



Clearing Permit Supporting Document

Kemerton Strategic Industrial Area (KSIA)

Lot 253 (formerly 510) on
Deposited Plan 411027 being
part of the land in Certificate
of Title Volume 2945, Folio
681

www.harveywater.com.au

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1. Introduction

1.1 Project description

South West Irrigation Management Cooperative (SWIMCO) trading as “Harvey Water” (HW) has been engaged by Albemarle Lithium Pty Ltd (Albemarle) to supply construction and industrial water to the proposed Albemarle Kemerton plant site in September 2018. Works are proposed to commence mid July 2018 for completion of pipeline and delivery of water estimated to be early to mid-September 2018, weather permitting. Ultimately this pipeline will also supply industrial water to other industries within the Kemerton Strategic Industrial Area (KSIA).

Due to the urgency of construction deadlines and the recent recommendation (10/07/2018) that a clearing permit be sought to clear re-growth vegetation from the existing Western Power Easement corridor, HW humbly implores the Department of Water and Environmental Regulation (DWER) to consider the approval of this clearing proposal as a matter of urgency, in order to accommodate Albemarle’s requirements for construction water for site development next month.

1.2 Project Location

The location of the proposed pipeline is Lot 253 (formerly 510), Wellesley Road, Wellesley within the Shire of Harvey. The proposed pipeline will tie in to an existing water supply pipeline that terminates at the Kemerton Power Station (505 Treasure Rd, Wellesley). From there the pipeline will extend approximately 2.4 kilometres south west along the Treasure Road reserve, and 3 km south along a Western Power maintenance corridor (KEM-MRR 81 & 82) before elbowing west 90° to the north east boundary of the proposed Albemarle Plant (Lot 253 Wellesley Road, Wellesley).

The Proposal area is located in the Strategic Industry Zone of the KSIA, approximately 17 kilometres (km) north-east of Bunbury, WA. The KSIA is a 7,508 ha Industrial Park comprising a 2,024 ha Strategic Industry Zone (Industrial Core), a 284 ha Ancillary Industry Zone (support industry area) and a 5,200 ha Industry Buffer Zone (Buffer) (Raymond 2017). The KSIA was established in 1985 to provide an area for downstream processing and value-adding to the South West region’s primary resources, especially its substantial mineral resources. It is the largest industrial area in the South West of WA and is one of the State’s designated strategic industrial areas (Markovic 2015).

1.3 Information Sources

HW commissioned GHD to prepare a Preliminary Environmental Impact Assessment (PEIA) for the proposed installation of the pipeline. This document was finalised in July 2018. A GHD Environmental Scientist and representatives from HW conducted a site walkover on June 28, 2018. The walkover included a visual assessment of native vegetation re-growth

and ground truthing of the proposed Clearing Area. Photos were taken at key points within the Project footprint, which were later assessed by a GHD Botanist.

2. Assessment against the 10 clearing principles

The Proposal area includes the removal of 1.1 hectares (ha) native vegetation (Conservative estimate), all of which is re-growth vegetation existing in the Western Power corridor. The clearing of native vegetation will require an approved clearing permit under the *Environmental Protection Act 1986* (EP Act), there are however exemptions for clearing of re-growth vegetation for maintenance purposes under the EP Act.

The Project does not require clearing within the Environmentally Sensitive Area, which occurs within the road reserve (Treasure Road). The closest vegetation to the Project footprint is a single *Kunzea/Melaleuca* sp. tree (re-growth), which is located approximately 2.0 m from the proposed excavation. It is expected that damage to this vegetation from machinery can be avoided. Therefore, the impact to the ESA will be limited to physical disturbance of the ground, which will occur above the water table.

Clearing can and will be avoided along the Treasure Rd reserve, and clearing of Pines in the southern project footprint is not likely to be required for this project as these would fall within the boundary of the proposed Albemarle plant footprint and application for clearing would fall under the developer’s proposal.

Clearing applications are assessed against the Ten Clearing Principles as outlined under Part V of the EP Act. These principles aim to ensure that all potential impacts resulting from the removal of native vegetation can be assessed in an integrated way. An assessment of the Proposal area against the Ten Clearing Principles was undertaken. In summary:

- Clearing of the Proposal area is at variance with Principle (f), because native re-growth vegetation to be cleared grows in association in Multiple-Use wetlands. However, this vegetation is almost entirely in Completely Degraded condition and offers little to no ecological value.

Principal a)	Native vegetation should not be cleared if it comprises a high level of biological diversity
Proposal is not likely to be at variance with this principle as most vegetation communities in the Proposal area are low density, due to the fact that the Proposal area has been previously cleared and is predominantly re-growth of native vegetation, with limited established understorey, or is neighbouring pine plantation. The site has been extensively disturbed by cattle grazing, weed invasion, unauthorised access (e.g. unplanned tracks, rubbish dumping, motorbikes) and clearing/logging (GHD, 2018).	
Principal b)	Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia

Proposal is not likely to be at variance with this principle as the area to be cleared consists entirely of re-growth vegetation that has previously been cleared. The adjacent pine plantation will not require clearing (other than possible pruning).	
Principal c)	Native vegetation should not be cleared if it includes, or is necessary for continued existence of, rare flora
Proposal is not likely to be at variance with this principle as the site walkover confirmed that no vegetation occurs within the Project footprint where it intersects wetland margins, therefore no declared rare flora (such as <i>Drakea micrantha</i> and <i>Diuris drummondii</i>) occur within this area (GHD, 2018).	
Principal d)	Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of a threatened ecological community
Proposal is not likely to be at variance with this principle . An 11 ha block of native vegetation occurs adjacent to the Project footprint towards the southern section, and may potentially be ' <i>Banksia</i> Woodlands of the Swan Coastal Plain' TEC. ELA (2013) undertook broad vegetation mapping within the KSIA, which identified the presence of vegetation representing the ' <i>Low lying Banksia attenuata</i> woodlands or shrublands' PEC within the Project footprint (0.3 ha). However, vegetation within the Project footprint has been previously cleared and consists only of re-growth vegetation and therefore it is not expected that the vegetation would be representative of either a TEC or PEC (GHD, 2018).	
Principal 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
Proposal is not likely to be at variance with this principle as the area to be cleared is not a significant proportion (1.1 ha).	
Principal f)	Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland
No Ramsar listed or Nationally Important wetlands occur within the Proposal area, and there are no conservation category wetlands within the Proposal area.	
Principal g)	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation
Proposal is not likely to be at variance with this principle as the clearing of the re-growth vegetation within the easement corridor is for the installation of a buried pipeline to 1100mm, and conducted within areas of moderate to low risk for Acid Sulphate Soil (ASS) risk (GHD, 2018). A site specific Construction and Environmental Management Plan addressing ASS during the construction has been submitted to the Shire of Harvey and will be referred to DWER for comment.	
Principal h)	Native vegetation should not be cleared if the clearing of vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area
Proposal is not likely to be at variance with this principle as there are no conservation areas within the KSIA.	
Principal 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 waters
Proposal is not likely to be at variance with this principle as the area to be cleared is re-growth vegetation and has been cleared previously within the maintenance easement corridor.	

Principal 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
Proposal is not likely to be at variance with this principle as the area to be cleared is re-growth vegetation and has been cleared previously within the maintenance easement corridor.	

3. Figures & Maps



Figure 1. A re-growth tree (*Kunzea/Melaleuca* sp.) within the road reserve on Treasure Road, facing west. The excavation will abut the bitumen road, with the machinery operating on the road reserve side. Construction will take place within the corridor identified with the tape measure.



Figure 2. Northern portion of the Western Power maintenance corridor, facing south. Re-growth native vegetation (dominant *Kunzea/Melaleuca* species) observed over sedges, with established pines occurring adjacent to the Project footprint.



Figure 3. Scattered *Xanthorrea* species within the Western Power maintenance corridor mid-section, facing south. Pink peg identifies the location of the excavation. Established pines occur adjacent to the Project footprint (some of which will require pruning).



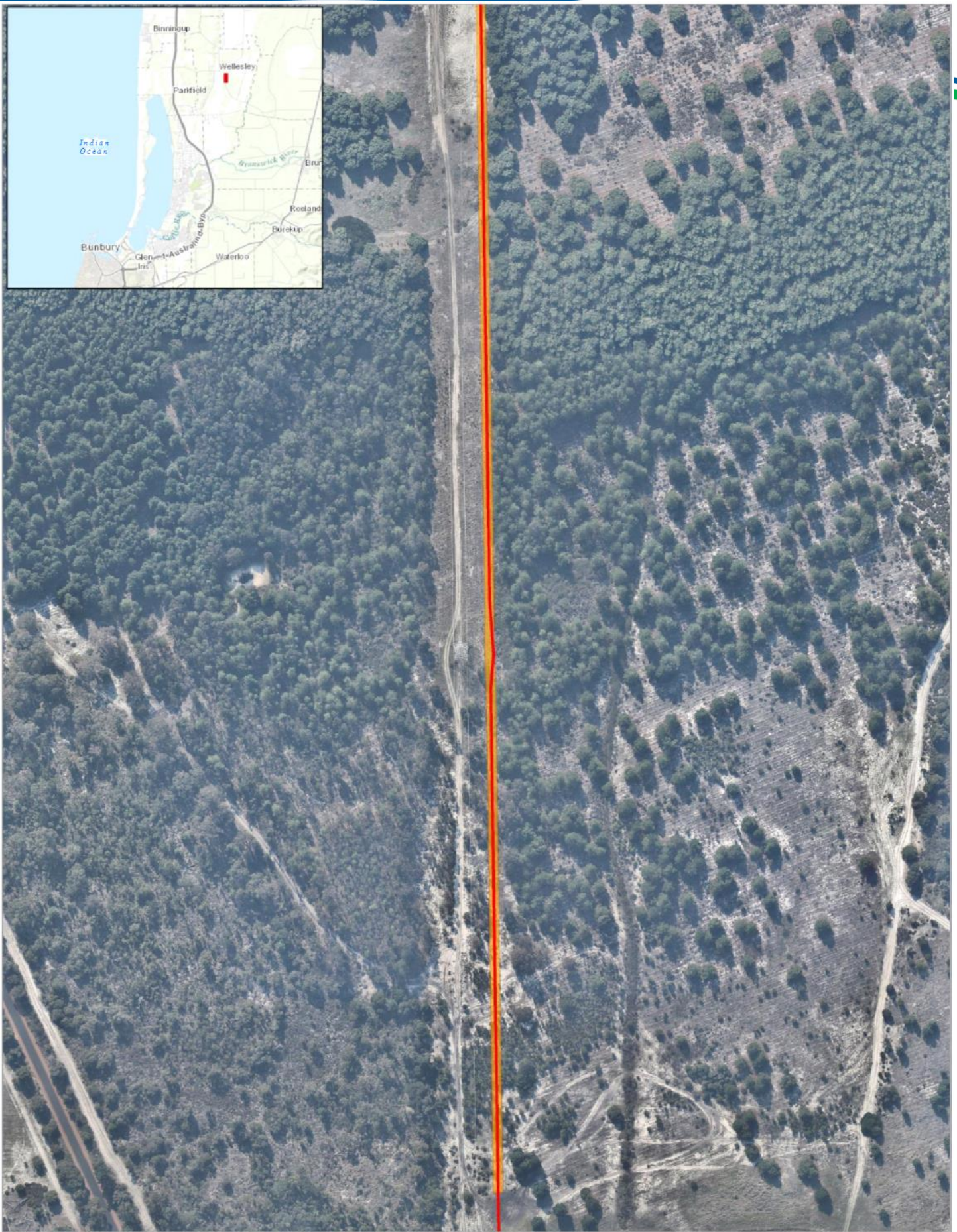
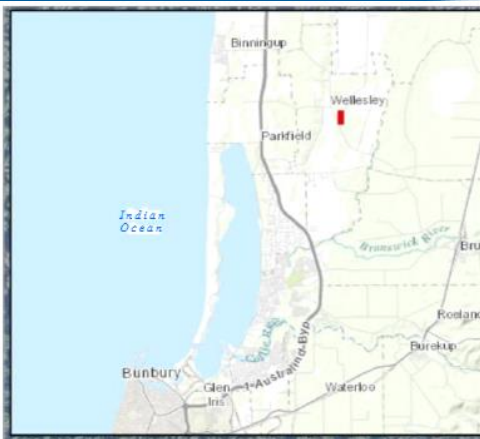
Figure 4. Western Power maintenance corridor where it is adjacent to the suspected Banksia Woodlands TEC, facing south. Pink peg identifies the location of the excavation. Regrowth native vegetation will require clearing. Established native vegetation, including Banksia species, occurs adjacent to the Project footprint.



Figure 5. Western Power maintenance corridor, southern extent, facing south. Agricultural land with some sedges and minor flooding at the southern extent.



Figure 6. Non-perennial watercourse observed in agricultural land at the southern extent of the Project footprint. Photo is facing west, where the pipeline enters the Albemarle Plant site.



- Legend**
- Project Footprint
 - - - Proposed Albarnie Kemerton
 - Plant Clearing Area

1:25,000 @ A3
 0 10 20 30 40
 metres
 Map Projection: Universal Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 50



Harvey Water
 Kemerton Pipeline: Desktop Assessment

Project No. 61-3/182
 Revision No. 0
 Date 24/05/2018

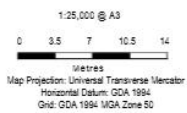
Project Footprint and Clearing Area

FIGURE 'IC

Data source: Landgate - Roads, Decatur (2017), NearMap - Imagery (data extracted: 17/05/2018), HW - Proposed Pipeline (2018), Sources: Eri, HERS, Camm, Inhamat, noname P Corp, GBRCC, USGS, FAD, NPS, NRCAN, Geobase, GDI, Keeslar-HL, Chroma Solutions, Eri, Jochen, METI, Eri China (Hong Kong), amastoc, © Contributors contributors, and the OS User Community. Created by jrc



- Legend**
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Harvey Water
Kemerton Pipeline - Desktop Assessment

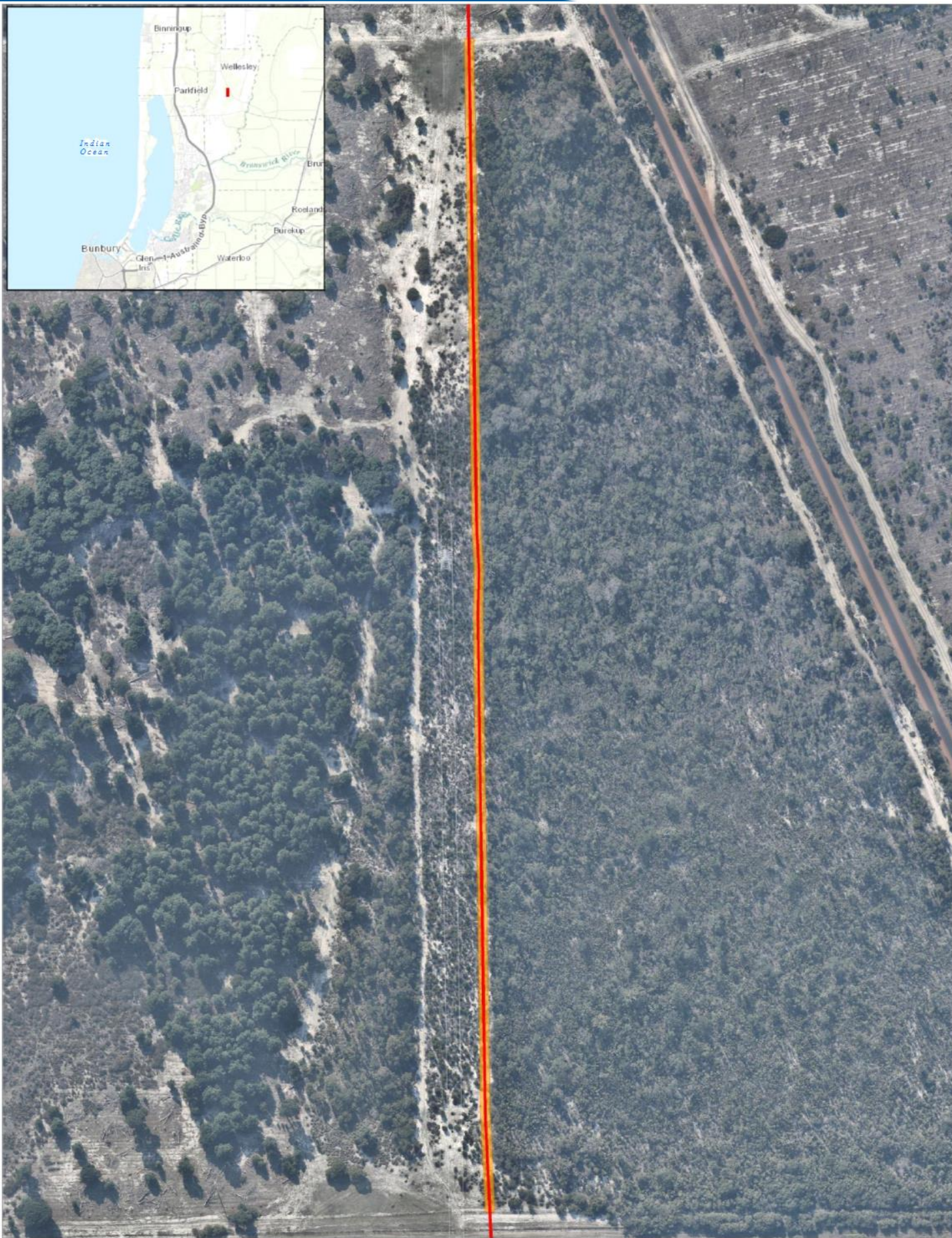
Project No. b1-37182
Revision No. 0
Date 24/05/2018

Project Footprint and Clearing Area

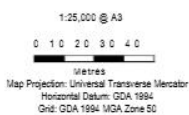
FIGURE 1D

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Data source: Lemoga - Roads, Cleburne (2017), HeatMap - Imagery - (Data extracted: 17/05/2018), WVI - Proposed Pipeline (2018), Sources: Eric MERE, Gerni, Inmegas, movement P Corp., GESCO, USGS, FAD, HPS, MRCAN, Geobase, GN, Kesteven H., Chronicle Survey, Ben Jones, MPT, Ben Drink (http://gplg.com.au), © Core Breeding contributors, and the GB user community. Created by jrc



- Legend**
- Project Footprint
 - Proposed Albemarle Kemerton
 - Plant Clearing Area



Harvey Water
Kemerton Pipeline: Desktop Assessment



Project No. 01-3/182
Revision No. 0
Date 24/05/2018

Project Footprint and Clearing Area

FIGURE 1E

Draw source: Landgate - Road, Cervara (2017), NW140 - Image - 1 (area accessed: 17-05-2018), HW - Proposed Pipeline (2018), Source: Earth Resources, Geomatics, Information Systems, Perth, Western Australia, GSEB01, 0524, PAC, WPS, WGS84, Canberra, GDA, Metadata: North, Contours, Survey, Earth Assets, WGS84, Earth Centre (http://gepi.wa.gov.au/information), © Contributing contributors, and the GIS User Community, Created by: jhs



<p>Legend</p> <ul style="list-style-type: none"> — Project Footprint - - - Proposed Albemarle Kemerton Plant Clearing Area 	<p>1:25,000 @ A3</p> <p>0 5.5 11 16.5 22</p> <p>Metres</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: GDA 1984 Grid: GDA 1984 MGA Zone 50</p> 		<p>Harvey Water Kemerton Pipeline: Desktop Assessment</p>	<p>Project No. b1-3/182 Revision No. 0 Date 24/05/2018</p>
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Data source: Landgate - Road, Decatur (2017); Neatline - Imagery - 2016; Metres: 17/05/2015; MH - Proposed Pipeline 2015; Survey: ERI, HERE, DeLorme, Intermap, swisstopo, IGN, GEBCO, USGS, FAO, NPS, NRCAN, GEBCO, IGN, Kartchner, CNR, Esri, Swisstopo, METI, Esri China (Hong Kong), Swisstopo, © OpenStreetMap contributors, and the GIS User Community. Created by jrcd

FIGURE 1F

Project Footprint and Clearing Area

4. References

EcoLogical Australia (ELA), 2013. Targeted Ecological Surveys for Kemerton Industrial Park. Prepared for LandCorp. December 2013.

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Raymond, M, 2017, 'Kemerton Strategic Industrial Area: Structure Plan'. Prepared by TPG for LandCorp and Department of State Development.

Harvey Water Contact

To discuss any components of this proposal please contact:

Kate Duzevich
Operations Controller
Harvey Water
E: kduzevich@harveywater.com.au
M: 0429 048 507
P: (08) 9729 0121