ERAMURRA SOLAR SALT PROJECT

INTERIM OFFSET STRATEGY
LEICHHARDT SALT PTY LTD

25 MARCH 2025

PREPARED FOR LEICHHARDT SALT PTY LTD
BY PRESTON CONSULTING PTY LTD

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ACKNOWLEDGEMENT OF COUNTRY

In the spirit of reconciliation Leichhardt Salt Pty Ltd and Preston Consulting Pty Ltd acknowledge that this project is proposed on the lands of the Mardudhunera People. We pay our respects to Elders past, present and emerging and recognise their continuing connection to land, sea, culture and community.

DOCUMENT CONTROL

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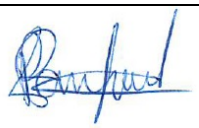
Author	Phoebe Ranford – Consultant, Preston Consulting Pty Ltd		30/04/2025
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1 INTRODUCTION

Leichhardt Salt Pty Ltd (Leichhardt) seeks to develop the Eramurra Solar Salt Project, a high-quality salt project in the Pilbara region of Western Australia (WA), approximately 55 km south-west of Karratha (Proposal) (Figure 1).

The Proposal is an evaporative solar project that utilises seawater to produce raw salts as a feedstock for dedicated processing facilities that will produce a high purity salt. The Proposal aims for average annual production rates of 5.2 million tonnes per annum (Mtpa). To meet this production, the following infrastructure will be developed:

- Seawater intake, pump station and pipeline;
- Concentration ponds totalling approximately 10,060 hectares (ha);
- Crystallisers, totalling approximately 1,840 ha;
- Drainage channels and bunds;
- Process plant and product dewatering facilities;
- Water supply (desalination plant);
- Bitterns disposal pipeline and outfall;
- Pumps, pipelines, roads, and support buildings including offices and communications facilities;
- Workshops and laydown areas;
- Landfill; and
- Other associated infrastructure.

The export of salt is proposed to be via a trestle jetty. The jetty and associated stockpiles will be located at the Cape Preston East (CPE) Port approved by Ministerial Statement (MS) 949. Dredging of the proposed channel and berth pocket will be undertaken as part of this Proposal to remove high points at the CPE Port. Dredged material will either be disposed of at an offshore disposal location, or onshore.

Bitterns will be transported by pipeline attached to the trestle jetty structure and discharged via a diffuser located off the trestle jetty.

The Proposal includes the Former Mardie and Karratha pastoral lease areas that are currently being managed by the Department of Biodiversity, Conservation and Attractions for the control of fire, feral animals and weeds and proposed for formal reservation under the *Conservation and Land Management Act 1984* (WA).

The boundaries of the proposed development envelopes, identified in Figure 2, have been adjusted where practicable to avoid and minimise potential environmental impacts relevant to mangroves, algal mats and other sensitive biological receptors.

Preston Consulting

CREATED BY	JOB	DATE	REVISION
ENVIRONMAPS	PC2900212	6/04/2023	0

Leichhardt Salt Pty Ltd

Figure 1: Regional location of the Proposal

0 25 50 100 km

Scale: 1:2,000,000 @ A3

N

- NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS

LOCALITY

Legend

- Dredge Spoil Disposal Development Envelope
- Marine Development Envelope
- Pond and Infrastructure Development Envelope

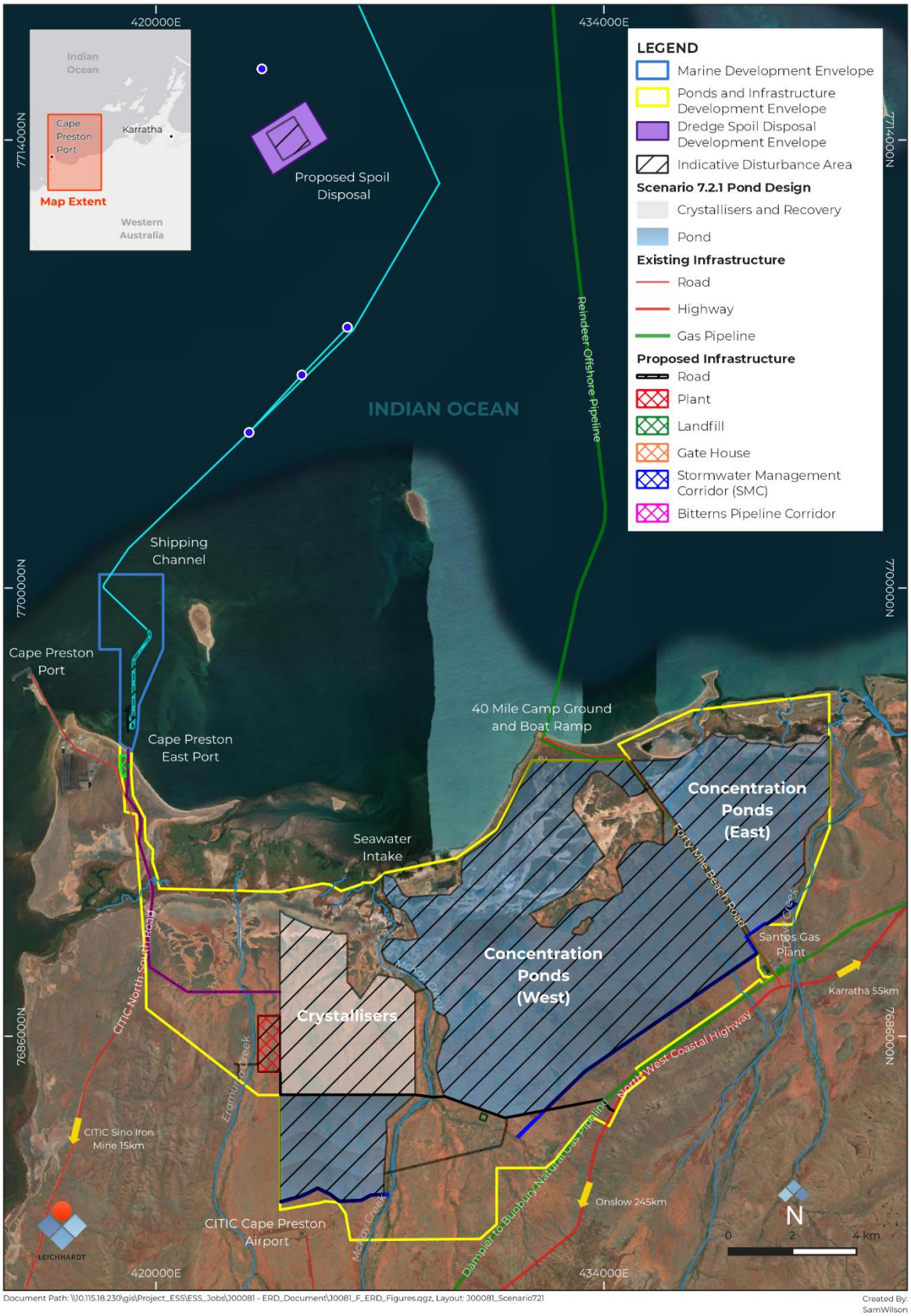


Figure 2: Proposal development envelopes and indicative layout

2 SCOPE AND PURPOSE

Leichhardt has commissioned numerous environmental surveys and studies for the Proposal. The surveys determined that there were key environmental values that required protection including significant Benthic Communities and Habitat (BCH), marine and terrestrial fauna habitat, flora and vegetation, and areas of Aboriginal cultural value. Changes to the Proposal design have been made to avoid and minimise significant impacts to the key environmental factors during Proposal construction and operations, however some residual impacts remain.

This Interim Offset Strategy has been prepared in order to detail potential suitable offset measures to counterbalance the significant residual impacts of the Proposal. This Interim Offset Strategy will remain in draft form until further information about the potential offset programs are available and have been confirmed as acceptable in discussions with the Environmental Protection Authority (EPA), the Department of Water and Environmental Regulation (DWER), Department of Climate Change, Energy, the Environment and Water (DCCEEW) and the Department of Biodiversity, Conservation and Attractions (DBCA).

3 STAKEHOLDER CONSULTATION

Leichhardt has a Stakeholder Consultation Register which maintains records of all consultations with stakeholders. The Register summarises key issues raised by stakeholders during the consultation process and describes how Leichhardt has responded to those issues. A summarised version of the Stakeholder Consultation Register is provided in Table 1 to provide details of the stakeholder consultation undertaken to-date that may be relevant to offsets for the Proposal.

A Stakeholder Consultation Plan is maintained by Leichhardt. This plan outlines the key stakeholders, type of consultation, purpose of the engagement, issues/subjects to be raised and the timing of those engagements. A summarised version of this Plan is provided in 2 to provide details of the planned future and ongoing stakeholder consultation relevant to offsets. Consultation topics that are not related to offsets have been excluded.

Table 1: Stakeholder Consultation Register

Stakeholder	Date/s	Relevant issues/topics raised	Proponent response/outcome
Government Stakeholders			
Assistant Minister for Regional Development and Territories	Sep 2020 – Teleconference.	• Follow up from November 2019 Canberra meeting with Minister for Regional Development and Territories. • Proposal update and lead agency status.	N/A
City of Karratha	• 2016 - Email and Phone. • Jun, Dec 2019 – Meetings. • Jun, Jul, Sep 2020 – At 40-Mile beach, meeting, teleconference. • Jan, Feb, Mar, May, Aug, Sep 2021 – Telephone, emails, meetings, conference/seminar. • Feb, May, Jul, Nov, Dec 2022 – Meetings, presentation. • Apr, Jul 2023 – presentation. • Jan 2025 – Phone.	• Local Government and community engagement. • Recreational areas and access/Proposal interaction. • Proposal overview. • Proposed revegetation programs. • Potential for WAC involvement and engagement. • Drone turtle surveys. • Camp improvements. • Introduction to new City of Karratha Chief Executive Officer • Draft Memorandum of Understandings & Gnoorea Foreshore Management Plan • New pond design, discussion on campground and Forty Mile Beach Road. • Forty Mile road access.	• Engage in ongoing discussions and negotiations. • Strengthen relationship with Shire and community. • Undertake a survey of campers to improve understanding of demographic. • Investigate stakeholder requirements for recreational and creek areas. • Draft a Memorandum of Understanding. • Investigate local opportunities through engaging the City of Karratha.
DCCEEW	• Jan, Dec 22 – MS Teams meeting. • May – July 2023- 156A application and approval. • Jun 2024 – MS Teams Ongoing in relation to assessment.	• EPBC Act referral. • Information required from DCCEEW. • ESD. • Section 156A application. • Draft ERD review. • Project timeline discussion. • Offshore dredge spoil disposal, consideration of onshore dredge spoil disposal. • The potential overlap/ interaction between the Sea Dumping Act and EPBC Act	• Leichhardt to provide written response to DCCEEW regarding latest queries. • Continue liaising with DCCEEW during assessment process. • Study on shore dredge spoil disposal options in more detail.

Stakeholder	Date/s	Relevant issues/topics raised	Proponent response/outcome
DBCA	Jun, Sep, Nov 2020 – Telephone, in person meeting and MS Teams (PowerPoint presentation) with EPA Services.	• Overview of the Proposal. • Horseflat conservation area status and guidance. • DBCA marine survey data. • Flora and vegetation. • Conservation significant fauna. • Availability of DBCA dolphin, dugong and turtle data. • Unmanned Aerial Vehicles (UAV) use for turtle monitoring. • Timing for turtle surveys. • Marine data for local impact assessment.	• DBCA to send data sharing agreement to O2 Marine. • Investigate validation surveys and determine if they are required for nesting turtles. • Obtain permits for UAV for turtle monitoring. • Provide a letter confirming the Pilbara Leaf-nosed Bat record and evidence that it is not a resident. • Compare Barrow Island SRE samples to mainland samples. Some species may be excluded as SREs based on significant range extensions.
DJTSI	• Jan 2018 - 2019 – Meetings. • Jun, Sep, Nov 2020 – Meetings, teleconference. • May, Aug, Nov 2021 – Meetings, site visit. • May, Oct 2022 – Meetings, MS Teams, in-person. • Mar 2023 – MS Teams meeting. • Jan, Apr, May, July, Sept, Nov 2023 – MS Teams. • Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct 2024 – MS Teams, meetings. • Jan 2025 – Phone.	• General Proposal update. • Proposal approvals. • Guidance on Proposal and port tenure. • MS 949 and MS 1149. • WAC. • Mineralogy General Purpose Lease alternative shipping channel. • Mining Proposal. • Bilateral EPA assessment. • Overview on Santos pipeline, Santos position discussed. • Approvals across a range of sections (EPA, NT, Santos, DEMIRS). • Eramurra site and CPE Port. • Cape Preston East Stage 3 Development Approval. • Maitland Strategic Industrial Area. • Resolution of tenure for the port landslide area. • Discussion on the Port Co concept. • Long term tenure for monitoring bores in the port area.	Leichhardt to apply for a S43A once consensus has been reached with the Leichhardt Board on the key changes to the Proposal as referred. Leichhardt to continue preparing PPA Stage 3 Development Application.
DEMIRS	• 2013 –Meetings, phone calls and emails. • Aug, Sep, Oct, Nov 2017 – Emails, phone calls.	• Proposal update. • Tenement applications. • Tenement technical report. • Tenure acquisition strategy.	• Ongoing discussions required. • Regional standard heritage agreement required. • Complete the tenement technical report. • Progress towards a mining lease application.

Stakeholder	Date/s	Relevant issues/topics raised	Proponent response/outcome
	• May 2018 – Emails and phone calls. • Jan, May, Jun, Nov 2019 – Emails and meeting. • Apr, May, Jun 2020 – Emails, meeting. • Jan 2021 – MS Teams meeting.	• Salt production royalty. • MRF rates. • Wardens Court Matters. • Mining title and forfeiture matters. • Statistics yearbook pricing of salt. • Alternative pricing structure. • Advice and contents of operational report. • Mineralisation report versus MP/MCP as the support mechanism. • Native Title and heritage. • Safety approvals. • Regional mining registrar - Impact of conservation area on exploration tenure. • Information requirements and limitations for MP/MCP preparation. • Environmental setting and approvals. • MP/MCP information issues. • Risk assessment.	• Consider submission of the Proposal for State Significance. • Provide timeline including funding and EPA process and how Proposal is progressing.
DPIRD	Jul 2022 – Meeting.	• Fish and Fisheries Desktop Report. • Report Structure. • Current work to date. • Key findings. • Stakeholder engagement. • Guidance and feedback. • Plan for review of the draft report.	• Recommended O2 Marine contact Recfishwest for recreational fishing data. • Ongoing consultation recommended, particularly regarding impact assessment.
DoT	• Mar 2019 – Meeting. • Apr 2020 – Meeting. • Apr, May 2022 – Meetings with PPA and Oropesa. • Jul 2023– Meeting.	• Shipping and pilotage. • Pylon platform shipping/loading concept. • Related shipping deconfliction issues. • Best configuration of transhipping operations. • Shipping deconfliction at the new port. • Trestle jetty shipping operation.	• Ongoing discussions required. • Formal acceptance of proposed CPE boundary realignment. • CITIC mooring to be relocated.

Stakeholder	Date/s	Relevant issues/topics raised	Proponent response/outcome
	• May, Sep, Oct 2024 – Phone. • Jan 2025 – Phone	• Logic for proposed realignment of CPE port boundary. • Port declarations, tenure and licenses	
EPA Services (DWER)	• Nov 2018 – Meeting. • Mar 2020 – Meeting. • May 2020 – Teleconference. • Sep 2020 – In person meeting and MS Teams (PowerPoint presentation) with DBCA. • Nov 2020 – MS Teams meeting and PowerPoint. • Apr, Nov 2021 – Meetings. • Jun 2021 – Meeting. • 22 Sep 2021- ESD Rev A • Nov 2021 – Meeting • Feb 2022 – Telephone. • 14 Mar 2022 – ESD Rev B. • 30 Aug 2022 – ESD Rev C. • 27 Oct 2022 – ESD Rev D. • 30 Nov 2022 – ESD Rev E. • May – Jun 2023 – S43A application and approval. • Aug 2023 – MS Teams. • Jan 2025 – MS Teams.	• Company and Proposal overview. • Next steps in assessment process. • Stakeholder engagement. • Infrastructure changes. • Design review and changes to the development envelopes. • Approvals pathways were presented and reviewed. • Cumulative effect (inland water, BCH, marine environment). • Consultation with key stakeholders (WAMSI, WAFIC etc.). • Legislation changes (impact to ESD, need to be clear outcomes). • DBCA marine survey data. • Flora and vegetation. • Conservation significant fauna. • Referral of Proposal. • Proposal update. • Cumulative effect (inland water, BCH, marine environment). • Consultation with key stakeholders (WAMSI, WAFIC etc.). • Legislation changes. • Comments on draft ESD. • Status of EPBC Act referral. • Submission and approval of ESD. • S43A application. • Draft ERD review. • ERD Feedback. • Mardie Offsets and the introduction of that information into the Eramurra EIA Process.	• Expand stakeholder engagement to include all DMAs. • Complete all baseline surveys. • EPA to assess whether dredging and brine discharge can be included in MS 949. • Maintain focus on heritage. • DWER to email DEMIRS ESD comments. • Continue liaison during assessment process. • EPA Services agreed the SCHMP will not be a public document. • Leichhardt to consider the request for management plans in the context of the process implications of providing later. • ERD progress will not be affected by the delay in the Mardie offset studies as relevant information can be captured in the response to public comments.
Federal Minister for Finance	Aug 2020 – Meeting.	Overall Proposal update/briefing.	N/A

Stakeholder	Date/s	Relevant issues/topics raised	Proponent response/outcome
Minister for Housing	Apr 2023 - Meeting	Housing in Karratha	N/A
Minister for Mines and Petroleum, Energy and Industrial Relations.	• Jun 2020 – Meeting. • Aug 2020 – Letter. • Sep 2020 – Formal event. • Oct 2021 – Meeting.	• Mining lease application process (Section 74) for solar salt projects while under pending approval under Part IV of the EP Act. • Legal advice regarding the application of Section 74 of the Mining Act and Part IV of the EP Act. • Fundraiser boardroom dinner for member for Pilbara. • Open discussion on Proposal. • Surrender of exploration tenure.	• Leichhardt and BCI Minerals Ltd to provide advice on Section 74 application to the Minister for review by DEMIRS and the state solicitor's office.
Minister for Regional Development	Sep 2019 – Meeting.	Discuss port and infrastructure access.	Develop and submit Proposal definition document to DJTSI.
Minister for the Environment (State)	• Jul 2020 – Meeting. • Apr 2023 - Meeting	• General project update. • Bilateral assessment. • Conditional approval. • ERD submission date.	Follow up meeting to be scheduled for Q3 2023
Minister Price (Member of Durack)	Sep 2020 – Teleconference.	• General Proposal update. • Lead agency informed.	N/A
Northern Australia Infrastructure Fund	• May, Aug 2020 – Meetings. • May 2021 – Meeting. • Mar 2022 – Meeting.	• Indigenous engagement. • Northern Australia Infrastructure Fund funding of CPE port infrastructure. • Project schedule and timing of funding Proposal. • Commonwealth consultation with all interested Commonwealth Departments. • Off take agreement. • Production commitment. • WA Government contact.	N/A

Stakeholder	Date/s	Relevant issues/topics raised	Proponent response/outcome
PPA	• 2015-2018 – Meetings, phone calls, emails. • Dec 2019 – Phone call, email. • May, Jul, Oct 2020 – Meetings. • Mar, Apr, May, Jun, Jul 2021 – Site Visit, Meetings, Presentation. • Mar, Apr, May 2022 – Teams Meeting, Workshop, Meeting. • Apr, May 2022 – Meetings with DoT and Oropesa. • Oct, Nov 2022 – Meeting with Dampier Technical Advisory and Consultative Committee (TACC) Chair, TACC presentation. • Jan, Feb, Mar, Sept 2023 – Meeting. • May 2023 – Attended and presented at Ashburton Technical Advisory and Consultative Committee (TACC) • Nov 2023 – MS Teams, Ashburton TACC. • Jan, Mar, May, Jun, Aug, Sep, Nov 2024- Meeting and Teleconference. • Jan 2025 - Phone	• Port approvals. • Non confliction with competing port users and applications to be foundation proponent at CPE Port. • Biological surveys. • New layout plan. • Port access and shipping. • Alternative transhipping route from CPE Port. • Road access to Port areas. • Site visit. • Draft development approval submission. • Extent of submission, topics covered. • Dredging and port development. • Stage 3 development approval. • PowerPoint presentation for briefing PPA personnel in Dampier late June. • Proposed anchorage locations. • Proposed changes to port marine boundaries. • Logic for proposed realignment of CPE port boundary. • Formal acceptance of proposed CPE boundary realignment. • Dredging. • Project update. • Cape Preston boundary discussions. • Development Application Summary. • Government strategy. • PPA Resources. • Capital costs. • Tenure and Licences discussed. • Introduction of the Port Co concept to the State. • Port operational matters • Ashburton TACC. • Long term tenure for monitoring bores in the port area.	• Ongoing discussions required. • Advise PPA of the channel from CPE to OGVs. • Leichhardt to obtain investigation licence. • Proceed with stage 3 development application without the marine boundary between Cape Preston/CPE being resolved. • Causeway to be removed from layouts. • Leichhardt to define short-term and ultimate plans. • Proposed new OGV anchorage coordinates to be submitted for ratification. • Stockpile to be located behind sand dune. • Add separate access to jetty, explain third party access in development approval. • CITIC mooring to be relocated, minor impact. • PPA to discuss a path forward on what can and cannot be committed to. • Leichhardt to provide the dredge plan once finalised for environmental approvals.

Stakeholder	Date/s	Relevant issues/topics raised	Proponent response/outcome
Regional Development Australia Pilbara	Sep 2020 – Meeting. Feb 2023 - Meeting	• Proposal update and follow-ups from November 2019 Canberra meetings. • Regulatory barriers to development. • Housing for employees • Future land releases in the Pilbara	• Ongoing discussions required. • Schedule a meeting for the next Proposal milestone.
Community and Corporate Stakeholders			
CITIC Pacific Mining (Local miner)	• Aug 2015-May 2020 – Emails, phone calls. • Sep 2020 – Teleconference. • Oct 2024 – Phone.	• Proposal updates. • Access agreement and legal negotiations.	• Ongoing discussions required. • Leichhardt to provide a detailed description of Proposal disturbance underlying Mardie pastoral lease.
ECU	• Jun 2020 – Meeting. • Sep 2020 – Meeting.	• Shorebird conservation and research program at 40-Mile Beach. • Outcome of the research program. • Indigenous involvement. • Development of a proposal for birds. • Habitat creation with the pond group.	• Ongoing discussions required. • ECU to provide a proposal.
Hampton Harbour Boat and Sailing Club	Jun 2020 – Meeting.	• Proposal Overview. • Informing the 40-Mile Beach recreation boat ramp users of Leichhardt plans for the area. • Aspects of importance to local recreational users.	• Investigate stakeholder requirements for recreational area. • Leichhardt to develop a Proposal overview to be distributed to the member base.
Karratha & Districts Chamber of Commerce and Industry	May 2023 – Leichhardt hosted event	• Update on the Proposal. • Update on community opportunities. • Update on L community support.	N/A
King Bay Game Fishing Club	• Sep 2020 – Teleconference and Meeting.	Community support program.	Organise a meeting in Karratha.

Stakeholder	Date/s	Relevant issues/topics raised	Proponent response/outcome
Local/broader community (Media Release)	• Mar, Jun, Sep 2020 – Website, newspaper, Project briefing paper, media release. • Jun 2022 – General media release.	• Community access/involvement with consultation for the Proposal. • Website for job opportunities and interaction with the Proposal team. • Proposal advertisement.	Ongoing community engagement required.
Nickol Bay Sport Fishing Club	Oct 2020 – Meeting.	Community support program.	Nickol Bay Sport Fishing Club provide details of club membership and levels of sponsorship expected.
Recfishwest	• Oct 2022 – Meeting. • Feb 2023 – Teleconference. • May, Aug 2023 – Information sheet	• Introduction and project briefing. • Project update and feedback. • ERD submission. • Feeback on FAQ. • Recreational fishing species of interest. • Information from ERD that would interest constituents for summary pack.	• Establish quarterly meetings. • Send revised pond layout and FAQ questions for review. • Interested in cumulative impacts. • Estuarine and nearshore fish of interest. • Interested in areas impacted by dredging and bitterns discharge and how it will affect fish abundance – infographics.
Santos	• Jan, Jul, Sep, Dec 2020 – Meetings, teleconferences. • Jan, Feb, May, Jun, Aug, Oct, Nov 2021 – Meetings, telephone calls. • Apr, Oct, Dec 2022 – Teams meeting, meeting. • Dec 2022 – Meeting. • Jan, March, Apr, May, Jun 2023 – Teams meeting, meeting	• Land use and energy requirements. • Interaction with the pipeline. • Revised general design. • Groundwater monitoring system at the Devil Creek Facility. • Proposal overview. • Data availability. • Schedule and timelines for technical and commercial process. • Feedback on the draft negotiation framework. • Borehole Project overview. • Exclusion zone and affected areas. • Update on geothermal licences. • Pipeline access agreement.	• Further consultation on pipeline issue required. • Consider technical requirements for the crossing. • Principle agreement on the process to crossing agreement required. • Leichhardt to formally notify/seek permission prior to works activity in the vicinity of the pipeline.

Stakeholder	Date/s	Relevant issues/topics raised	Proponent response/outcome
WAFIC	• Mar, Dec 2021 – Meeting and email. • Mar, Jun and Jul 2022 – Meetings. • Oct 2023 - Meeting	• Overview of the Proposal. • Update on the approvals process. • Engagement with commercial fishing sector. • Proposal Schedule. • Consultation with key stakeholders. • Response to fee-for-service information. • Feedback on scope of work for fisheries consultation and potential providers. • Key issues of the Proposal. • Cumulative and incremental impacts. • Fish and Fisheries Desktop Report. • Key findings, guidance and feedback. • Changes to the Proposal. • Engagement process with other proponents. • Current timeline. • Future engagement.	• Leichhardt to include aquatic resources and habits and cumulative impacts in scope of work. • WAFIC to provide comments on the scope of work and contact details for DPIRD researchers. • Leichhardt and WAFIC keep in contact and work together. • Recommended O2 Marine contact Recfishwest for recreational fishing data. • Further consultation required, particularly regarding impact assessment.
WAMSI	• Feb 2022 – Teams meeting. • Jul, Aug 2023 – Meeting • Jan 2025 – Meeting.	• Overview of the Proposal. • Remote-sensing and GIS work on BCH cumulative and regional impacts in the context of the Mardie Project offsets. • Addressing cumulative and regional impacts for the Proposal. • Existing protocols and procedures around BCH remote-sensing and GIS work on cumulative and regional impacts. • Informal discussion regarding research program funding. • Commercial aspects of data provision. • Mardie offset research projects. • ERD resubmission.	• Agreement on the process for the provision of the LiDAR data. • ERD resubmission will not be affected by the delay in the Mardie offset studies as relevant information can be captured in the response to public comments.
WAC	• 2018 - Email and phone. • Feb 2019 – Meeting. • Apr 2019 – Meeting with YACMAC. • Jun 2020 – Meeting.	• Native Title Agreement. • Meeting at 40-Mile Beach. • Proposal update. • Layout flexibility.	• Ongoing negotiations and discussions required. • Progress towards Native Title Agreement. • Follow up on Heritage agreement delays. • Conduct regular on country visits with WAC members.

Stakeholder	Date/s	Relevant issues/topics raised	Proponent response/outcome
	• May, Sep, Oct, Nov, Dec 2021 – Heritage surveys, meeting, sundowner. • Apr, May, Jun, Jul, Sept and Oct 2022 – Ethnobotanical Reconnaissance site visit, Social Cultural Heritage Management Plan. • Jan, Feb, May, Jul, Sept, Oct, Nov 2023 – Meeting • Feb, Jun, Oct, Nov, Dec 2024 - Meeting and phone.	• Heritage surveys. • Ethnobotanical areas of interest. • Heritage agreement and negotiation protocol. • Visual impacts. • Access restrictions. • Devil Creek Accommodation. • The Voice. • Investigation licenses.	• Conduct regular workshops in Karratha office. • Further ethnobotanical surveys to be arranged.
YACMAC	• May 2018 – Meeting. • Jan, Feb, Apr 2019 – Emails, phone call, meetings and meeting with WAC.	• Native Title negotiation and completion of Heritage Agreement. • Informal Board meeting. • Proposal overview. • Meeting at 40-Mile Beach.	• Ongoing negotiations. • Progress towards completion of Heritage Agreement. • Progress towards Native Title Agreement.

Table 2: Stakeholder Consultation Plan

Stakeholder	Type	Purpose of planned engagement	Issues to be raised
City of Karratha	Letters and meetings	Letter summarising the Proposal status (i.e., approvals to date and path forward). Meetings to agree City of Karratha support for establishment of a public road to access the Proposal.	• Approvals required for the City (e.g., building). • Approvals required to support the gazetting of Mardie Road. • Future applications. • Path forward for the Proposal. • Ongoing support of 40-mile camping and recreational area.
CITIC Pacific Mining	Emails, phones calls, meetings	Correspondence summarising the Proposal status and timing on pathway forward.	• Proposal summary, status, timing. • Invitation for comment. • Tenement applications.
DBCA	Telephone, email and meetings	Correspondence to obtain approval under the EP Act. Ongoing monitoring data.	• Potential impacts to species listed under BC Act or by DBCA. • Additional information requirements. • Approval conditions.

Stakeholder	Type	Purpose of planned engagement	Issues to be raised
		Potential input to offset programs	• Management Plans. • Ongoing monitoring of Migratory birds. • Offsets.
DCCEEW	Telephone, email and meetings	Correspondence to obtain approval under the EPBC Act.	• Potential impacts to MNES. • Additional information requirements. • Approval conditions. • Management Plans. • Ongoing monitoring of Migratory birds. • Offsets.
DEMIRS	Telephone, email and meetings	Correspondence to obtain grant of mining tenements and approval of Programme of Works (PoWs), MP and MCP. Agreement on salt royalty rates.	• Tenement applications. • MP and MCP assessment. • Timing. • Proposal specific requirements. • Closure requirements. • Salt royalty rates.
DPIRD	Letters and meetings	Correspondence to ensure Proposal has minimal impacts on commercial and recreational fishing.	• Proposal summary, status, timing. • Invitation for comment/discussion. • Proposal operations to minimise impacts.
DWER (Industry Regulation)	Telephone, email and meetings	Correspondence to obtain works approvals under Part V of the EP Act.	• Future Works Approvals and Licence requirements (concentration ponds and crystallisers, bulk material export, landfill etc.). • Proposal timing (i.e., construction). • Potential environmental impacts.
DWER - EPA Services	Telephone, email and meetings	• Correspondence to obtain approval under Part IV of the EP Act. • EPA Board meeting.	• Minor or Preliminary Works approval (if required). • Mangrove Management Area. • Review of draft ERD. • Response to public comments. • Draft conditions. • EPA Board meeting.
Main Roads WA	Letter	Letter summarising the Proposal status and future planning.	• Future applications. • Site access. • Timing (i.e., construction and operation). • Operating hours.

Stakeholder	Type	Purpose of planned engagement	Issues to be raised
			• Site access/routes.
Mardie Station	Ongoing meetings and formal access agreement	• Correspondence summarising the Proposal status and timing on pathway forward. • Formal access agreement.	• Proposal summary, status, timing. • Invitation for comment. • Tenement applications. • Access agreement.
PPA and Dampier Technical Advisory and Consultative Committee	Letters and meetings	Correspondence to: negotiate terms of port leases; gain port Development and Construction Application approvals and support the Taking of the Lands required for the Port.	• Future applications. • Export options. • Path forward for the Proposal. • Ongoing management of dredging and dumping activities.
Relevant Ministers	Letters and meetings	Letter summarising the Proposal status (i.e. approvals to date and path forward).	• Approvals and tenure status. • Future applications. • Studies undertaken. • Key findings. • Path forward for the Proposal.
Santos	Phone calls and meetings	Correspondence summarising the Proposal status and timing on pathway forward.	• Proposal summary, status, timeline. • Notify/seek permission prior to works in vicinity.
WAC and YACMAC Native Title Claim Groups	Letter, copies of draft approval documents and meetings	Correspondence summarising feedback on Proposal design and ongoing negotiations regarding Native Title agreement.	• Approvals to date. • Future applications. • Studies undertaken and key findings. • Path forward for the Proposal. • Potential for Indigenous contracting and employment opportunities. • Bush tucker/bush medicine management.
WAFIC	Letters and meetings	Correspondence to ensure Proposal minimises impacts on commercial fishing.	• Proposal summary, status, timing. • Invitation for comment/discussion. • Proposal operations to minimise impacts.
RecFishWest	Letters and meetings	Correspondence to ensure Proposal minimises impacts on recreational fishing.	• Proposal summary, status, timing. • Invitation for comment/discussion. • Proposal operations to minimise impacts.

4 PROPOSED OFFSETS

4.1 SIGNIFICANT RESIDUAL IMPACTS

The WA Environmental Offsets Guidelines (EPA, 2014) states:

> "*In general, significant residual impacts include those that affect rare and endangered plants and animals (such as declared rare flora and threatened species that are protected by statute), areas within the formal conservation reserve system, important environmental systems and species that are protected under international agreements (such as Ramsar listed wetlands) and areas that are already defined as being critically impacted in a cumulative context. Impacts may also be significant if, for example, they could cause plants or animals to become rare or endangered, or they affect vegetation which provides important ecological functions.*"

Leichhardt has assessed the residual impacts of the Proposal against the residual impact significance model provided in the WA Environmental Offsets Guidelines (EPA, 2014). The Proposal's predicted significant residual impacts on the environmental values are summarised in Table 3 and the Matters of National Environmental Significance (MNES) listed in Table 4.

Table 3: Summary of significant residual impacts - Part IV EP Act Environmental Values

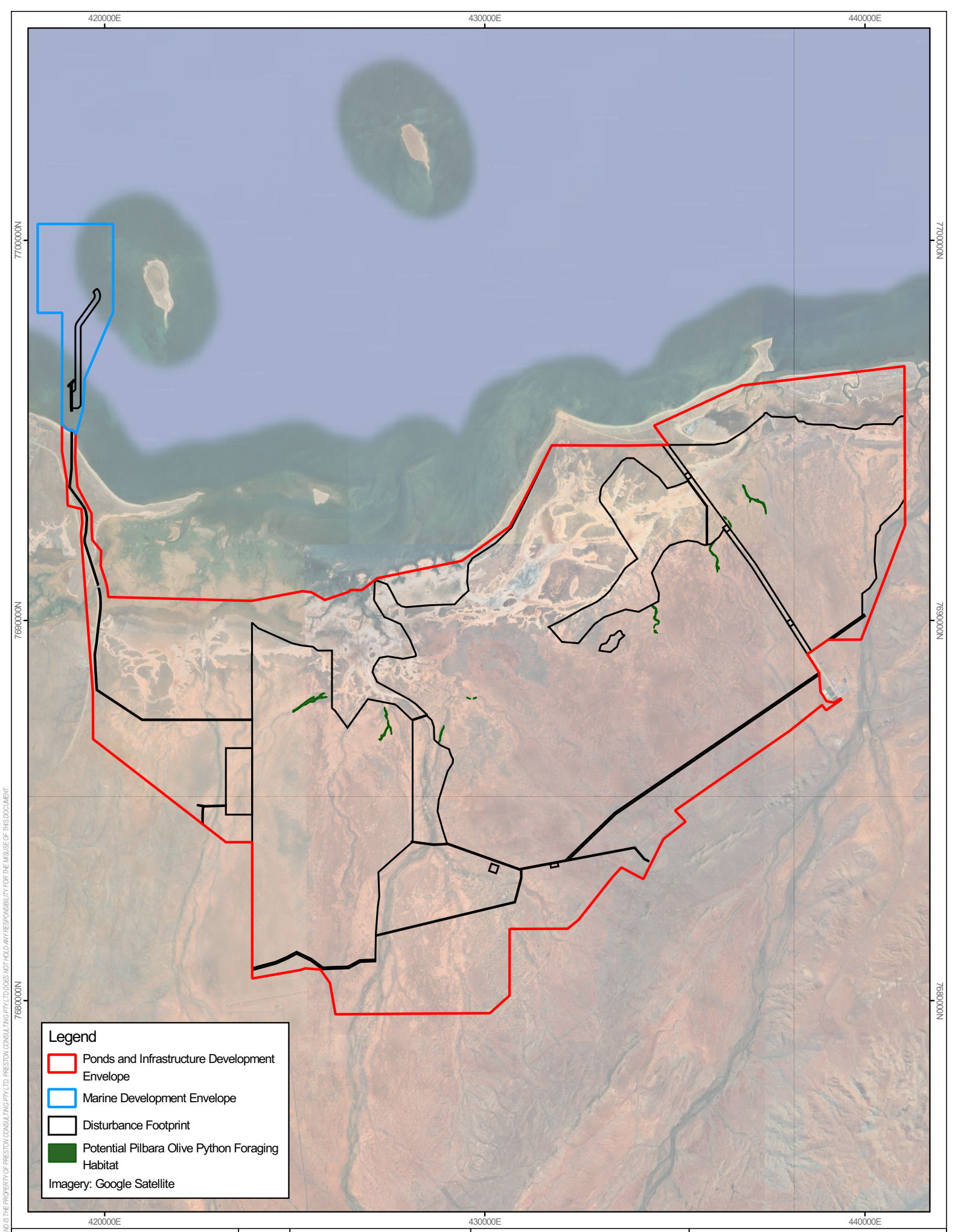
Environmental value	Other associated values	Residual Impacts
'Good' to 'Excellent' condition native vegetation	Horseflat PEC, Pilbara Olive Python, Pilbara Leaf-nosed Bat, Ghost Bat and Grey Falcon	Clearing of up to 11,287.7 ha of good to excellent condition native vegetation, including: • 7,614.1 ha (3.9% of regional extent) of the Horseflat PEC; • 20.8 ha of potential foraging habitat for Pilbara Olive Python; • 10,950.3 ha of broad foraging habitat for the Pilbara Leaf-nosed Bat and Ghost Bat; and • 1,954.4 ha of broad foraging habitat for the Grey Falcon. Potential indirect impacts to up to 181.1 ha of good to excellent vegetation as a result of groundwater mounding and seepage, including up to: • 20.3 ha of Horseflat PEC; • 150.9 ha of broad foraging habitat for the Pilbara Leaf-nosed Bat and Ghost Bat; and • 151.0 ha of broad foraging habitat for the Grey Falcon. Potential indirect impacts to up to 27.0 ha of good to excellent vegetation as a result of a reduction in surface water inundation, including: • 6.9 ha of Horseflat PEC • 16.9 ha of broad foraging habitat for the Pilbara Leaf-nosed Bat and Ghost Bat; and • 17.0 ha of broad foraging habitat for the Grey Falcon Up to 20.3 ha of the groundwater and surface water indirect impacts described above, overlap.

Environmental value	Other associated values	Residual Impacts
Intertidal BCH, in particular mangroves, algal mats, and samphire shrubland	Migratory shorebirds (all listed BCH), marine turtles, green sawfish, North-Western Free-tailed Bat (mangroves)	Loss of up to: • 87.3 ha of HDAM; • 480.7 ha of samphire shrubland BCH; and • 8.3 ha of mangroves. Potential indirect impacts that are uncertain and subject to monitoring, described below. Potential indirect impacts as a result of groundwater mounding and seepage, up to: • 12.0 ha of HDAM; • 15.5 ha of samphire shrublands; and • 1.8 ha of mangroves. Potential indirect impacts as a result of a reduction in surface water inundation, including up to: • 2.9 ha of HDAM; • 8.0 ha of samphire shrublands; and' • 2.4 ha of mangroves Potential for a reduction in available habitat for BCH migration due to sea level rise.

Table 4: Summary of significant residual impacts – MNES

Relevant MNES	Residual Impacts
Listed threatened species and communities (Sections 18 & 18A)	
Migratory Shorebirds	Clearing of foraging habitat including: • Up to 87.3 ha of algal mats; • Up to 480.7 ha of samphire shrubland BCH; and • Up to 8.3 ha of mangroves. Potential indirect impacts as a result of groundwater mounding and seepage, up to: • 12.0 ha of HDAM; • 15.5 ha of samphire shrublands; and • 1.8 ha of mangroves. Potential indirect impacts as a result of a reduction in surface water inundation, including up to: • 2.9 ha of HDAM; • 8.0 ha of samphire shrublands; and' • 2.4 ha of mangroves
Pilbara Olive Python (*Liasus olivaceaus barroni*)	Clearing of up to 20.8 ha of potential foraging habitat. There will be an additional 0.2 ha and 1.0 ha of potential foraging habitat at risk of indirect impacts associated with groundwater mounding and seepage and reduced surface water inundation respectively.
Pilbara Leaf-nosed Bat (*Rhinonicteris aurantia*) and Ghost Bat (*Macroderma gigas*)	Clearing of up to 10,950.3 ha of broad foraging habitat. There will be an additional 150.9 ha and 16.9 ha of broad foraging habitat at risk of indirect impacts associated with groundwater mounding and seepage and change to surface water inundation respectively.
Grey Falcon (*Falco hypoleucos*)	Clearing of up to 1,954.4 ha of broad foraging habitat. There will be an additional 151.0 ha and 17.0 ha of broad foraging habitat at risk of indirect impacts associated with groundwater mounding and seepage and change to surface water inundation respectively.
Listed migratory species (Sections 20 & 20A)	
Migratory Shorebirds	Clearing of foraging habitat including: • Up to 87.3 ha of HDAM; • Up to 480.7 ha of samphire shrubland BCH; and • Up to 8.3 ha of mangroves Potential indirect impacts as a result of groundwater mounding and seepage, up to: • 12.0 ha of HDAM; • 15.5 ha of samphire shrublands; and • 1.8 ha of mangroves. Potential indirect impacts as a result of a reduction in surface water inundation, including up to: • 2.9 ha of HDAM; • 8.0 ha of samphire shrublands; and' • 2.4 ha of mangroves

Leichhardt has assessed the residual impacts of the Proposal against the residual impact significance model provided in the WA Environmental Offsets Guidelines (EPA, 2014). The findings of this assessment are provided in Table 6.



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GDA2020 / MGA zone 50

1:120,000

Project: LEI_0535_027
Date: 30/04/2025
Size: A4
Author: ASmithers (Preston Consulting Pty Ltd)

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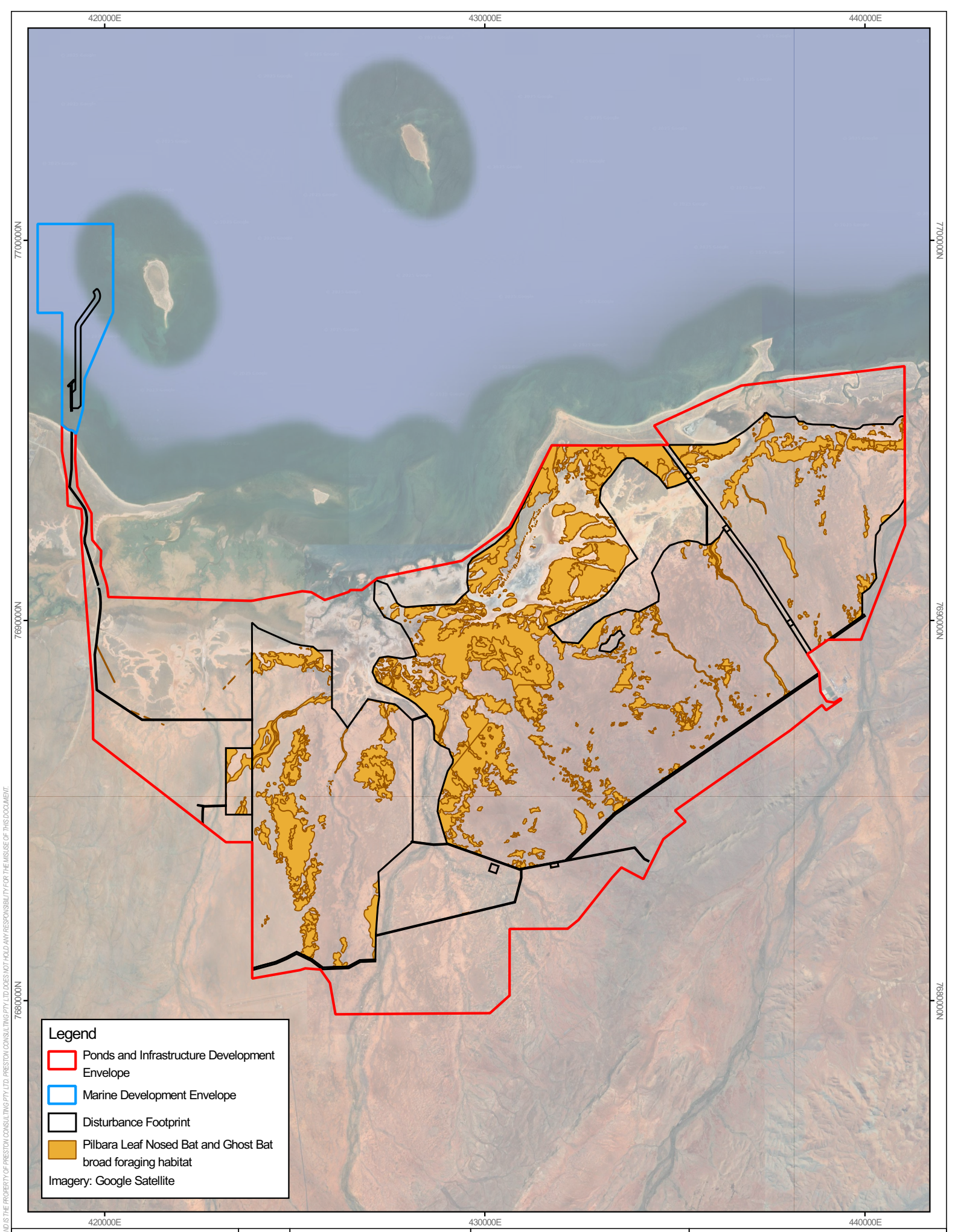
Figure 3: Significant residual impacts to Pilbara Olive Python habitat of good or above vegetation condition



0 2 4 km

GDA2020 / MGA zone 50

1:120,000

Project: LEI_0535_029
Date: 26/03/2025
Size: A4
Author: ASmithers (Preston Consulting Pty Ltd)

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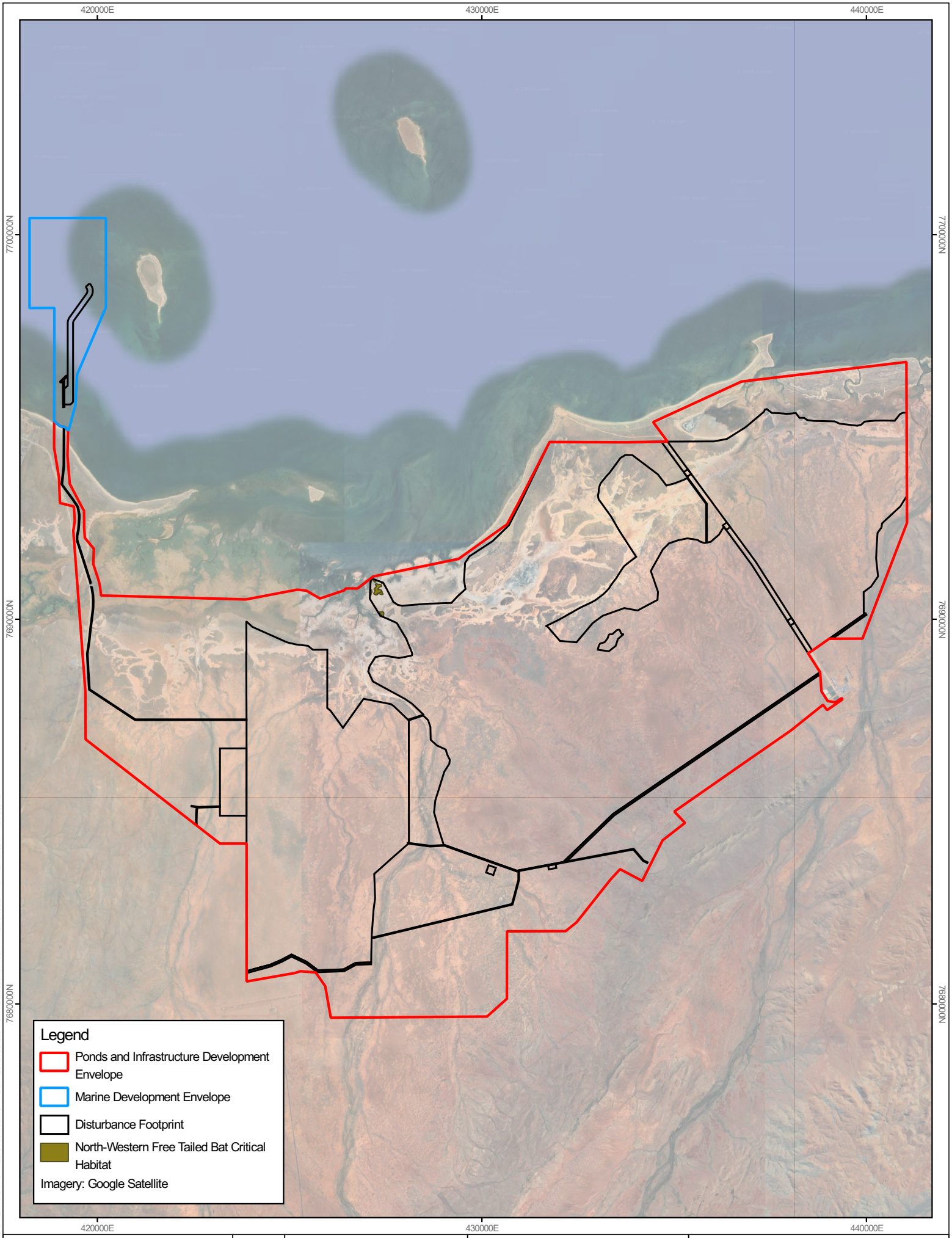
Figure 4: Significant residual impacts to Pilbara Leaf-nosed Bat & Ghost Bat habitat of good or higher vegetation condition



0 2 4 km

GDA2020 / MGA zone 50

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Project: LEI_0535_030
Date: 30/04/2025
Size: A4
Author: ASmithers (Preston Consulting Pty Ltd)

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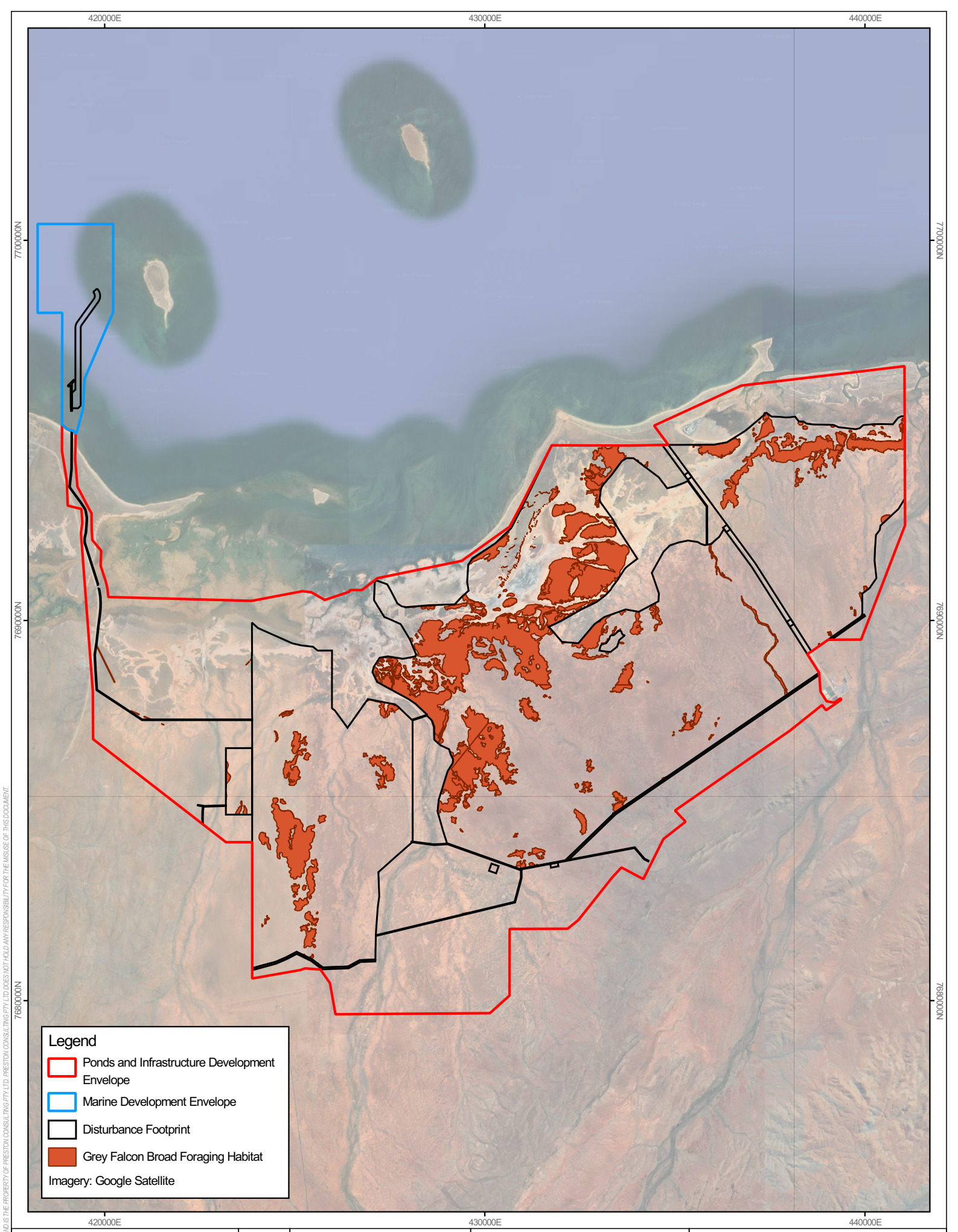
Figure 5: Significant residual impacts to North-Western Free-tailed Bat habitat of good or higher vegetation condition



0 2 4 km

GDA2020 / MGA zone 50

1:120,000

Project: LEI_0535_031
Date: 26/03/2025
Size: A4
Author: ASmithers (Preston Consulting Pty Ltd)

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Figure 6: Significant residual impacts to Grey Falcon habitat of good or higher vegetation condition

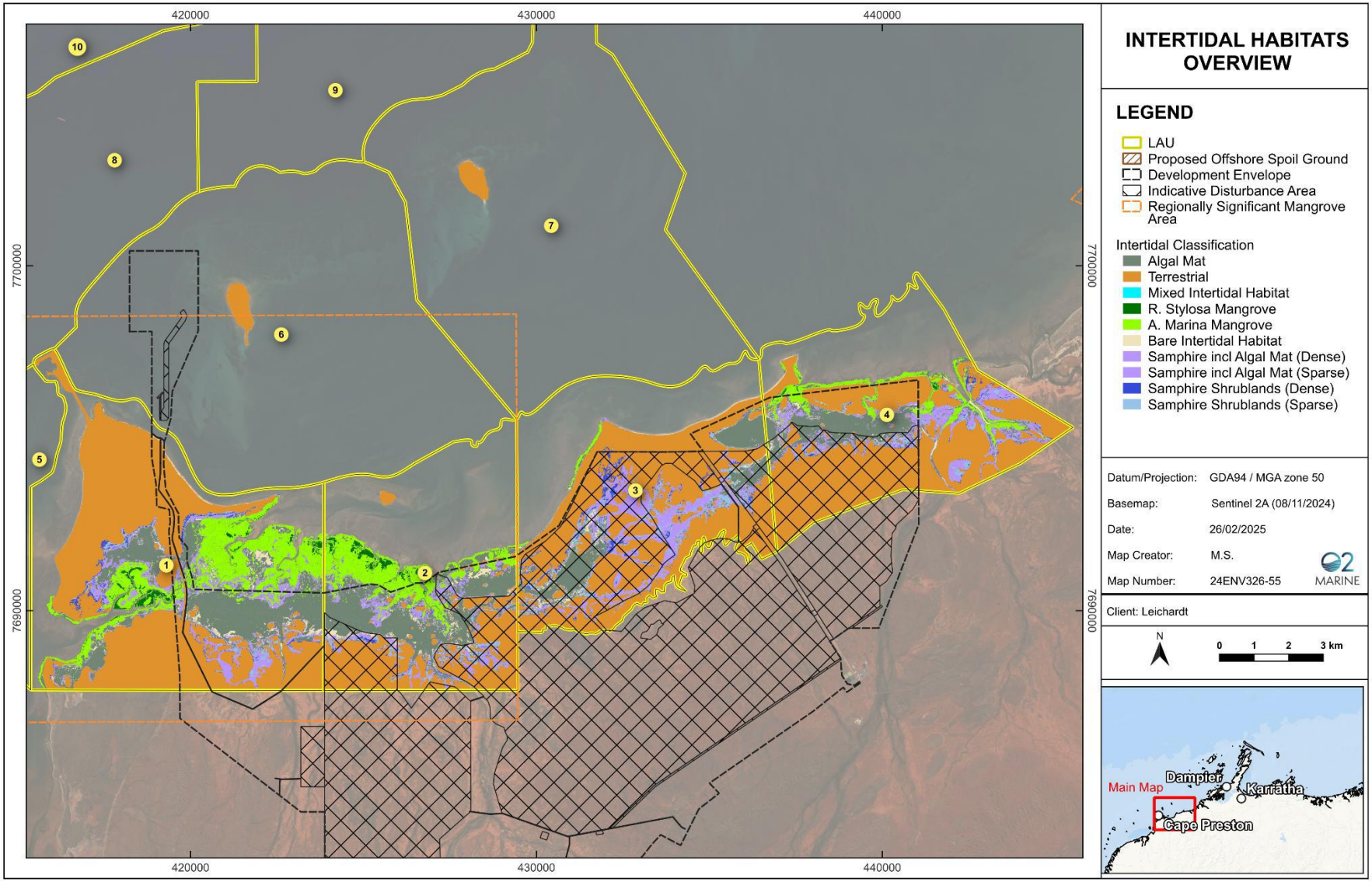

Figure 7: Direct impacts on BCH

4.2 DETAILS OF PROPOSED OFFSETS

Table 5 describes the measures proposed to offset the additional residual impacts associated with the Proposal. These measures are subject to refinement as the Proposal assessment progresses, and pending discussions with influencing parties such as DBCA.

Pilbara Environmental Offsets Fund (PEOF) funding will be maintained through indexation to the Perth Consumer Price Index.

Table 5: Proposed offsets

Offset	Type	Details	Relevant values/MNES
Offsets for known significant residual impacts			
Contribution to the PEOF ('higher rate') for direct impacts to critical habitat for North-Western Free-tailed Bat	PEOF: Direct-- preservation of existing habitat and management	As above.	North-Western Free-tailed Bat
Contribution to the PEOF ('higher rate') for direct impacts to Horseflat PEC *not already offset by the measures above*	PEOF: Direct-- preservation of existing habitat and management	As above.	Horseflat PEC
Contribution to the PEOF ('base rate') for direct impacts to 'Good' to 'Excellent' condition native vegetation *not already offset by the measures above.* This vegetation includes broad foraging habitat for Pilbara Olive Python, Pilbara Leaf-nosed Bat, Ghost Bat and Grey Falcon.	PEOF: Direct-- preservation of existing habitat and management	As above.	Pilbara Olive Python Pilbara Leaf-nosed Bat Ghost Bat Grey Falcon Good to Excellent quality vegetation
Contribution of funds to a relevant intertidal BCH conservation and management program established for the Proposal. Funds are to be paid at a rate of $2,102 per hectare of mangroves, samphire shrublands and HDAM lost as a result of the Proposal (estimated value of $1.2 million), based on	Direct (management)-- contribution for the purpose of management	The Proposal is predicted to have a significant residual impact on several intertidal BCH types. Leichhardt is aware that research programs are underway as part of the offsets for the Mardie Project: Project A-- Mapping of the original and current extent of samphire and algal mat on the west Pilbara coast. Project B-- Identify and quantify the potential effects of sea level rise on mangroves, samphire and algal mat on the west Pilbara coast. Project C (i)-- Identify the ecological roles, values and functions of algal mat on the west Pilbara coast. Funding could include a postdoctoral or similar study on *Tecticornia* spp. to resolve their taxonomy and provide a genomic library and taxonomic key to their identification along the west Pilbara	Migratory shorebirds Mangroves Samphire shrublands Algal mats Commercial fisheries Nearshore marine fauna

Offset	Type	Details	Relevant values/MNES
2023 Perth CPI index. The proposed offsets will be developed after the results of the Mardie Project offset program are released, with the information used to develop suitable management measures to protect the ecological roles, values and functions of intertidal BCH.		coast. This research to address this uncertainty will provide environmental and nature resource management regulators with greater confidence when assessing project developments that impact samphire habitats. Furthermore, this research also provides greater certainty (de-risking) to development proponents and project operators, especially in respect to the mitigation of impacts to samphire species and the communities they form, and the application of regulatory frameworks designed to limit and offset impacts. The details of the study have been drafted with Curtin University and DBCA. It is likely that the findings of the Mardie offset research listed above will be available in 2025, well before the implementation of the Proposal. Leichhardt intends to assess the findings and develop further appropriate conservation and management offsets in consultation with DBCA, DCCEEW, WAMSI and DWER that provide the best environmental outcome for these BCH types across the western Pilbara coast. Leichhardt will ensure that the real funding for the conservation and management projects will be maintained through indexation to the Perth CPI.	
Contingency offsets for potential indirect significant residual impacts Contingency offsets will be implemented if monitoring identifies that there are additional impacts associated with indirect impacts such as SLR and altered hydrology and hydrogeology.			
Contribution to the PEOF ('higher rate') for confirmed indirect impacts to critical habitat for North-Western Free-tailed Bat	PEOF: Direct-- preservation of existing habitat and management	Potential indirect impacts to critical habitat for North-Western Free-tailed Bat associated with reductions in surface water inundation and groundwater seepage and mounding may occur, although the extent of impact is uncertain. There is also uncertainty about the impacts of sea level rise on mangrove habitat. In a worst-case scenario the Proposal could reduce the area available for the migration of mangroves inland. If these potential impacts occur and result in the loss of critical habitat for North-Western Free-tailed Bat (i.e., confirmed by monitoring) then this would be considered a significant residual impact that requires an offset. Refer above for a description of the PEOF.	North-Western Free-tailed Bat
Contribution to the PEOF ('higher rate') for confirmed indirect impacts to Horseflat PEC *not already offset by the measures above*	PEOF: Direct-- preservation of existing habitat and management	Potential indirect impacts to Horseflat PEC associated with reductions in surface water inundation and groundwater seepage and mounding may occur, although the extent of impact is uncertain. If these potential impacts occur and result in the loss of Horseflat PEC (i.e., confirmed by monitoring) then this would be considered a significant residual impact that requires an offset. Refer above for a description of the PEOF.	Horseflat PEC
Contribution to the PEOF ('base rate') for confirmed indirect impacts to 'Good' to 'Excellent' condition native	PEOF: Direct-- preservation of existing habitat and management	Potential indirect impacts to 'Good' to 'Excellent' condition native vegetation associated with reductions in surface water inundation and groundwater seepage and mounding may occur, although the extent of impact is uncertain.	Pilbara Olive Python Pilbara Leaf-nosed Bat Ghost Bat

Offset	Type	Details	Relevant values/MNES
vegetation *not already offset by the measures above.* This vegetation includes broad foraging habitat for Pilbara Olive Python, Pilbara Leaf-nosed Bat, Ghost Bat and Grey Falcon.		If these potential impacts occur and result in the loss of 'Good' to 'Excellent' condition native vegetation (i.e., confirmed by monitoring) then this would be considered a significant residual impact that requires an offset. Refer above for a description of the PEOF.	Grey Falcon Good to Excellent quality vegetation
Contribution of funds to a relevant intertidal BCH conservation and management program established for the Proposal. Funds are to be paid at a rate of $2,102 per hectare of mangroves, samphire shrublands and HDAM confirmed to be indirectly impacted as a result of the Proposal, based on 2023 Perth CPI index. The contingency offsets will be in addition to the BCH offsets described above, to protect the ecological roles, values and functions of intertidal BCH.	Direct (management)-- contribution for the purpose of management	Potential indirect impacts to intertidal BCH associated with reductions in surface water inundation and groundwater seepage and mounding may occur, although the extent of impact is uncertain. There is also uncertainty about the impacts of sea level rise on intertidal BCH. In a worst-case scenario the Proposal could reduce the area available for the migration of BCH inland. Leichhardt is aware that research programs are underway as part of the offsets for the Mardie Project: Project A-- Mapping of the original and current extent of samphire and algal mat on the west Pilbara coast. Project B-- Identify and quantify the potential effects of sea level rise on mangroves, samphire and algal mat on the west Pilbara coast. Project C (i)-- Identify the ecological roles, values and functions of algal mat on the west Pilbara coast. It is likely that the findings of the Mardie offset research listed above will be available in 2025, well before the implementation of the Proposal or the requirement for contingency offsets. Leichhardt intends to assess the findings and develop further appropriate conservation and management offsets in consultation with DBCA, DCCEEW, WAMSI and DWER that provide the best environmental outcome for these BCH types across the western Pilbara coast. Leichhardt will ensure that the real funding for the conservation and management projects will be maintained through indexation to the Perth CPI.	Migratory shorebirds Mangroves Samphire shrublands Algal mats Commercial fisheries Nearshore marine fauna

5 ASSESSMENT OF PROPOSED OFFSETS – EP ACT

Offsets are the last of the four steps in the mitigation hierarchy (Avoid, Minimise, Rehabilitate and Offset). They are only applied to counterbalance residual significant impacts when the other steps have already been applied to a Proposal.

Leichhardt commissioned numerous environmental surveys and studies for the Proposal. The surveys determined that there were key environmental values that required protection, including terrestrial, intertidal and marine habitats.

Leichhardt assessed the findings of the surveys and studies and made significant changes to the Proposal design. Some of these changes carried a significant cost (such as relocating the pond walls further south). Changes were also made to avoid and minimise construction and operational impacts, such as implementing surface water drainage measures.

The application of these avoidance and minimisation mechanisms in Proposal design and operations has meant that impacts to many key environmental values have been avoided or significantly reduced. Leichhardt understands that this conclusion is in part based on studies and modelling, and as such monitoring has been committed to in order to verify the study and model outputs.

5.1 WA ENVIRONMENTAL OFFSETS GUIDELINES

The WA Environmental Offsets Guidelines (EPA, 2014) states:

> "*In general, significant residual impacts include those that affect rare and endangered plants and animals (such as declared rare flora and threatened species that are protected by statute), areas within the formal conservation reserve system, important environmental systems and species that are protected under international agreements (such as Ramsar listed wetlands) and areas that are already defined as being critically impacted in a cumulative context. Impacts may also be significant if, for example, they could cause plants or animals to become rare or endangered, or they affect vegetation which provides important ecological functions.*"

Leichhardt has assessed the residual impacts of the Proposal against the residual impact significance model provided in the WA Environmental Offsets Guidelines (EPA, 2014). The findings of this assessment are provided in Table 6.

Table 6: Assessment against residual impact significance model

Part IV Environmental Factors	Vegetation and Flora				Benthic Habitat and Communities		
				Terrestrial Fauna			
Part V Clearing Principles	**C--** Rare flora	**D--** TECs	**E--** Remnant vegetation	**F--** Wetlands and waterways	**H--** Conservation areas	**A--** High biological diversity	**B--** Habitat for fauna
Residual impact that is environmentally unacceptable and cannot be offset	No residual impacts are considered to meet this criterion						
Significant residual impacts that will require an offset – *all significant residual impacts to species and ecosystems are protected by statute or where the cumulative impact is already at a critical level*	No residual impacts are considered to meet this criterion: • No Threatened Flora records are located within the development envelopes; • No significant Priority Flora impacts; • Undescribed flora species are proposed to be mitigated such that they are not considered significant; and • No significant residual impacts to novel species or species with significant range extensions.	No TECS recorded within the development envelopes. Residual impacts to Horseflat PEC are likely to meet this criterion. Up to 7,614.1 ha of disturbance (3.9% of regional extent).	Residual impacts to vegetation in 'good' to 'excellent' condition are likely to meet this criterion: Up to 11,287.7 ha of good to excellent condition native vegetation, including potential habitat for significant flora and fauna.	No residual impacts are considered to meet this criterion as no wetlands or waterways that are protected by statute lie within the development envelopes.	Some significant residual impacts to mangroves within the RSMA. The Proposal will result in up to 8.3 ha of mangroves within this area.	Some significant residual impacts to mangroves which are considered areas of high biological diversity. The Proposal will result in the loss of up to 8.3 ha of mangroves.	Some significant residual impacts to migratory bird species. Up to 576.3 ha of disturbance is to migratory shorebird habitat is predicted which includes: • Mangroves; • Samphire shrublands; and • HDAM. Some significant residual impacts associated with terrestrial fauna habitat including: • Up to 20.8 ha of disturbance to potential foraging habitat for Pilbara Olive Python • Up to 8.3 ha of disturbance to critical habitat for North-Western Free-tailed Bat; • Up to 10,950.3 ha of disturbance to potential foraging habitat for the Ghost Bat and Pilbara Leaf-nosed Bat; and • 1,954.4 ha of disturbance to potential foraging habitat for the Grey Falcon.
Significant residual impacts that may require an offset – *any significant residual impacts to potentially threatened species and ecosystems, areas of high environmental value or where the cumulative impact may reach critical levels if not managed*	No other residual impacts are considered to meet this criterion – refer above.	Potential indirect impacts to the Horseflat PEC associated with reductions in surface water inundation and groundwater seepage and mounding may occur, although the extent of impact is uncertain. If these impacts result in the loss of Horseflat PEC then this would be considered a significant residual impact that requires an offset.	Potential indirect impacts to good to excellent quality vegetation associated with reductions in surface water inundation and groundwater seepage and mounding may occur, although the extent of impact is uncertain. If these impacts result in the loss of good to excellent quality vegetation then this would be considered a significant residual impact that requires an offset.	No residual impacts are considered to meet this criterion: refer above.	Potential indirect impacts to mangroves within the RSMA associated with reductions in surface water inundation and groundwater seepage and mounding may occur, although the extent of impact is uncertain. There is also uncertainty about the impacts of sea level rise on the mangroves in the RSMA. In a worst-case scenario the Proposal could reduce the area available for the migration of mangroves inland. If these potential impacts occur and result in the loss of mangroves within the RSMA then this would be considered a significant residual impact that requires an offset.	Impacts to coral reefs may meet this criterion if dredging and bitterns disposal are not managed appropriately. Potential indirect impacts to mangroves associated with reductions in surface water inundation and groundwater seepage and mounding may occur, although the extent of impact is uncertain. There is also uncertainty about the impacts of sea level rise on the mangroves. In a worst-case scenario the Proposal could reduce the area available for the migration of mangroves inland. If these potential impacts occur and result in the loss of mangroves then this would be considered a	No other residual impacts are considered to meet this criterion – refer above. Potential indirect impacts to migratory species and terrestrial fauna associated with reductions in surface water inundation and groundwater seepage and mounding may occur, although the extent of impact is uncertain. There is also uncertainty about the impacts of sea level rise on BCH habitat. In a worst-case scenario the Proposal could reduce the area

Part IV Environmental Factors	Vegetation and Flora						
					Benthic Habitat and Communities		
				Terrestrial Fauna			
Part V Clearing Principles	**C--** Rare flora	**D--** TECs	**E--** Remnant vegetation	**F--** Wetlands and waterways	**H--** Conservation areas	**A--** High biological diversity	**B--** Habitat for fauna
						significant residual impact that requires an offset.	
Residual impacts that are not significant	No known Threatened Flora listed under the EPBC Act or BC Act will be disturbed. Priority flora species were recorded within the development envelopes. Based on the assessments of these species in Section **Error! R eference source not found.**, the Proposal is unlikely to significantly impact the local or regional extent of these species.	No other residual impacts are considered to meet this criterion – refer above.	Clearing of vegetation that is in poor or degraded condition will occur as a result of the Proposal however this is not considered to be a significant residual impact.	No other residual impacts are considered to meet this criterion – refer above.	No other residual impacts are considered to meet this criterion – refer above.	With the exception of the above, the Proposal avoids areas of high biological diversity.	Clearing of fauna habitat that is in poor or degraded condition will occur as a result of the Proposal however this is not considered to be a significant residual impact.

5.2 WA OFFSETS TEMPLATE

Leichhardt has completed a WA Offsets Template as per the requirements of the WA Environmental Offsets Guideline (EPA, 2014), provided in Table 7.

Table 7: WA offsets policy template

Existing Environment/Impact	**Mitigation**			**Significant Residual Impact**	**Offset Calculation Methodology**				
	Avoid and Minimise	**Rehabilitation Type**	**Likely Rehab Success**		**Type**	**Risk**	**Likely Offset Success**	**Time Lag**	**Offset Quantification**
North-Western Free-tailed Bat – clearing of up to 8.3 ha of critical roosting habitat.	**Avoid:** The ponds have been re-designed to avoid the majority of critical habitat (mangroves). **Minimise**: • Minimise clearing within good to excellent habitat • Industry standard clearing controls • Compliance with Part IV EP Act approval, Part V EP Act Works Approval and Licence, and *Mining Act 1978.*	• Decommission and remove infrastructure; • Remove excess salt and brine from crystallisers • Pond embankments will be breached to allow re-establishment of tidal inundation and flooding regimes; and • Crystallisers will be rehabilitated to an acceptable landform.	Can the environmental values be rehabilitated/Evidence? Likely, Pilbara rehabilitation methods are well established and while rehabilitation of a salt project has not yet been undertaken, additional scientific information is likely to be available at closure given the long life of the Proposal. Operator experience in undertaking rehabilitation? Leichhardt will source experienced rehabilitation operators at closure. What is the type of vegetation being rehabilitated? Various Time lag? Up to several decades for vegetation to fully re-establish. Credibility of the rehabilitation proposed (evidence of demonstrated success) Credible, Pilbara rehabilitation methods are well established and while success has been varied, additional scientific information is likely to be available at closure given the long life of the Proposal.	Yes	Critical habitat: Refer to 'Intertidal BCH' item below.	Critical habitat: Unknown – offset programs are to be determined at the completion of the Mardie offsets research program	Can the values be defined and measured? Yes – value to species can be measured Operator experience/Evidence? PEOF managers will manage the offset What is the type of vegetation being revegetated? N/A	Minimal-- manages this species soon after payment.	Offset would protect/improve/maintain the quality of significant habitat for this environmental value.

Existing Environment/Impact	Mitigation			Significant Residual Impact	Offset Calculation Methodology				
	Avoid and Minimise	Rehabilitation Type	Likely Rehab Success		Type	Risk	Likely Offset Success	Time Lag	Offset Quantification
Horseflat PEC – Clearing of up to 7,614.1 ha of Horseflat PEC.	**Avoid:** N/A **Minimise**: • Minimise clearing within good to excellent vegetation • Industry standard clearing controls • Compliance with Part IV EP Act approval, Part V EP Act Works Approval and Licence, and *Mining Act 1978.*	• Decommission and remove infrastructure; • Remove excess salt and brine from crystallisers; • Pond embankments will be breached to allow re-establishment of tidal inundation and flooding regimes; and • Crystallisers will be rehabilitated to an acceptable landform.	<u>Can the environmental values be rehabilitated/Evidence?</u> Likely, Pilbara rehabilitation methods are well established and while rehabilitation of a salt project has not yet been undertaken, additional scientific information is likely to be available at closure given the long life of the Proposal. <u>Operator experience in undertaking rehabilitation?</u> Leichhardt will source experienced rehabilitation operators at closure. <u>What is the type of vegetation being rehabilitated?</u> Various <u>Time lag?</u> Up to several decades for vegetation to fully re-establish. <u>Credibility of the rehabilitation proposed (evidence of demonstrated success)</u> Credible, Pilbara rehabilitation methods are well established and while success has been varied, additional scientific information is likely to be available at closure given the long life of the Proposal.	Yes	Contribution to the PEOF at the 'Roebourne-- higher' rate for direct or indirect impacts (predicted and additional impacts identified during monitoring) to Good to Excellent quality habitat	Low – PEOF well-established for offsets in the Pilbara	<u>Can the values be defined and measured?</u> Likely – value to ecosystem should be able to be measured Yes – value to PEC can be measured <u>Operator experience/Evidence?</u> PEOF managers will manage the offset <u>What is the type of vegetation being revegetated?</u> N/A	Minimal-- manages PEC soon after payment.	Offset would protect/improve/maintain the quality of significant areas of this environmental value.
Good to Excellent Condition native vegetation – clearing of up to 11,287.7 ha of good to excellent condition native vegetation, including potential habitat for significant flora and fauna species. **Pilbara Olive Python**– clearing of up to 20.8 ha of potential foraging habitat. **Pilbara Leaf-nosed Bat and Ghost Bat** – clearing of up to 10,950.3 ha of potential foraging habitat. **Grey Falcon** – 1,954.4 ha of potential foraging habitat.	**Avoid:** The Coastal Dunes PEC has been completely avoided. **Minimise**: • Minimise clearing within good to excellent vegetation • Industry standard clearing controls • Compliance with Part IV EP Act approval, Part V EP Act Works Approval and Licence, and *Mining Act 1978.*	• Decommission and remove infrastructure; • Remove excess salt and brine from crystallisers • Pond embankments will be breached to allow re-establishment of tidal inundation and flooding regimes; and • Crystallisers will be rehabilitated to an acceptable landform.	<u>Can the environmental values be rehabilitated/Evidence?</u> Likely, Pilbara rehabilitation methods are well established and while rehabilitation of a salt project has not yet been undertaken, additional scientific information is likely to be available at closure given the long life of the Proposal. <u>Operator experience in undertaking rehabilitation?</u> Leichhardt will source experienced rehabilitation operators at closure. <u>What is the type of vegetation being rehabilitated?</u> Various <u>Time lag?</u> Up to several decades for vegetation to fully re-establish. <u>Credibility of the rehabilitation proposed (evidence of demonstrated success)</u> Credible, Pilbara rehabilitation methods are well established and while success has been varied, additional scientific information is likely to be available at closure given the long life of the Proposal.	Yes	Contribution to the PEOF at the 'Roebourne – base' rate for direct or indirect impacts (predicted and additional impacts identified during monitoring) to Good to Excellent quality vegetation / habitat	Low – PEOF well-established for offsets in the Pilbara	<u>Can the values be defined and measured?</u> Yes – value to ecosystem can be measured <u>Operator experience/Evidence?</u> PEOF managers will manage the offset <u>What is the type of vegetation being revegetated?</u> N/A <u>Is there evidence the environmental values can be re-created (evidence of demonstrated success)?</u> N/A	Minimal-- manages vegetation and affected species soon after payment.	Offset would protect/improve/maintain the quality of significant areas of these environmental values.
Intertidal BCH– loss of up to: • 480.7 ha of samphire shrubland BCH • 8.3 ha of mangroves • 87.3 ha of HDAM. BCH above is also considered migratory shorebird habitat, and mangroves are considered North-Western Free-tailed Bat habitat.	**Avoid**: • Marine disturbance footprint avoids impacts to known high value BCH areas such as dense cover coral and seagrass; • Pond disturbance footprint avoids impacts to almost all of the structurally complex (i.e., CC) mangrove BCH; and	• All buildings and structures on land will be removed from the site and the pond areas may be selectively reconnected to the existing tidal flat system, with	<u>Can the environmental values be rehabilitated/Evidence?</u> Yes, natural processes are expected to gradually reinstate the remaining BCH, although some boundaries may be altered due to sea level rise. BCH are relatively dynamic due to cyclone events. <u>Operator experience in undertaking rehabilitation?</u> None required, rehabilitation will occur via natural processes. <u>What is the type of vegetation being rehabilitated?</u>	Yes	Contribution to a relevant management program established for the Proposal. The management program is intended to be developed after the results of the	Unknown but predicted to be low, as offset would be based on recent detailed research	<u>Can the values be defined and measured?</u> Likely – value to regional BCH should be able to be measured <u>Operator experience/Evidence?</u>	Minimal – funding will be provided to a management program established specifically for the Proposal.	Offset program would be based on recent research to best manage this environmental value.

Existing Environment/Impact	Mitigation			Significant Residual Impact	Offset Calculation Methodology				
	Avoid and Minimise	Rehabilitation Type	Likely Rehab Success		Type	Risk	Likely Offset Success	Time Lag	Offset Quantification
	• Pond design avoids impacts to surface water flows within McKay Creek. **Minimise**: • Mangrove disturbance limits; • Ensure low noise and light emissions; • Industry standard clearing controls; and • Compliance with Part IV EP Act approval, Part V EP Act Works Approval and Licence, and *Mining Act 1978* approvals.	consideration of the ponds becoming fauna habitat for shore birds; • Remove excess salt and brine from crystallisers • Pond embankments will be breached to allow re-establishment of tidal inundation and flooding regimes..	Algal mat, mudflat or salt flat, samphire shrubland BCH and some mangrove BCH. <u>Time lag?</u> Up to two years to remove salts depending on rainfall events, then several decades for BCH to re-establish. <u>Credibility of the rehabilitation proposed (evidence of demonstrated success)</u> Credible, intertidal processes are dynamic and will flush the area and allow BCH to spread across the area over time. There is evidence in the Pilbara of mangroves growing on man-made structures.		Mardie Project offset program are released, with the information used to develop suitable management measures to protect the ecological roles, values and functions of intertidal BCH. Funding will be maintained through indexation to the Perth CPI.		Land managers will manage the offset (DBCA or contractor) <u>What is the type of vegetation being revegetated?</u> N/A <u>Is there evidence the environmental values can be re-created (evidence of demonstrated success)?</u> There is evidence in the Pilbara of mangroves growing on man-made structures.		

5.3 OFFSET PRINCIPLES

Six principles support the assessment and decision-making process undertaken by the WA Government in relation to the use of environmental offsets. These principles are set out in the Environmental Offsets Policy (EPA, 2011). The Proposal and proposed offsets have been assessed against each of these principles, as provided in Table 8.

Table 8: Assessment of the proposed offset against the six principles

Number	Principle	Consideration
1	Environmental offsets will only be considered after avoidance and mitigation options have been pursued.	Leichhardt has applied the mitigation hierarchy by identifying measures to avoid, minimise and rehabilitate. The primary action taken to meet this policy's requirements was site selection and design, which avoided and minimised impacts to key environmental features, and reduced the development envelope and required disturbance to the smallest size possible.
2	Environmental offsets are not appropriate for all projects.	It is acknowledged that offsets are not appropriate for all projects. Numerous pond designs were assessed to ensure the impacts are at a scale of significance where offsets are appropriate. As the Proposal may result in significant residual impacts to BCH, fauna habitat and vegetation, an offset is considered to be appropriate.
3	Environmental offsets will be cost-effective, as well as relevant and proportionate to the significance of the environmental value being impacted.	Leichhardt will contribute funding into the PEOF for residual impacts to terrestrial fauna habitats, Horseflat PEC and good to excellent condition vegetation. In area where these values overlap, the higher rate will be selected. The PEOF has been developed to be cost-effective for potential significant residual impacts in the Pilbara and is relevant and proportionate to the Proposal's potential significant residual impacts. Leichhardt also intends to contribute funding for conservation and management programs to offset the residual impacts to intertidal BCH. These offsets will be designed based on the findings of intertidal BCH research currently be undertaken by WAMSI and due to be completed in 2025. Funding could include a postdoctoral or similar study on Tecticornia spp., on a per hectare rate, to resolve their taxonomy and provide a genomic library and taxonomic key to their identification along the west Pilbara coast. This research to address this uncertainty will provide environmental and nature resource management regulators with greater confidence when assessing project developments that impact samphire habitats. Furthermore, this research also provides greater certainty (de-risking) to development proponents and project operators, especially in respect to the mitigation of impacts to samphire species and the communities they form, and the application of regulatory frameworks designed to limit and offset impacts. The details of the study have been drafted with Curtin University and DBCA. This will ensure the offsets are cost-effective for the management of these BCH types and are relevant and proportionate to the Proposal's potential significant residual impacts (funding has been based on a review of offset costs for the Mardie Project). Contingency offsets will be implemented if monitoring identifies that there are additional impacts associated with indirect impacts such as SLR and altered hydrology or hydrogeology. Contingency offsets will include additional funding for management, potentially resulting in an extension or expansion of the original program. Leichhardt understands that additional detail is required and intends to refine the scope of these offsets once the Mardie research program in complete (completion expected in 2025).
4	Environmental offsets will be based on sound environmental information and knowledge.	PEOF is managed and implemented by DWER with advice from the fund's advisory group. It is expected that PEOF meets this principle.

Number	Principle	Consideration
		The proposed management and conservation programs will be designed to ensure the offsets are based on sound environmental information and knowledge.
5	Environmental offsets will be applied within a framework of adaptive management.	PEOF is adaptively managed to adjust its delivery over time as more information and opportunities become available. The proposed management and conservation programs will be developed to include a review and revision component to ensure it utilises the most up-to-date information and research measures.
6	Environmental offsets will be focused on longer term strategic outcomes.	PEOF investment will target areas with a high density of both state and Commonwealth environmental values, and where land tenure enables legal access and longevity for offset outcomes. The proposed management and conservation programs will be designed to be focused on longer term strategic outcomes.

6 ASSESSMENT OF PROPOSED OFFSETS – EPBC ACT

Offsets are defined as measures that compensate for the residual adverse impacts of an action on the environment. Where appropriate, offsets are considered during the assessment phase of an EIA under the EPBC Act.

The EPBC Act Environmental Offsets Policy (DSEWPaC, 2012) states:

> "*The term 'environmental offsets' refers to measures that compensate for the residual adverse impacts of an action on the environment. Offsets provide environmental benefits to counterbalance the impacts that remain after avoidance and mitigation measures. These remaining, unavoidable impacts are termed 'residual impacts.' For assessments under the EPBC Act, offsets are only required if residual impacts are significant.*
>
> *Offsets can help to achieve long-term environmental outcomes for matters protected under the EPBC Act, while providing flexibility for proponents seeking to undertake an action that will have residual impacts on those protected matters*."

6.1 COMMONWEALTH ENVIRONMENTAL OFFSETS GUIDELINES

Offsets are defined as measures that compensate for the residual adverse impacts of an action on the environment. Where appropriate, offsets are considered during the assessment phase of an environmental impact assessment under the EPBC Act.

The EPBC Act Environmental Offsets Policy (DSEWPaC, 2012) states:

> "*The term 'environmental offsets' refers to measures that compensate for the residual adverse impacts of an action on the environment. Offsets provide environmental benefits to counterbalance the impacts that remain after avoidance and mitigation measures. These remaining, unavoidable impacts are termed 'residual impacts'. For assessments under the EPBC Act, offsets are only required if residual impacts are significant.*
>
> *Offsets can help to achieve long-term environmental outcomes for matters protected under the EPBC Act, while providing flexibility for proponents seeking to undertake an action that will have residual impacts on those protected matters*."

6.2 OFFSET PRINCIPLES

Table 9 provides the overarching principles that are applied in determining the suitability of offsets. In assessing the suitability of an offset, government decision-making will be informed by scientifically robust information and incorporate the precautionary principle in the absence of scientific certainty and conducted in a consistent and transparent manner.

Table 9: EPBC Act overarching principles applied in determining the suitability of offsets

No.	Principle	Offset suitability
1	Offsets must deliver an overall conservation outcome that improves or maintains the viability of the protected matter	The PEOF has been developed to deliver overall conservation outcomes that improve or maintain the viability of MNES. The intertidal management and conservation programs proposed as offsets will be directly related to the impacts. Management projects can add significant value through strategic protection and the management of the environmental values being impacted. The outcomes of the research projects being conducted by WAMSI are intended to inform the management programs to achieve the objectives above. For this Proposal, conservation and management offsets for impacts to algal mat, samphire shrubland BCH and mangroves are appropriate due to the lack of available options for direct land acquisition offsets to be undertaken. The research projects being conducted by WAMSI will provide new science to develop better mitigation measures for impacts to mangroves and algal mats and provide valuable scientific knowledge to inform regional and strategic protection of these values. Management measures will be refined after priority knowledge gaps have been filled by the WAMSI research programs, leading to positive conservation outcomes based on current and relevant science.
2	Offsets must be built around direct offsets but may include other compensatory measures	The PEOF has been developed to primarily deliver management offsets but may include land acquisition and compensatory measures. There are currently limited opportunities for direct land acquisition offsets in the Pilbara given the lack of freehold land, and there are no Pilbara strategic conservation initiatives that are undertaking actions that would be relevant to marine and intertidal values. The WA EPA identified a lack of scientific knowledge about the extent, ecological roles, values and functions of intertidal BCH on the west Pilbara coast. Research offsets were therefore deemed appropriate for the Mardie Project to offset their residual impacts as the research would result in positive conservation outcomes, address priority knowledge gaps and provide critical information to improve environmental assessment of future projects. These offsets proposed for this Proposal are intended to build on the Mardie Project offsets, utilising the information gathered to conserve and manage high-value sites.
3	Offsets must be in proportion to the level of statutory protection that applies to the protected matter	Leichhardt acknowledge the various levels of statutory protection that apply to the protected matters. This was considered when assessing the significance of the residual impacts. The scale of the proposed offsets takes these considerations into account.
4	Offsets must be of a size and scale proportionate to the residual impacts on the protected matter	The proposed offsets will be significant in size and scale, proportionate to the predicted residual impacts. The information gathered during the WAMSI research will inform Leichhardt's proposed management offsets, providing valuable scientific knowledge to inform regional and strategic protection of these values.
5	Offsets must effectively account for and manage the risks of the offset not succeeding	An Interim Offset Strategy has been provided that will continue to be revised to include detailed information about each management program, its management and governance, and the outcomes. This strategy will be revised to become a detailed Offset Management Plan prior to implementation, in consultation with relevant stakeholders to ensure that there is minimal risk of the offset not succeeding.
6	Offsets must be additional to what is already required, determined by law or planning regulations, or agreed to under other schemes or programs	The proposed offsets are in addition to that which is already required, determined by law or planning regulations, or agreed to under other schemes or programs.
7	Offsets must be efficient, effective, timely, transparent, scientifically robust and reasonable	The Interim Offset Strategy includes information about timeframes and transparency of information, which will be further detailed as the management programs are developed. The management programs will be

No.	Principle	Offset suitability
		developed in consultation with relevant stakeholders to ensure that they are effective, scientifically robust and reasonable.
8	Offsets must have transparent governance arrangements including being able to be readily measured, monitored, audited and enforced	The Interim Offset Strategy provides information about the transparent governance proposed to be implemented during the development and implementation of the management programs. The management programs will be designed to ensure they can be readily measured, monitored, audited and enforced.

7 OBJECTIVES, TARGETS AND COMPLETION CRITERIA

Table 10 sets out the objectives, targets and completion criteria for the proposed offsets.

Table 10: Objectives, targets and completion criteria

Objective	Target	Completion Criteria
Counterbalance the significant residual impact to native vegetation in 'Good' to 'Excellent' condition as a result of implementation of the Proposal.	PEOF implements protection and management of similar habitat	• Accurate PEOF contributions made by the due date; and • Approval of Offset Strategy.
Counterbalance the significant residual impact to Pilbara Leaf-nosed Bat foraging habitat as a result of implementation of the Proposal.	PEOF implements protection and management of similar habitat	• Accurate PEOF contributions made by the due date; and • Approval of Offset Strategy
Counterbalance the significant residual impact to North-Western Free-tailed Bat critical habitat as a result of implementation of the Proposal.	PEOF implements protection and management of similar habitat	• Accurate PEOF contributions made by the due date; and • Approval of Offset Strategy.
Counterbalance the significant residual impact to Pilbara Olive Python potential foraging habitat as a result of implementation of the Proposal.	PEOF implements protection and management of similar habitat	• Accurate PEOF contributions made by the due date; and • Approval of Offset Strategy.
Counterbalance the significant residual impact to mangrove, algal mats and samphire shrublands BCH (habitat for Migratory Birds, and North-Western Free-tailed Bat) as a result of implementation of the Proposal.	Leichhardt intends to assess the findings of the research programs, underway as part of the offsets for the Mardie Project, and develop appropriate conservation and management offsets in consultation with DBCA, WAMSI and DWER that provide the best environmental outcome for these BCH types across the western Pilbara coast. Leichhardt will ensure that the projects have realistic and achievable targets that aim to counterbalance the residual impacts to BCH.	• Funding and management structure will be established and agreed by DWER and DCCEEW within three years of the Ministerial Statement; • Required funding provided by due dates; and • Approval of Offset Strategy.

8 MONITORING

Routine monitoring is necessary to ensure the proposed offsets are effective in counterbalancing the significant residual impacts on the environmental values. Table 11 provides a framework for the monitoring required, however final monitoring requirements and timings will be determined during agreements with DWER, DCCEEW and/or other relevant parties.

Table 11: Offset monitoring schedule

Offset	Monitoring	Timing
Contributions to the PEOF	Disturbance of Good to Excellent vegetation recorded as per Impact Reconciliation Procedure.	Every two years.
Contribution to a relevant intertidal BCH conservation and management program established for the Proposal. The management program is intended to be developed after the results of the Mardie Project offset program are released, with the information used to develop suitable management measures to protect the ecological roles, values and functions of intertidal BCH.	As per the requirements of the conservation and/or management program (once established).	To be determined.

9 FUNDING ARRANGEMENTS

Funding arrangements for the PEOF are expected to be established in the approval conditions for the Ministerial Statement and EPBC 2021/9027 (if approved).

Funding arrangements for the research programs will be paid in line with the requirements of the programs. The management program is intended to be developed after the results of the Mardie Project offset program are released. Funding arrangements will be determined once the research programs have been determined.

10 MANAGEMENT, ROLES AND RESPONSIBILITIES

Table 12 details the management structure proposed for each offset and Table 13 identifies the key roles and responsibilities for the implementation of offsets.

Table 12: Management of proposed offsets

Offset	Management / Responsibility
Contributions to the PEOF	Leichhardt would be responsible for contributions. The PEOF Project Recommendation Group and Implementation Advisory Group would be responsible for the implementation of appropriate offset programs.
Contribution to a relevant intertidal BCH conservation and management program established for the Proposal. The management program is intended to be developed after the results of the Mardie Project offset program are released, with the information used to develop suitable management measures to protect the ecological roles, values and functions of intertidal BCH.	To be determined during the planning of the offset programs.

Table 13: Roles and responsibilities

Role	Responsibility
Leichhardt (corporate)	Development of the Offset Strategy, PEOF contributions, engagement and potential management of research and management programs.
Management Authority (TBD)	Implementation of conservation and management programs
Leichhardt Environment / Conservation Manager	Overseeing the monitoring programs that may inform the conservation and management programs

11 REVIEW AND REVISION

The final Offset Strategy is to be reviewed once details of the Mardie offset research programs have been finalised. It will then be reviewed at least every five years, or more frequently under the following circumstances:

- Following a significant environmental incident that threatens the success of the proposed offsets;
- When there is a need to improve performance in an area of environmental conservation;
- When there are changes to activities that are being managed under this Offset Strategy; or
- When there are new activities that should be managed under this Offset Strategy.

The review is to assess whether the Offset Strategy is achieving its objectives and the requirements of approval conditions. The review is to consider environmental monitoring records, response actions taken and the results of any internal and external audits. During the review process, the reasons for varying the Offset Strategy are to be documented. The review may be initiated by any party that has a management responsibility for the implementation of the offsets.

12 CONCLUSION

Leichhardt has assessed the impacts of the Proposal against the Residual Impact Significance Model (EPA, 2014) and has determined that the Proposal is likely to result in a significant additional residual impact to several environmental values, including MNES.

This Interim Offset Strategy provides details regarding the offsets proposed by Leichhardt for the Proposal.

The suitability of the proposed offsets has been assessed against the six offset principles set out in the Environmental Offsets Policy (Government of WA, 2011) and the WA Offsets Template, as well as EPBC Act guidance. The proposed offsets are considered to be relevant and proportionate to the significance of the environmental value or MNES being impacted.

GLOSSARY

Term	Meaning
BCH	Benthic Communities and Habitat
CPE	Cape Preston East
CPI	Consumer Price Index
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DJTSI	Department of Jobs, Tourism, Science and Innovation
DMIRS	Department of Mines, Industry Regulation and Safety
DPIRD	Department of Primary Industries and Regional Development
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities
DWER	Department of Water and Environmental; Regulation
ECU	Edith Cowan University
EP Act	*Environmental Protection Act 1986* (WA)
EPA	Environmental Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)
ERD	Environmental Review Document
ESD	Environmental Scoping Document
ha	Hectare
Horseflat PEC	Horseflat Land System of the Roebourne Plains Priority Ecological Community (Priority 3)
km	Kilometre
Leichhardt	Leichhardt Salt Pty Ltd
MCP	Mine Closure Plan
MNES	Matters of National Environmental Significance
MS	Ministerial Statement
Mtpa	Million tonnes per annum
N/A	Not Applicable
PEC	Priority Ecological Community
PEOF	Pilbara Environmental Offset Fund
PPA	Pilbara Ports Authority
Proposal	Eramurra Solar Salt Project
TBD	To be determined
TEC	Threatened Ecological Community
WA	Western Australia
WAC	Wirrawandi Aboriginal Corporation
WAFIC	Western Australian Fishing Industry Council Inc.
WAMSI	Western Australian Marine Science Institute

Term	Meaning
YACMAC	Yaburara and Coastal Mardudhunera Aboriginal Corporation

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