GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 11444/1
Permit Holder:	SubCom Pty Ltd
Duration of Permit:	From 15 June 2026 to 15 June 2031

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

PART I – CLEARING AUTHORISED

1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of installing fibre optic subsea telecommunication cables.

2. Land on which clearing is to be done

Marine Waters

Unallocated Crown Land (PIN 12077636), Madora Bay

3. Clearing authorised

The permit holder must not clear more than 1.97 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

PART II – MANAGEMENT CONDITIONS

4. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

(a) avoid the clearing of *native vegetation*;

(b) minimise the amount of *native vegetation* to be cleared; and

(c) reduce the impact of clearing on any environmental value.

PART III - RECORD KEEPING AND REPORTING

5. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

No.	Relevant matter	Specifications
1.	In relation to the authorised clearing activities generally	(a) the species composition, structure, and density of the cleared area; (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings; (c) the date that the area was cleared; (d) the size of the area cleared (in hectares); and (e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 4.

6. Reporting

The permit holder must provide to the *CEO* the records required under condition 5 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table have the meanings defined.

Table 2: Definitions

Term	Definition
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*.
clearing	has the meaning given under section 3(1) of the EP Act.
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.
department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
EP Act	*Environmental Protection Act 1986* (WA)
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.

END OF CONDITIONS

Jessica Burton
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

21 May 2026

Schedule 1 The boundary of the area authorised to be cleared is shown in the map below (Figure 1).

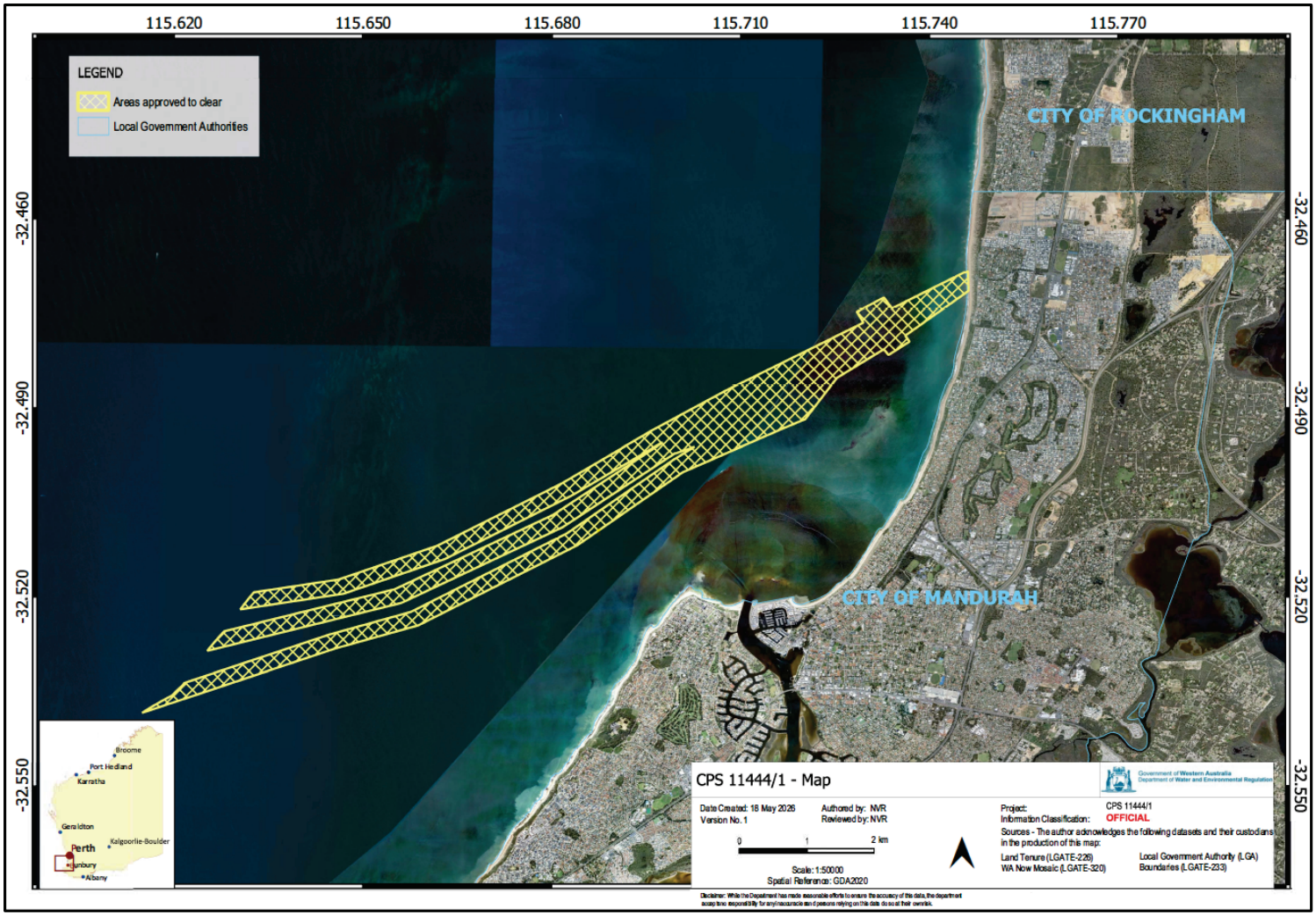


Figure 1: Map of the boundary of the area within which clearing may occur

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 11444/1
Permit type:	Purpose permit
Applicant name:	SubCom Pty Ltd
Application received:	02 February 2026
Application area:	1.97 hectares of native vegetation (marine) within 1004.86-hectare footprint
Purpose of clearing:	Installing fibre optic subsea telecommunication cables
Method of clearing:	Mechanical
Property:	Marine waters Unallocated Crown Land (PIN 12077636)
Location (LGA area/s):	City of Mandurah
Localities (suburb/s):	Madora Bay

1.2. Description of clearing activities

The vegetation proposed to be cleared is marine vegetation, contained within a single contiguous area (see Figure 1, Section 1.5).

Project background

The proposed clearing is to facilitate the installation of fibre optic subsea telecommunication infrastructure within the Australia Connect and Africa Connect Initiatives of Google's Global Network Infrastructure group, delivered through their registered licence carrier company, Perch Infrastructure Pty Ltd (Perch) (SubCom, 2026). These initiatives aim to enhance digital connectivity across Australia, the Indo-Pacific and Africa. This investment in subsea digital infrastructure will improve data security, resilience, capacity and efficiency to meet Australia's current and future connectivity needs (GHD, 2025).

In Western Australia (WA) waters, the project will be located off the coast of Madora Bay, Mandurah and will involve the installation of two cable systems (SubCom, 2026):

- TalayLink Cable System, connecting Victoria, Western Australia, Christmas Island and onwards to Asia. This system consists of two cables:
  - TalayLink 1 cable: 14.33 kilometres.
  - TalayLink 2 cable: 12.07 kilometres.
- Umoja Cable System, connecting WA to South Africa, with a total length of 11.71 kilometres within WA waters.

Perch has engaged SubCom Pty Ltd (SubCom) to design, manufacture, and install both cable systems (GHD, 2025).

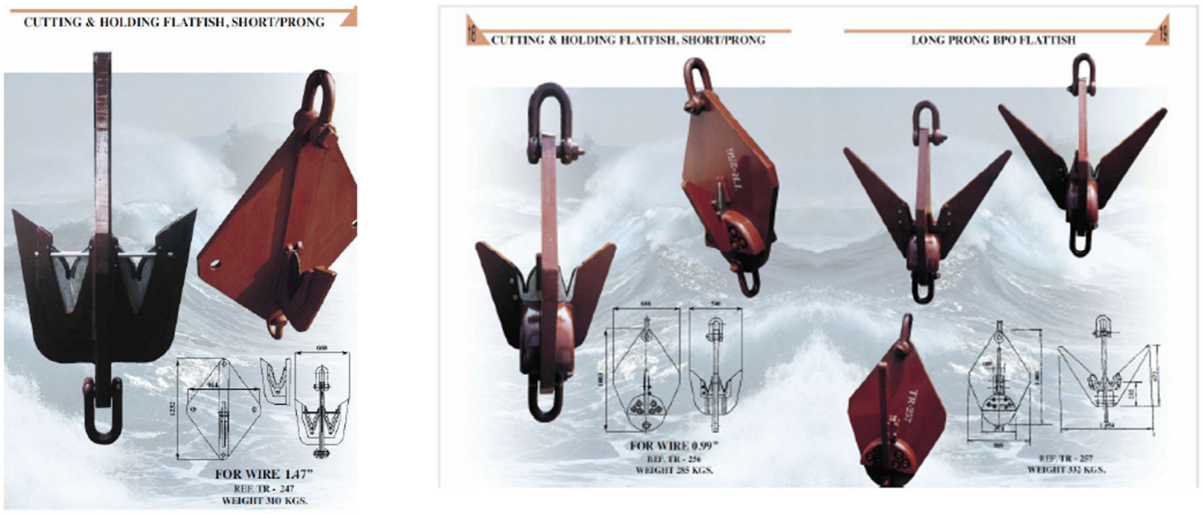
Cable installation method

Cable installation methods will vary along the cable routes depending on the seabed conditions and water depth. The cable will be buried beneath the seabed where possible (GHD, 2025). The cable installation will involve the following stages (GHD, 2025):

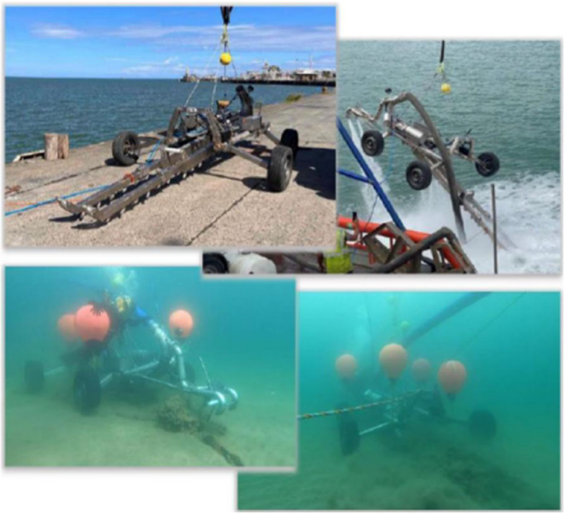
- Pre-lay grapnel run (PLGR): A PLGR will be undertaken along each cable route prior to cable laying to remove unwanted debris from the seabed. A grapnel will be towed by the cable ship at speeds below 1 knot,

clearing a path up to 0.75 metres wide and up to 40 centimetres deep. Grapnel operations will not occur in hard-bottom areas.

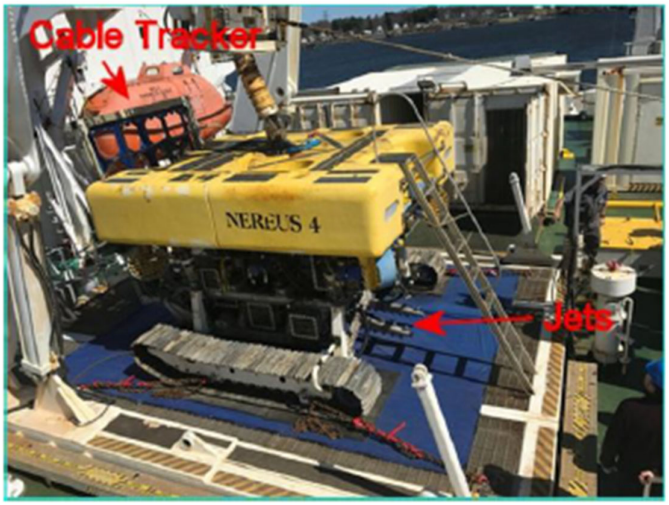
- PLGR activities will directly disturb marine vegetation where present. All recovered debris will be brought onboard and disposed of appropriately onshore following completion of operations.
- Pre-laid shore end (PLSE) installation: In this stage, the cables will be laid on the seabed and then buried using subsea jet trenchers. Trenchers will create a trench with a maximum clearance width of 0.75 metres. As the trenchers will follow the PLGR alignment, no additional direct seabed clearing is expected to result from this stage. However, the burying activity may result in sediment dispersion of up to five metres, depending on sediment composition and local environmental conditions.
- Cable surface lay: where cable burial is not feasible due to unsuitable seabed conditions, the cables will be placed accurately on the seabed under controlled tension at speeds of approximately 6 to 8 knots per hour.
- Post-lay inspection and burial (PLIB): This final stage of subsea cable installation is undertaken using a Remotely Operated Vehicle (ROV). The ROV will inspect whether the cable has been buried to the required depth and specifications. In areas where the cable could not be buried via PLSE installation, the ROV will be used to bury the cable to the required depth.



Pre-lay grapnel and cable recovery equipment



Subsea jet trencher example



Example of ROV

Figure 1. Examples of equipment will be deployed in subsea cable installation (GHD, 2025)

1.3. Decision on application

Decision:	Granted
Decision date:	21 May 2026
Decision area:	1.97 hectares of native vegetation (marine) within 1004.86-hectare footprint, as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix B), relevant datasets (see Appendix F.1) and supporting document provided by the applicants (see Appendix D), the clearing principles set out in Schedule 5 of the EP Act (see Appendix C), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3).

The assessment identified that the proposed clearing will result in the direct loss of up to 1.97 hectares of marine vegetation (macroalgae and seagrass). However, noting the extensive extent of marine vegetation in the vicinity of the application area, this loss is not considered as significant habitat for marine fauna.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing is not likely to lead to an unacceptable risk to the environment.

The Delegated Officer decided to grant a clearing permit subject to conditions to conditions to avoid, minimise to reduce the impacts and extent of clearing.

1.5. Site map

Figure 2. Map of the application area

The area crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.

2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)
- Technical guidance – *Protection of Benthic Communities and Habitats* (EPA, December 2016)
- Technical guidance – *Protecting the Quality of Western Australia's Marine Environment* (EPA, December 2016)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

Supporting information was submitted by the applicant, demonstrating that the following avoidance and mitigation measures have been implemented or committed to be implemented (GHD, 2026b). Details of the proposed measures can be found in the Appendix D.

Avoidance

- The cable route has been informed by geophysical and geotechnical marine route survey (MRS) data and designed to avoid sensitive seabed features, including marine vegetation and rocky reefs, where practicable.
- Ecologically sensitive areas identified through benthic survey data and desktop assessments will be avoided where possible.
- The pre-lay grapnel run (PLGR) will not be conducted in hard substrate areas; and surface laying will be undertaken in areas of hard substrate where burial is not feasible. This will avoid direct disturbance to hard substrate – associated reef and vegetation communities.
- The subsea jet trencher will follow the previously cleared PLGR alignment, avoiding additional direct disturbance outside the established footprint.
- No anchoring of installation vessels is planned during cable laying operations, reducing the risk of seabed disturbance outside the cable corridor.

Minimisation measures (design and installation controls)

- The disturbance footprint of PLGR activities is restricted to a narrow width (approximately 0.75 m per pass), thereby minimising the extent of seabed and vegetation disturbance.
- Additional PLGR passes will only be undertaken where necessary to address unforeseen obstructions, minimising unnecessary clearing.
- Cable burial will be undertaken where feasible to reduce long-term interaction with benthic habitats and marine users.
- Installation activities are temporary and localised, with cable laying vessels continuously moving along the route, thereby limiting the spatial and temporal extent of impacts.

Marine fauna mitigation measures

- A trained Marine Megafauna Observer will be present during installation activities, particularly during peak whale migration periods.
- All vessel interactions with marine fauna (including cetaceans, pinnipeds, whale sharks, etc.) will comply with Part 8 of the *EPBC Regulations 2000* and the *Australian National Guidelines for Whale and Dolphin Watching*.
- Vessel machinery will be maintained in accordance with manufacturer specifications to minimise underwater noise emissions.

- Vessel speeds during installation will be low (e.g. PLGR <1 knot), reducing the risk of collision with marine fauna.
- Lighting on vessels will be managed to minimise unnecessary light spill that could affect marine fauna behaviour.

Operational and environmental management measures

- Fisheries and community engagement will be undertaken prior to seabed clearance activities to minimise interference with fishing equipment and marine users.
- All discharges (e.g. sewage, bilge, cooling water) will comply with relevant State and Commonwealth marine pollution regulations.
- Waste will be managed in accordance with the *International Convention for the Prevention of Pollution from Ships* (MARPOL) requirements, including containment, storage and disposal at licensed facilities.
- Measures will be implemented to prevent introduction of marine pests, including compliance with quarantine requirements and ballast water management guidelines.
- All equipment will be secured during operations to prevent dropped objects and accidental seabed damage.
- Records of any dropped or lost items will be maintained and reviewed to prevent recurrence.

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix B) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see **Error! Reference source not found.**) identified that the impacts of the proposed clearing present a risk to biological values (fauna and flora). The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values (biodiversity and fauna) - Clearing Principle (a) and (b)

Assessment

According to available databases, in addition to many seabirds and shorebirds, eight conservation significant marine fauna species recorded within the local area may occur at the application area (see Appendix B.2), including:

- *Arctocephalus tropicalis* (Subantarctic fur seal) - Vulnerable
- *Balaenoptera physalus* (Fin whale) - Endangered
- *Caretta caretta* (Loggerhead turtle) - Endangered
- *Chelonia mydas* (Green turtle) – Vulnerable
- *Dermochelys coriacea* (leatherback turtle) - Vulnerable
- *Eretmochelys imbricata* (Hawksbill turtle) - Vulnerable
- *Eubalaena australis* (Southern right whale) - Vulnerable
- *Megaptera novaeangliae* (Humpback whale) - Conservation dependent

Since the proposed clearing will occur on the seabed, the impacts on avifauna species are indirect and minimal, noting the short period of the clearing.

The potential risk to the above-mentioned species from the proposed activities is considered low. The limited extent of marine vegetation loss (refer to Section 3.2.2) is unlikely to significantly affect habitat availability or food resources, and the project area does not constitute critical or key habitat for any listed species (DWER, 2026). Given the extensive availability of marine vegetation in the surrounding area, the relatively small area of seagrass and macroalgae directly impacted, the short duration of works (approximately 31 days within a two-month window, subject to weather and permit conditions) (SubCom, 2026), and the avoidance and mitigation measures committed by the applicant (refer Section 3.1), impacts to marine fauna habitat are not expected to be significant or long-lasting.

The proposed clearing may have impact on the marine fauna if individuals are present within the application area during the time of clearing. These impacts will be minimized by undertaking mitigation measures to prevent marine mammal collision proposed by the applicant (see Section 3.1 and Appendix D).

The proposed clearing activities present a potential risk for the introduction of marine pest species (GHD, 2026b). However, the implementation of mitigation measures outlined by the applicant (refer to Section 3.1 and Appendix D), including controls to manage biosecurity risks, is expected to minimize this risk to an acceptable level.

Having regard to the above, the proposed clearing is unlikely to impact significant habitat for fauna indigenous to Western Australia. Accordingly, the potential impacts to marine fauna arising from the proposed activities are considered acceptable (DWER, 2026).

Conclusion

Based on the above assessment, the Delegated Officer has determined that the proposed clearing is considered acceptable in relation to this environmental value, given that avoidance, mitigation, management and monitoring measures proposed are undertaken properly.

Conditions

No fauna management conditions required.

3.2.2. Biological values (biodiversity and flora) - Clearing Principle (a) and (c)

Assessment

The geophysical and geotechnical marine route survey (MRS) completed in July 2024 identified approximately three kilometres of macroalgae patches along the proposed cable routes, with no seagrass or coral reef habitats explicitly recorded (GHD, 2025).

However, advice from DWER's Marine Ecosystems Branch notes that the proposed cable route is located in waters between approximately 5-15 metres below Lowest Astronomical Tide (LAT) which is within a suitable depth range for seagrass growth. As such, the presence of seagrass within the survey area cannot be ruled out (DWER, 2026).

In the absence of a dedicated marine vegetation survey, the benthic communities and habitats (BCH) data derived from the MRS (Table 1) has been used to infer the likely distribution of marine vegetation along the proposed route (DWER, 2026).

Table 1. BCH area within the MRS survey area (GHD, 2025)

BCH Type	Area (ha)	% (of total MRS survey area)
Hard substrate (bare)	168	13.39
Soft substrate (bare)	537	42.79
Reef on hard substrate	243	19.36
Vegetation on hard substrate	89	7.09
Vegetation on subcropping hard ground	14	1.12
Vegetation on soft substrate	176	14.02
TOTAL	**1255**	-

Three vegetation classifications with a total area of approximately 279 hectares were identified within the survey area including 'vegetation on hard surface', 'vegetation on subcropping hard ground' and 'vegetation on soft surface' (GHD, 2025). Based on typical habitat associations, macroalgae are generally restricted to hard substrates, while seagrass is typically associated with soft sediment environments (DWER, 2026). As such, areas mapped as 'vegetation on soft substrate' are considered likely to comprise seagrass. Seagrass may also occur within areas classified as 'vegetation on subcropping hard ground', where sufficient sediment overlies the substrate to support growth (DWER, 2026).

The applicant advised that two scenarios have been considered to estimate potential marine vegetation loss associated with the proposed PLGR activities. The best-case scenario assumes a single PLGR per cable, with a disturbance width of approximately 0.75 metres across sediment habitats. The worst-case scenario assumes up to three PLGRs per cable within a 150-metre corridor, to account for potential re-routing around unforeseen obstructions, each with a disturbance width of 0.75 metres (GHD, 2025).

Based on these assumptions, the applicant has advised that the predicted loss of vegetation units likely to support marine vegetation is estimated at approximately 0.66 hectares under the best-case scenario and up to 1.97 hectares under the worst-case scenario (Table 2) (GHD, 2025). This represents approximately 0.19 to 0.58 per cent of the

mapped vegetation units within the survey area and an even smaller proportion at broader local and regional scales, where such habitats are well represented (DWER, 2026; GHD, 2025).

Table 2. Summary of cable installation disturbance footprints intersecting marine vegetation (GHD, 2025)

Cable system	Total length intersecting marine vegetation (km)	Max. area of marine vegetation to be cleared for single PLGR (ha)	Single route PLGR as a % of total vegetation in whole MRS area	Maximum area of marine vegetation to be cleared in WCS (ha) (3 PLGRs)	WCS (3 PLGRs) as a % of total vegetation in whole MRS area
TalayLink 1	1.34	0.27	0.080%	0.81	0.24%
TalayLink 2	2.23	0.19	0.055%	0.56	0.17%
Umoja	2.63	0.20	0.58%	0.59	0.17%
TOTAL	**6.19**	**0.66**	**0.19%**	**1.97**	**0.58%**

In addition, the operation of jet trenching may result in indirect disturbance within approximately five metres of the trench centreline. This disturbance is expected to be temporary, with affected areas likely to be rapidly recolonised (GHD, 2025). Accordingly, the impact is not considered significant.

Overall, the extent of predicted marine vegetation loss is considered small and unlikely to result in a measurable impact on ecosystem function. The proposed clearing is therefore considered acceptable (DWER, 2026).

Conclusion

Based on the above assessment, the Delegated Officer has determined that the proposed clearing is considered acceptable in relation to marine vegetation.

Condition
No flora management conditions required.

3.3. Relevant planning instruments and other matters

The City of Mandurah advised that the proposal sits outside its administrative boundary. Therefore, no local planning scheme or strategies are impacted by the proposal (City of Mandurah, 2026).

The proposed works received Development Approval from the Western Australian Planning Commission (WAPC) on 15 April 2026, valid for two years (GHD, 2026b).

The applicant advised that the EPA supports assessment of this proposal under the Part V pathway of the EP Act. Therefore, the proposal was not referred to the EPA (GHD, 2026a).

For the broader project, a referral was submitted to the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and was determined to be not a controlled action (DCCEEW, 2024).

No Aboriginal sites of significance have been mapped within the application area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

End

Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
Development Approval granted by WAPC	This information has been presented in Section 3.3 of the Decision Report

Appendix B. Site characteristics

B.1. Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to DWER at the time of this assessment. This information was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix C.

Characteristic	Details
Local context	The proposed clearing area comprises seabed within the marine waters off the shoreline of Madora Bay, Mandurah. It spans a 15-kilometre-long strip, up to approximately one kilometre wide, extending from the shoreline of Madora Bay out into the ocean.
Ecological linkage	Not applicable as the vegetation proposed to be cleared is marine vegetation.
Conservation areas	The application area is not mapped within any conservation areas. There are two marine conservation areas in proximity to the area proposed to be cleared, which are the Shoalwater Islands Marine Park and an Agreement to Reserve Conservation Covenant area (ID: H681439), located approximately 10.8 km and 2.1 kilometres to the north of the application area.
Vegetation description	A geophysical and geotechnical marine route survey completed in July 2024 identified approximately three kilometres of macroalgae patches along the proposed cable routes. No seagrass or coral reefs were identified along the routes (GHD, 2025). Representative photos are available in Appendix D.
Vegetation condition	No information on conditions of the marine vegetation proposed to be cleared is available.
Climate	Climate: Mean maximum temperature is 23.4 degrees Celsius. Mean minimum temperature is 14.8 degrees Celsius. Rainfall: Mean annual rainfall is 605.0 millimetres (BOM, 2026)
Soil description	There is no soil mapping data currently available.
Land degradation risk	Given the nature of the application area, land degradation is not likely to be relevant.
Waterbodies and hydrogeography	The application area lies within the Indian Ocean and is not connected with any terrestrial watercourses or wetlands.
Flora	Three threatened flora species and 11 priority flora species are mapped within the local area (10 kilometres from the application area). None of the recorded flora species are known marine species.
Ecological communities	According to available databases, seven threatened ecological communities (TEC) (with 533 occurrences) and one priority ecological communities (PEC) (with three occurrences) have been recorded within the local area. Most of these TEC/PECs are terrestrial vegetation communities, except for the Subtropical and Temperate Coastal Saltmarsh (EPBC-listed TEC and State-listed PEC), which occurs at the land-sea interface. The nearest TEC is Tuart *(Eucalyptus gomphocephala)* woodlands and forests of the Swan Coastal Plain, located 1.6 kilometres from the application area. The closest marine associated ecological community Subtropical and Temperate Coastal Saltmarsh is located approximately 4.5 kilometres from the proposed clearing area.
Fauna	The desktop assessment identified that a total of 62 threatened or priority fauna species have been recorded within the local area, including 25 threatened fauna species, nine priority fauna species, and 28 specially protected fauna species. Among them are four marine mammals, four marine reptile and 31 coastal and/or marine birds.

B.2. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records within the local area	Are surveys adequate to identify? [Y, N, N/A]
Arctocephalus tropicalis (Subantarctic fur seal)	VU	Y	Y	3.71	2	N/A
Balaenoptera physalus (Fin whale)	EN	Y	Y	3.77	1	N/A
Caretta caretta (loggerhead turtle)	EN	Y	Y	1.24	7	N/A
Chelonia mydas (Green turtle)	VU	Y	Y	3.48	1	N/A

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records within the local area	Are surveys adequate to identify? [Y, N, N/A]
Dermochelys coriacea (leatherback turtle)	VU	Y	Y	3.83	1	N/A
Eretmochelys imbricata (Hawksbill turtle)	VU	Y	Y	0.58	1	N/A
Eubalaena australis (Southern right whale)	VU	Y	Y	2.82	1	N/A
Megaptera novaeangliae (Humpback whale)	CD	Y	Y	1.32	3	N/A

CD: conservation dependent, EN: endangered, VU: vulnerable

Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The area proposed to be cleared does not contain locally or regionally significant flora, fauna or habitats.	Not likely to be at variance	No
Principle (b): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."* Assessment: The area proposed to be cleared does not contain significant habitat for conservation significant fauna.	Not likely to be at variance	Yes *Refer to Section 3.2.1, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The proposed clearing area is unlikely to contain habitat for threatened flora species.	Not likely to be at variance	Yes *Refer to Section 3.2.2, above.*
Principle (d): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."* Assessment: The proposed clearing area does not contain species indicative a threatened ecological community.	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (e): *"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."* Assessment: There is no available data on the marine vegetation on the database. However, noting the abundance of suitable habitat for marine vegetation within the survey area and local area (DWER, 2026), the proposed clearing area is not considered to be a significant remnant.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (h): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."* Assessment: Given the nature and extent of the proposed clearing and distance to the nearest conservation area, the proposed clearing is not likely to have significant impacts on the environmental values of nearby conservation areas.	Not likely to be at variance	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: Given the application area lies on the seabed, the native vegetation proposed to be cleared is marine vegetation and is not considered to be growing in association with a wetland or watercourse.	Not likely to be at variance	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The vegetation proposed to clear is marine vegetation on seabed, therefore the proposed clearing is not likely to have an appreciable impact on land degradation.	Not at variance	No
Principle (i): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."* Assessment: Given the area proposed to be cleared are on seabed with no connections with onshore watercourses or wetlands, the proposed clearing is unlikely to impact surface or ground water quality. The proposed activities may disturb the seabed, potentially increasing turbidity and affecting seawater quality. However, given the short duration of the works and the applicant's proposed mitigation measures, any impacts are expected to be short-term and not significant.	Not likely to be at variance	No
Principle (j): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."* Assessment: Given the clearing occurs on seabed, the proposed clearing is unlikely to contribute to increased incidence or intensity of flooding and waterlogging.	Not likely to be at variance	No

Appendix D. Survey information excerpts / photographs of the vegetation and proposed mitigation measures

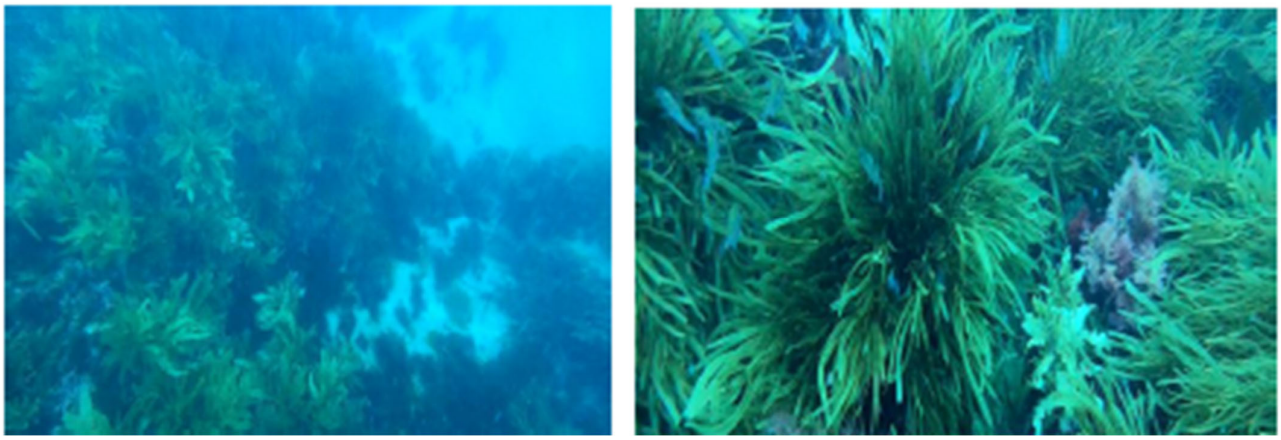


Figure D.1. Macroalgae patches along the cable route observed within the application area (GHD, 2025)

Table E.1. Proposed mitigation measures (GHD, 2025)

Activity	Potential impacts	Relevant management controls	Environmental outcomes
Accidental release of solid waste	Accidental spillage of material and incorrectly disposed items may cause unintentional release to the environment. This may cause entanglement or ingestion by fauna particularly prevalent for seabirds and marine turtles.	– Waste containment facilities will be managed to avoid overflow or accidental release. – All wastes will be managed in accordance with Regulation 9 of MARPOL Annex V. – Hazardous wastes will be retained onboard within a secondary containment area. – All recyclables and general wastes will be appropriately stored for disposal at a regulated waste facility. – Solid non-biodegradable and hazardous waste will be appropriately stored for disposal at a suitable waste facility.	The risk associated with unplanned releases of waste material is considered as low as reasonably practicable given the adoption of the industry standard management controls.
Dropped objects	Damage to benthic habitats can occur due to an object being dropped overboard (e.g., equipment falling from vessel deck). Marine organisms associated with the affected benthic habitat within the	– All equipment on the vessels will be securely fastened during mobilisation/demobilisation – Lifting is to be carried out by competent personnel using	The risk associated with dropped objects is considered to be as low as reasonably possible with the adoption of industry accepted
	dropped object's footprint may also be harmed.	equipment that is suitable, certified and maintained – Waste management controls are to remain effective to reduce risk of release of wastes that could be ingested or cause entanglement – During the activities, detailed records of equipment lost overboard or dropped will be maintained and reviews will be undertaken to reflect on methods to mitigate repetition of the incident	controls and procedures.

Activity	Potential impacts	Relevant management controls	Environmental outcomes
Seabed disturbance	Disturbance to the seafloor and benthic habitats may occur. Potential impacts and mitigation measures for coastal environment during the subsea cable installation, which generally involves pre-lay grapnel run, surface laying, plough burial, post-lay inspection and shore end installation along the route Marine route survey results were used to inform the cable route to best avoid areas of sensitivity.	– No anchoring of the vessel is planned during cable lay operations. Vessels may only drop anchor during port calls or other standby periods, in dedicated mooring areas, if required. – The cable laying route in deep waters will be positioned to avoid underwater features such as rocky reefs, other cables (as far as practicable), or debris. – The need for pinning of the articulated pipe may need to be considered in order to avoid lateral movement of the pipe over the reef area. – Ecologically sensitive areas identified from a review of benthic survey data and desktop assessments will be avoided if possible.	**Impacts considered to be as low as reasonably practicable.** Cable installation activities are expected to disturb the seabed and benthic habitats along the route. Disturbance is expected to be minor, temporary, and limited to the cable route, with negligible effects on suspended sediment. Environmental risks will be confined to the immediate area around the cable and are expected to be short-term, posing a low risk to existing species.
Underwater noise emissions	Underwater noise emissions generated by vessels and other equipment during subsea cable installation are anticipated to be similar to those from other marine vessels routinely transiting the area, such as commercial shipping. While noise emissions from the installation equipment may pose a risk to acoustically sensitive species in close proximity, the likelihood of significant adverse impacts remains low given the temporary and localised nature of the activity. Behavioural impacts (e.g. avoidance patterns and swimming movements away from the area) are the most probable form of impact to marine fauna as a result of anthropogenic noise generated by this activity, particularly for sensitive species such as cetaceans. Vessel and cable installation noise is anticipated to only induce temporary and localised behavioural impact if species are encountered, with affected marine species expected to adopt normal behavioural patterns within a short time frame in the open waters along the cable route. Underwater noise and vessel disturbance will be temporary at any given location because the vessel will be constantly moving along a pre-determined route. Exposure duration for individual fauna will therefore be limited.	– A trained crew member will act as a Marine Megafauna Observer during cable installation operations particularly when program overlaps with peak whale migration season. – Vessel machinery will be maintained in accordance with the manufacturers specifications to reduce noise emissions. – The interaction of all vessels with cetaceans, pinnipeds and whale sharks will be compliant with Part 8 of the EPBC Regulations (2000). The Australian Guidelines for Whale and Dolphin Watching for sea-faring activities will be implemented across the entire project.	**Impacts are considered to be as low as reasonable possible with the implementation of industry standards requirements and considering type of equipment and short duration of the proposed activity.**

Activity	Potential impacts	Relevant management controls	Environmental outcomes
Artificial light emissions	Artificial light from the cable installation vessel may disrupt the normal behaviour of birds, turtles, fish and other pelagic species in locality if night works are required.	– Lighting on vessel decks will be managed to reduce direct light spill in accordance with vessel safety and navigation standards	**Impacts are considered to be as low as reasonable possible with the implementation of industry standards requirements and considering type of equipment and short duration of the proposed activity.**
Planned discharges	Discharges to the surrounding marine environment from sewage and food waste, brine, cooling water and deck drainage will result in a reduction in surface water quality in the vicinity.	– Compliance with relevant State legislations and Commonwealth pollution regulations. – Adherence to vessel waste management best practices.	**Impacts are considered to be as low as reasonable possible with the implementation of industry standards requirements.**
Marine fauna collisions or entanglement	There is potential for collision to occur between marine fauna and vessels associated with the installation. However, likelihood of marine fauna collisions or entanglement is very low for a cable laying vessel due to the slow speed of the vessel during cable laying operations.	– A trained crew member will act as a Marine Megafauna Observer during cable installation operations particularly when program overlaps with peak whale migration season. – Operations of vessels adhere to Part 8 of the EPBC Regulations (Interacting with Cetaceans and Whale Watching). – The Australian Guidelines for Whale and Dolphin Watching for sea-faring activities will be implemented across the project including no-go and caution zones.	**Potential risks associated with collision and interference are considered to be as low as reasonably practicable with implementation of industry standard requirements.**
Pest introduction and proliferation	Ecosystems, fisheries, aquaculture and other industries are potentially at risk from the impacts of Introduced Marine Pests (IMPs). Effects of IMPs may include depletion of viable fishing areas and fisheries, out-competing of native flora and fauna and decrease vessel and infrastructure performance and increased maintenance costs. Shallow water environments are the predominant preferred habitat for the successful introduction of most known marine pests. As the location of the cable laying activities include shallow coastal waters, there is potential that an IMP would be able to adapt and develop a successful translocation to the areas within the cable route or surrounding region. However, with the adherence of vessels to biofouling regulations, the chance of a successful translocation for IMPs is considered unlikely.	– Vessels should be sourced locally wherever possible. – International vessels arriving in Australia, as well as domestically sourced vessels, should adhere to Australian quarantine requirements – Management of ballast water must follow Australian Quarantine and Inspection Service guidelines and compliance requirements.	**The risk associated with the introduction of IMPs is considered as low as reasonably practicable with the adoption of industry standard management controls.**

Appendix F. Sources of information

F.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- Aboriginal Heritage Places (DPLH-001)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- IBRA Vegetation Statistics
- Imagery
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

F.2. References

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GHD (2026b) *Subsea Telecommunication Cable Installation – Marine Native Vegetation Clearance Permit: Supporting Information for CPS 11444/1*. Received 02 February 2026 (DWER Ref: DWERDT1285325).

GHD (2026c) *Providing the Development Approval for the Project of Subsea Telecommunication Cable Installation*. Received 15 April 2026 (DWER Ref: DWERDT1324234).