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Alkimos City Centre and Central (Vista)

EPBC 2015/7561 Annual Compliance Report 2018

Prepared for

Lendlease

by Strategen

December 2018

Alkimos City Centre and Central (Vista)

EPBC 2015/7561 Annual Compliance Report 2018

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Client: Lendlease

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1. Introduction

This report addresses the status and compliance of implementation of the Alkimos City Centre and Central (Vista) residential development with the conditions in *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval 2015/7561 (EPBC 2015/7561). This initial report has been prepared for the purpose of meeting the requirements of condition 7 of EPBC 2015/7561, which requires the proponent to publish this annual compliance report (ACR) within three months of every 12 month anniversary of the commencement of the action (by 25 December 2018).

1.1 Project Approvals

Lendlease Communities (Alkimos Central) Pty Ltd (Lendlease) is developing the Alkimos Central (Vista) Residential Development (the project) located approximately 40 km northwest of the Perth Central Business District. The project consists of:

- Alkimos City Centre (Lot 9502, Marmion Avenue, Alkimos)
- Central Alkimos (Lot 9501, Marmion Avenue, Alkimos).

The project was referred to the former Department of the Environment (DotE, now the Department of the Environment and Energy [DEE]) on 18 September 2015. The proposed action was determined to be a controlled action requiring assessment via preliminary documentation on 26 November 2015. On 30 March 2017, the proposal was conditionally approved (EPBC 2015/7561).

In accordance with conditions 2 and 3 of EPBC 2015/7561, the approval of the Construction Environmental Management Plan, dated 17 July 2017 (CEMP Rev 2) and the Parks and Recreation Reserve Management Plan, dated 17 July 2017 (PRRMP Rev 2) were approved on 26 July 2017.

Condition 4 of EPBC 2015/7561 requires the provision of an offset property in the vicinity of Gingin, WA of at least 1138 ha of Carnaby's Black-Cockatoo habitat, to offset the action being undertaken. The DEE confirmed on 14 August 2017 that the Department was satisfied that condition 4 was met.

In accordance with condition 5 of EPBC 2015/7561, the project commenced on 26 September 2017 with clearing in Precinct 1, and the DEE was notified on 4 October 2017.

1.2 Project Description

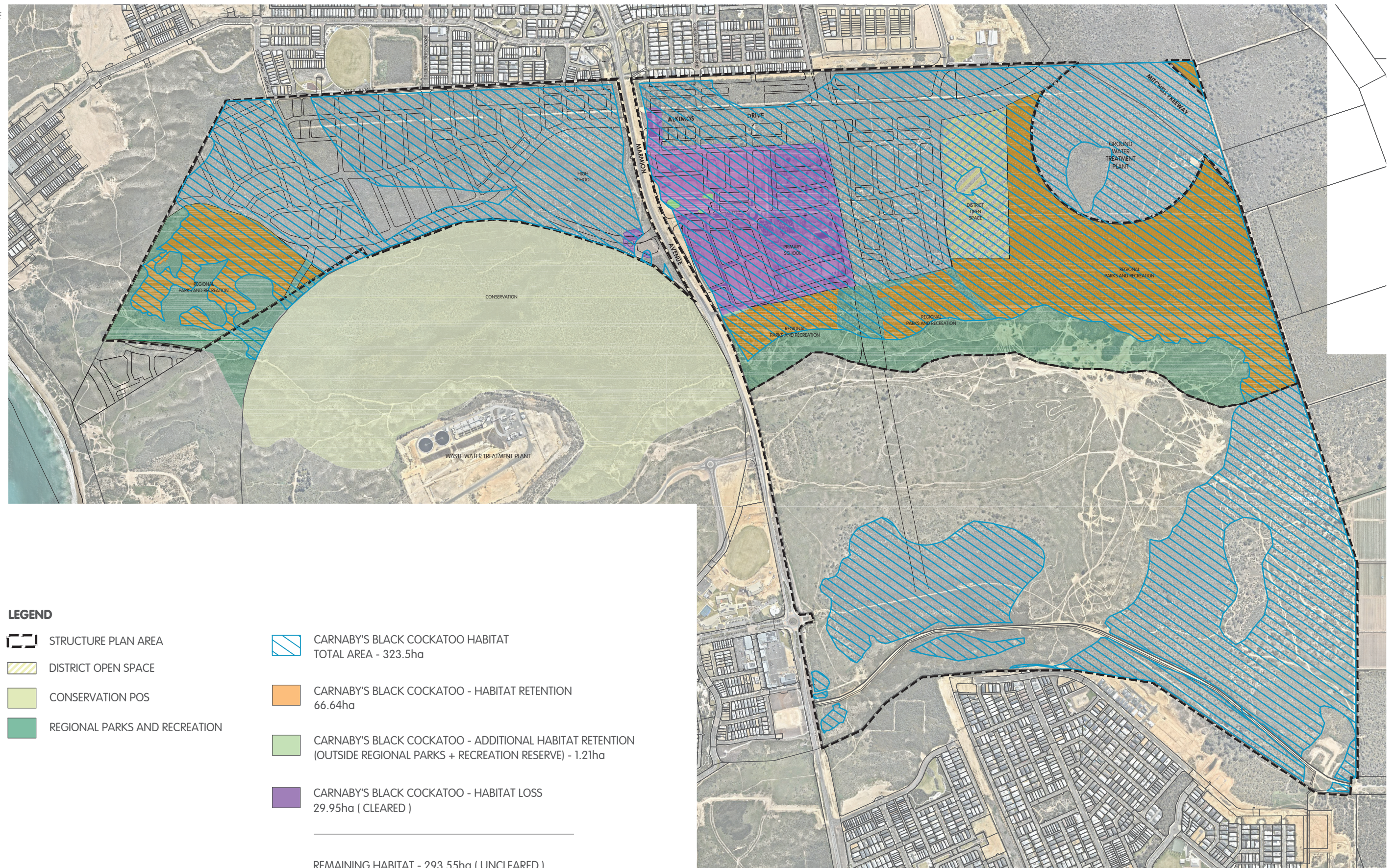
Alkimos Lots 9501 and 9502 cover a combined area of 480.4 ha (Figure 1). The development involves the provision of an urban regional centre including a commercial centre, residential housing, schools, public amenities and transport routes.

The project area contains approximately 323.5 ha of potential foraging habitat for the endangered Carnaby's Black Cockatoo (CBC). Of this habitat, approximately 257 ha will be cleared for the development and approximately 66.64 ha retained within Parks and Recreation Reserves (PRR). A total of 103 potential breeding trees (>500 mm diameter at breast height [DBH]) have been identified within the project area. Of these trees, a minimum of 16 will be retained within the PRR and where possible additional trees will be preserved within the development area through incorporation into strategically located public open space and within road reserves.

Up to 22 of the 103 trees contain potentially suitable hollows for black cockatoos (nesting and roosting activities) and of these 4 will be retained within the PRR. An additional 6 trees that do not currently exhibit a DBH above 500 mm, however are considered to be future potential habitat trees (*Eucalyptus gomphocephala* (Tuart) and *E. tottiana* (Coastal Blackbutt)), will be retained within PRR.

In addition, a total of 12 nest hollows (transplanted from trees prior to clearing) or artificial nest boxes will be installed strategically within the project area in proximity to foraging habitat.

The Project will be developed over the next 20-30 years, with development of the Alkimos City Centre taking place over the next 7-10 years. The initial precinct will be developed over 16 stages. The staging schedule will be subject to further refinement as development progresses.



LEGEND

- STRUCTURE PLAN AREA
- DISTRICT OPEN SPACE
- CONSERVATION POS
- REGIONAL PARKS AND RECREATION

- CARNABY'S BLACK COCKATOO HABITAT
TOTAL AREA - 323.5ha
- CARNABY'S BLACK COCKATOO - HABITAT RETENTION
66.64ha
- CARNABY'S BLACK COCKATOO - ADDITIONAL HABITAT RETENTION
(OUTSIDE REGIONAL PARKS + RECREATION RESERVE) - 1.21ha
- CARNABY'S BLACK COCKATOO - HABITAT LOSS
29.95ha (CLEARED)

REMAINING HABITAT - 293.55ha (UNCLEARED)

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2. Current status

Activities undertaken during the initial audit period (26 September 2017 to 25 September 2018) involved project commencement with earthworks and clearing within precinct 1 (Alkimos Central (Vista) – eastern side of Marmion Avenue), fencing of the PRR and installation of signage to restrict workers from entering the PRR. Stage 1 was constructed to have 45 lots and Stage 2 clearing had commenced at the time of the audit.

Approximately 1.08 ha of vegetation was also cleared in precinct 2 (Alkimos Central (Vista) - western side of Marmion Avenue) on 6 September 2018, which contained 0.05 ha of CBC habitat. The southern boundary adjacent to precinct 2 was fenced.

Prior to project commencement, the following activities were also conducted:

- identification of an offset site in Gingin and transferred funds to the Department of Parks and Wildlife (now the Department of Biodiversity, Conservation and Attractions [DBCA])
- publication of the CEMP and PRRMP on the Lendlease website in August 2017, within one month after the plans were approved by DEE
- commission of baseline surveys, including:
 - * CBC habitat assessment in 2012 for the whole project area
 - * tree survey in August 2014 in precinct 1
 - * fauna assessment in August 2017 in precinct 1 to identify potential CBC breeding trees
 - * dieback survey in Stage 1, adjacent to the PRR, in August 2017.

3. Audit methodology

3.1 Audit plan

3.1.1 Purpose and scope

This document fulfils the requirement of condition 7 of EPBC 2015/7561. Condition 7 requires the person taking the action to publish an annual report for the previous twelve-month period, addressing compliance with each condition of EPBC 2015/7561; as follows:

'Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. Reports must remain on the website for the life of this approval. The person taking the action must continue to comply with this condition until such a time as agreed in writing by the Minister.'

This ACR addresses the audit period between 26 September 2017 and 25 September 2018. The ACR is due to be published on the Lendlease website by 25 December 2018.

Proponent management commitments included in the following management plans, required by conditions 2 and 3 respectively, were also assessed as part of the audit:

- CEMP (Rev 2 2017)
- PRRMP (Rev 2 2017).

Audit of the management plans involved assessment of the commitments to determine if the plan has been satisfactorily implemented.

3.1.2 Methodology

The audit was undertaken between September and December 2018 and involved a site inspection by Tiffany George, Strategen Environmental Consultants, on 20 September 2018, interviews with key members of the project team and a review of documentation to provide evidence to support the audit.

Table 1 provides an overview of the personnel consulted as part of the audit.

Table 1: Persons consulted during audit

Person	Position	Organisation
Laura Bowdell	Development Manager, Alkimos Vista	Lendlease Communities
Nadja Kampfhenkel	Sustainability Manager WA	Lendlease Communities
Sinisa Rakovic	Project Manager Lead Contractor	Georgiou
Alyson Bray	Officer of Lead Contractor	Georgiou
Peter Grose (unofficial capacity)	Managing Director	Tranen

3.2 Audit terminology

The 'Status' field of the audit tables (refer to Section 4) describes the implementation of actions and compliance with the approval. DEE (DoE 2014) has published Annual Compliance Report Guidelines and terminology from this guidance was applied in this audit.

Table 2: Action implementation status

Status	Acronym	Description
Conditions of approval		
Compliant	C	Sufficient evidence is required to confirm that all the requirements of a condition have been met, including the implementation of management plans or other measures required by those conditions. (Note Strategen also utilises the status 'Compliant (completed)' where a requirement has a finite period of application and has been determined to be satisfactorily completed).
Potentially Non-compliant	PNC	The requirements of a condition or elements of a condition, including the implementation of management plans and other measures, have not been met.
Not applicable	NA	The requirements of a condition or elements of a condition fall outside of the scope of the current reporting period. For example, a condition which applies to an activity that has not yet commenced.
Management Plans		
Conformant	C	Sufficient evidence is required to confirm that the requirements of the procedures, programs and/or management actions detailed within an Environmental Management Plan or similar document have been satisfactorily met.
Potentially Non-conformant	PNC	Considered to be any deviation from the procedures, programs and/or management actions detailed within an Environmental Management Plan or similar document.
Not applicable	NA	The requirements of a management action fall outside of the scope of the current reporting period. For example, a condition which applies to an activity that has not yet commenced.

Source: adapted from DotE (2014)

4. Audit results

The results of this initial audit of EPBC 2015/7561 are shown in Table 3.

The results of audit of conformance with the management actions contained within the CEMP and PRRMP are outlined in Appendix 1 and Appendix 2 respectively.

A total of 120 items were audited from EPBC 2015/7561, CEMP and PRRMP.

4.1 Compliance with EPBC 2015/7561 conditions

No potential non-compliances with conditions of EPBC 2015/7561 (Table 3) were identified during the audit. It was found that of the 16 key actions within the approval:

- six were deemed compliant
- a further five were deemed compliant (completed)
- five were not applicable during the audit period.

4.1.1 Potential Non-Conformances with the Construction Environmental Management Plan

Two potential non-conformances with the requirements of the CEMP (Appendix 1) were identified during the audit, mainly to do with the activity required prior to clearing. CBC activity/presence was not surveyed within 7 days prior to clearing (when clearing is conducted during the breeding season, July to December) in both precinct 1 and precinct 2.

4.1.2 Potential Non-Conformances with the Parks and Recreation Reserve Management Plan

Two potential non-conformances with the requirements of the PRRMP (Appendix 2) were identified during the audit, mainly to do with the appointment of a contractor to conduct seed collection prior to clearing of the project area.

Seed collection needs to occur over 50 ha of the total proposed clearing area of 257 ha. As approximately 30 ha of CBC habitat has been cleared during the audit period, adequate uncleared areas remain to complete the 50 ha seed collection requirement; however, as seed collection did not take place prior to clearing, Lendlease is potentially non-conformant with two actions. The auditor notes that while potentially non-conformant findings have been made, the potential non-conformances are technical, relating primarily to timing, and as such did not result in an impact to the proposed rehabilitation program during the audit period.

Table 3: Compliance with Conditions of EPBC 2015/7561

Condition number	Condition	Evidence/Comment	Compliance status
1	The person taking the action must not clear more than 257 hectares of Carnaby's Black-Cockatoo habitat within the project area (shown as the proposed clearing area in Attachment A).	G_001_CBC cleared habitat - SEPT – 2018. During this initial audit period 29.95 ha of Carnaby's Black Cockatoo habitat was cleared across the development area.	C
2	<p>To mitigate impacts to Carnaby's Black-Cockatoos, the person taking the action must prepare and submit a Construction Environmental Management Plan (CEMP), for the approval of the Minister. The person taking the action must not commence clearing unless the Minister has approved the CEMP.</p> <p>The CEMP must include, but is not limited to:</p> <ul style="list-style-type: none"> a. avoidance and mitigation measures to prevent impacts to Carnaby's Black-Cockatoo habitat following the commencement of the action, the measures must include measures to control site access, weeds, Phytophthora die back, erosion and dust b. performance indicators that measure the effectiveness of avoidance and mitigation measures to prevent impacts to Carnaby's Black-Cockatoo habitat c. details of performance monitoring, reporting and contingency measures if performance indicators are not met d. timeframes for the implementation of the above measures e. descriptions of the roles and responsibilities of personnel associated with implementing each of the above measures. <p>If the Minister approves the CEMP then the approved CEMP must be implemented.</p>	<p>C_003_Alkimos CEMP PRRMP decision letter.</p> <p>The DEE advised on 26 July 2017 that the CEMP meets the requirements of Condition 2.</p> <p>The key actions of the CEMP were assessed during this audit period and it was found that of the 40 key actions identified within the CEMP:</p> <ul style="list-style-type: none"> • 33 conformant • 2 potentially non-conformant • 5 not applicable during the audit period. <p>Refer to Appendix 1 for further detail.</p> <p>The objectives of the CEMP have been met and it has been determined that the plan has been implemented satisfactorily.</p>	C

Condition number	Condition	Evidence/Comment	Compliance status
3	<p>To mitigate impacts to Carnaby's Black-Cockatoos, the person taking the action must prepare and submit a Parks and Recreation Reserve Management Plan (PRRMP), for the approval of the Minister. The person taking the action must not commence clearing unless the Minister has approved the PRRMP.</p> <p>In relation to the Parks and Recreation Reserve, the PRRMP must include, but is not limited to:</p> <ul style="list-style-type: none"> a. zoning and tenure arrangements b. measures to physically delineate 66.64 ha of Carnaby's Black Cockatoo habitat that will be retained within the Parks and Recreation Reserve c. an outline of how Carnaby's Black-Cockatoo habitat will be rehabilitated d. objectives, interim targets and completion criteria for the rehabilitation, including site preparation works, seedling planting program, success rates and details of replanting requirements, if success rates are not achieved e. management measures including fencing, access controls, weed and pest management, and the control of <i>Phytophthora cinnamomi</i> (dieback) spread f. management of nesting hollows, including hollows removed and relocated prior to clearing, and artificial nesting boxes <ul style="list-style-type: none"> i. A total of 12 artificial nest boxes or nesting hollows must be installed within the project area ii. The construction, positioning and erection of the artificial nest boxes must be in accordance with the WA DEC Publication "Artificial hollows for Carnaby's black cockatoo" (Groom, 2010) iii. The artificial nest boxes must be inspected at least annually to check for condition and evidence of black cockatoo usage for a period of five years. Repair of damage/deterioration, removal of bee colonies, replacement of mulch and/or sacrificial chewing posts, must be undertaken prior to the next breeding season. g. timeframes for implementing the above measures h. performance indicators that measure the effectiveness of measures to mitigate impacts to Carnaby's Black-Cockatoos i. details of performance monitoring, reporting and contingency measures if interim targets, completion criteria and performance indicators are not met j. descriptions of the roles and responsibilities of personnel associated with implementation of each of the above measures. <p>If the Minister approves the PRRMP then the approved PRRMP must be implemented.</p>	<p>C_003_Alkimos CEMP PRRMP decision letter.</p> <p>The DEE advised on 26 July 2017 that the PRRMP meets the requirements of Condition 3.</p> <p>The key actions of the PRRMP were assessed during this audit period and it was found that of the 64 key actions identified within the PRRMP:</p> <ul style="list-style-type: none"> • 16 conformant • 2 potentially non-conformant • 46 not applicable to the audit period. <p>Refer to Appendix 2 for further detail regarding implementation.</p> <p>The majority of the items in the PRRMP were not applicable during the audit period, however, for the items that were relevant, it has been assessed that the plan has been implemented satisfactorily.</p>	C
4.1	<p>To offset the loss of Carnaby's Black-Cockatoo habitat, the person taking the action must, prior to the commencement of the action, provide the Department with:</p> <ul style="list-style-type: none"> a) written evidence that an offset property in the vicinity of Gingin, Western Australia, that has at least 1138 ha of Carnaby's Black-Cockatoo habitat, has been transferred to the Western Australian Department of Parks and Wildlife (WA DPaW) to offset the action being undertaken within the project area; 	<p>C_004_L to DEE with evidence regarding offset</p> <p>Written advice regarding the transfer of funds for the 1195 ha offset property in Gingin, WA, was provided to DPaW in August 2013, prior to the commencement of the action.</p> <p>A letter detailing the transfer was provided to the DEE in July 2017 (C_004).</p>	C (completed)

Condition number	Condition	Evidence/Comment	Compliance status
4.2	b) a textural description and map clearly defining the locations and boundaries of the offset property. This information must be accompanied by the offset attributes and shapefiles.	C_004_L to DEE with evidence regarding offset. G_002_Offset site. A Shapefile map and list of GIS points of the offset site (Lot 403 Red Gully Road, Gingin) were provided to the DEE in July 2017, prior to commencement of the action.	C (completed)
4.3	c) written evidence that \$50,000 has been provided to the Kaarakin Black Cockatoo Conservation Centre.	C_004_L to DEE with evidence regarding offset. Written evidence regarding the provision of \$50,000 (excl GST) to Kaarakin Black Cockatoo Conservation Centre was provided in May 2017, prior to the commencement of the action.	C (completed)
5	Within 30 days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement.	C_001_Letter to DEE notification of commencement_04_10_17. DEE was notified on 4 October 2017 of commencement of the project.	C (completed)
6	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the Plans and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	Accurate records for all applicable conditions have been maintained and were available at the time of the audit and following the audit (refer to other items in this table and appendices).	C
7	Within 3 months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. Reports must remain on the website for the life of this approval. The person taking the action must continue to comply with this condition until such time as agreed in writing by the Minister.	As this is the initial audit period, the requirement to publish a compliance report was not applicable during the audit period. This report will be the first compliance report to be published within three months after the 12 month anniversary of the commencement of the action (publish by 25 December 2018).	N/A
8	The person taking the action must notify the Department within seven business days of first becoming aware of potential non-compliance with a condition of the approval. The notification must include details of the potential non-compliance as well as any remediation activities that have been undertaken.	There were no potential non-compliances identified during the audit period. Management advice on 20 September 2018.	C
9	Upon the direction of the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.	The Minister did not request an independent audit during the reporting period. This condition was not applicable during the audit period. Management advice on 20 September 2018.	N/A

Condition number	Condition	Evidence/Comment	Compliance status
10 A	<p>The person taking the action may choose to revise a Plan approved by the Minister under condition 2 or 3 without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the revised Plan would not be likely to have a new or increased impact. If the person taking the action makes this choice they must:</p> <p>a. notify the Department in writing that the approved Plan has been revised and provide the Department with an electronic copy of the revised Plan;</p> <p>b. implement the revised Plan from the date that the Plan is submitted to the Department; and c. for the life of this approval, maintain a record of the reasons the person taking the action considers that taking the action in accordance with the revised Plan would not be likely to have a new or increased impact.</p>	<p>Lendlease did not choose to revise a management plan during the audit period.</p> <p>Condition 10A was not applicable during the audit period.</p> <p>Management advice on 20 September 2018.</p>	N/A
10 B	<p>10B If the Minister gives a notice to the person taking the action that the Minister is satisfied that the taking of the action in accordance with the revised Plan would be likely to have a new or increased impact, then:</p> <p>a. condition 10 does not apply, or ceases to apply, in relation to the revised Plan; and</p> <p>b. the person taking the action must implement the Plan approved by the Minister.</p> <p>To avoid any doubt, this condition does not affect any operation of conditions 10 and 10A in the period before the day the notice is given.</p> <p>At the time of giving the notice the Minister may also notify that, for a specified period of time, condition 10 does not apply for one or more specified Plan required under the approval.</p>	<p>The Minister did not provide notice during the audit period about a revised plan.</p> <p>Condition 10B was not applicable during the audit period.</p> <p>Management advice on 20 September 2018.</p>	N/A
10 C	<p>10C Conditions 10, 10A and 10B are not intended to limit the operation of section 143A of the EPBC Act which allows the person taking the action to submit a revised Plan to the Minister for approval.</p>	<p>Lendlease did not submit a revised plan for approval during the audit period.</p> <p>Condition 10C was not applicable during the audit period.</p> <p>Management advice on 20 September 2018.</p>	N/A
11	<p>If, at any time after 5 years from the date of this approval, the person taking the action has not commenced the action, then the person taking the action must not commence the action without the written agreement of the Minister.</p>	<p>C_001_Letter to DEE notification of commencement_04_10_17</p> <p>DEE was notified on 4 October 2017 of commencement of the project.</p>	C (complete)
12	<p>Unless otherwise agreed to in writing by the Minister, the person taking the action must publish the Plans referred to in these conditions of approval on their website. The Plans must be published on the website within 1 month of being approved by the Minister or being submitted under condition 10.</p>	<p>The CEMP and PRRMP were published on the Alkimos Central website on 21 August 2017, within one month of being approved.</p> <p>C_005_EPBC Plans on website.</p>	C

5. References

Department of the Environment (DotE) 2014, *Annual Compliance Report Guidelines*, Commonwealth of Australia, Canberra.

Strategen 2017, *Construction Environmental Management Plan*, Alkimos City Centre and Central, Rev 2, report prepared for Lendlease, July 2017.

Strategen 2017 *Parks and Recreation Reserve Management Plan*, Alkimos City Centre and Central, Rev 2, report prepared for Lendlease, July 2017.

Appendix 1
Compliance with Construction
Environmental Management Plan

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
4. Management measures					
CEMP 1.	Site preparation and clearing	<p>Induct all personnel working on site in relation to the following:</p> <ul style="list-style-type: none"> restricted and/or 'no-go' areas, including the PRR and other restricted/protected areas on site key requirements of the PRRMP key requirements of the Construction Environmental Management Plan (CEMP) relating to protection of CBCs (hygiene measures, waste management, traffic management, erosion and dust control). 	Prior to commencing work on site	<p>R_002_Alkimos Induction Presentation (BEACH VISTA).</p> <p>D_001_Alkimos Induction Register.</p> <p>R_003_Site Induction 2.</p> <p>Personnel working on site undertook a site specific induction that covered off on the requirements listed.</p> <p>It is recommended that the induction presentation has a date next to the document number, so that different versions of the document can be tracked and updated as required.</p>	C
CEMP 2.		Clearly mark CBC habitat proposed to be retained (as indicated on Figure 2) on construction drawings and delineated by survey pegs and/or temporary fencing along the entire stage boundary.	Pre- & during clearing Pre-construction	<p>G_001_CBC cleared habitat - SEPT – 2018.</p> <p>G_003 Survey plan April 2018.</p> <p>P_001_fenced PRR area.</p> <p>P_002_Fenced PRR area.</p> <p>Survey plans indicate CBC habitat to be retained.</p> <p>Fences were observed during the site inspection on 20 September 2018.</p>	C
CEMP 3.		Clearly mark trees proposed to be retained on construction drawings and by coloured tape within the Project site.	Pre- & during clearing Pre-construction	<p>P_006_Additional trees to be retained.</p> <p>P_007_Additional trees to be retained.</p> <p>G_005_Construction drawing showing retained veg.</p> <p>16 trees to be retained are in the PRR and therefore not on construction drawings.</p> <p>The additional retained vegetation within the development area are shown on construction drawings (G_005).</p>	C
CEMP 4.		Provide GPS co-ordinates of areas approved to be cleared and those required to be retained to the contractor to ensure no unapproved clearing is undertaken.	Pre- & during clearing Pre-construction	<p>C_006_Email evidence of CW GPS details.</p> <p>C_009_Email of GPS data for precinct 2</p> <p>C_010_Mail to Georgiou 6270 Digital Clearing Boundaries</p> <p>Email correspondence shows that GPS co-ordinates and CAD drawings were provided to the clearing contractor (Georgiou) prior to clearing commencing on 26 September 2017 and onwards for precinct 1 (C_010, C_006).</p> <p>Email correspondence shows that GPS co-ordinates and CAD drawings were provided to the clearing contractor (Georgiou) prior to clearing of precinct 2 in September 2018 (C_009).</p>	C
CEMP 5.		Install appropriate fencing or barriers to restrict access to unwanted tracks in PRR areas.	Pre-construction During construction	<p>P_001_fenced PRR area.</p> <p>P_002_Fenced PRR area.</p> <p>R_004_Sept 2018 CEMP Monthly Compliance Checklist.</p> <p>R_005_Aug 2018 CEMP Monthly Compliance Checklist.</p> <p>Appropriate fencing of the PRR areas adjacent to cleared areas have been installed.</p>	C
CEMP 6.		Install appropriate temporary signage to restrict unauthorised access to the PRR.	Pre and during construction	<p>R_004_Sept 2018 CEMP Monthly Compliance Checklist.</p> <p>R_005_Aug 2018 CEMP Monthly Compliance Checklist.</p> <p>P_003_PRR Signage.</p> <p>Appropriate signage has been installed to restrict unauthorised access to the PRR area.</p>	C

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
CEMP 7.		Ensure no domestic animals, traps or firearms are permitted onsite.	Pre and during clearing	<p>R_002_Alkimos Induction Presentation (BEACH VISTA).</p> <p>R_015_Alkimos Fauna relocation_Sept 2017.</p> <p>Management advice 20 September 2018.</p> <p>The site induction mentions that domestic animals, traps and firearms are not permitted on site.</p> <p>There were no incidences recorded during the audit period about these issues.</p> <p>Traps were used during the fauna relocation program conducted by Biothorn from late September to mid October 2017, in an area of approximately 15 ha in precinct 1, during which five days of trapping and opportunistic relocations were conducted (R_015). These traps are considered appropriate for the purpose of relocating fauna and fauna management.</p>	C
CEMP 8.		If clearing occurs during CBC breeding season (July – December), habitat tree assessments of potential breeding trees within 30 m from the construction area must be conducted to check for nesting hollows and use by CBCs.	Pre-clearing, during CBC breeding season – at least 7 days prior to clearing	<p>R_006_Alkimos Precinct 1 Fauna Assessment Report – Final.</p> <p>R_014_CEMP 27 Owl in Tree.</p> <p>C_007_Owl vacated Emails Jan 18.</p> <p>R_016_Black Cockatoo Assessment April 2013.</p> <p>Fauna assessment in precinct 1 was undertaken in August 2017 (R_006), more than 1 month prior to the commencement of clearing in precinct 1, during the breeding season.</p> <p>Seven trees (two with hollows) in precinct 1 had the potential to support CBC species for breeding, however, none of the trees were in use at the time of the inspection in August 2017.</p> <p>A habitat inspection was undertaken in precinct 1 in October 2017 (two weeks after clearing commenced) of potential breeding trees within 30 m of the construction. An owl was found to be using a potential CBC hollow (R_014). The tree was not cleared until the owl vacated the tree in January 2018 (C_007).</p> <p>A CBC habitat assessment was undertaken in October 2012 (R_016) which included precinct 2. At that time, precinct 2 was assessed as containing potential CBC breeding habitat.</p> <p>A pre-clearing habitat tree assessment was not undertaken in precinct 2 to check for nesting hollows and use by CBCs, where potential breeding trees were recorded within 30 m of the construction area.</p> <p>This item has therefore been assessed as potentially non-conformant.</p> <p>It is recommended that pre-clearing surveys are conducted within 7 days prior to the area being cleared, to check for nesting hollows in potential breeding trees in areas within 30 m of the construction area (if clearing is conducted between July – December).</p>	PNC
CEMP 9.		If active CBC nests are located on site, the tree must be clearly demarcated and not cleared until fledglings have left the nest.	Pre-clearing, if active CBC nests are located.	<p>R_006_Alkimos Precinct 1 Fauna Assessment Report – Final.</p> <p>Inspection of tree hollows on site found no evidence of CBCs using the site for breeding.</p> <p>A habitat tree assessment was not undertaken prior to the clearing of precinct 2, however, it is unlikely that any hollows would have contained active nests.</p> <p>Previous experience with finding the Owl indicates that appropriate procedures are in place and were implemented during the audit period.</p>	C

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
CEMP 10.	Waste management	Maintain work areas in a clean and tidy manner to ensure that feral and other pest species are not attracted to site.	Pre-& during construction	R_004_Sept 2018 CEMP Monthly Compliance Checklist. R_005_Aug 2018 CEMP Monthly Compliance Checklist. R_002_Alkimos Induction Presentation (BEACH VISTA). Management advice 20 September 2018. Monthly site inspections and site specific induction included waste management. No incidences of feral animals on site were recorded during the audit period.	C
CEMP 11.		All bins shall have secure lids which remain closed and will need to be emptied regularly.	Pre-& during construction	P_004_waste bin with lid. Waste appeared to be collected regularly and there were no waste issues identified during the audit inspection on 20 September 2018. All bins had lids.	C
CEMP 12.	Traffic management	A maximum speed limit of 40 km/h is permitted within the construction area and will be sign posted within the construction area.	Pre-& during construction	P_002_Fenced PRR area. P_005_Speed sign. Site inspection on 20 September 2018. Speed signs of 30 km/hr were sighted during the site inspection and speed limits are in the site induction. Vehicles sighted during the audit inspection appeared to be travelling at the correct speed.	C
CEMP 13.	Weed and dieback management	Induct all construction personnel in relation to dieback and weeds risk, potential impacts and management.	Prior to commencing work on site and Pre- & During construction	R_002_Alkimos Induction Presentation (BEACH VISTA). Dieback and weed management is discussed in the site specific induction. However, dieback was identified as a weed, rather than a soil pathogen. It is recommended that the site induction is revised to describe both dieback (as a soil pathogen) and weed management.	C
CEMP 14.		Undertake baseline dieback assessment of the PRR.	Prior to the commencement of work on site, where site works are adjacent (up to 50 m) of the PRR	R_007_Phytophthora mapping of Stage One_082017 v2. A baseline dieback assessment was conducted in Stage 1 prior to commencement in August 2017, and covers a small proportion of the PRR area, adjacent to Stage 1. No Phytophthora was seen during this assessment and no suspicious sites required sampling. However, the report states there is potential that Phytophthora may have been introduced during recent soil disturbance activities. It is recommended that a follow up dieback assessment is conducted over the broader PRR area to ascertain the baseline dieback status of the PRR.	C
CEMP 15.		Make sure all vehicles; machinery and equipment are clean prior to entering site.	During construction	R_002_Alkimos Induction Presentation (BEACH VISTA). R_009_Plant_Equipment checklist_July 2018. R_010_Plant_Equipment checklist_July 2018. D_002_Plant_Equipment_Register. Clean on entry procedures are discussed in the site specific site induction. Plant and equipment are inspected prior to being accepted on site. However, the site induction mentions "departure on Vista only" rather than on arrival. It is recommended that this is updated to "clean on arrival".	C

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
CEMP 16.		Restrict access of vehicles to areas of construction to minimise the spread or introduction of weeds or pathogens. Access restrictions will be communicated through inductions, signage and fencing.	Pre- & during construction	R_002_Alkimos Induction Presentation (BEACH VISTA). P_002_Fenced PRR area. P_005_Speed sign. Clean on entry procedures are discussed in the site specific site induction. Access restrictions are discussed in the site induction, and are minimised through signage and installation of fences.	C
CEMP 17.		In the event construction vehicles are required to enter PRR areas, all vehicles, machinery and equipment will be free of mud and soil prior to entering retained vegetation to prevent introduction and spread of weeds and pathogens.	At all times	Management advice on 20 September 2018. There was no access by construction vehicles in the PRR areas during the audit period.	N/A
CEMP 18.		Clean on exit all vehicles, machinery, equipment and footwear if activities undertaken within any known dieback infested areas.	During construction and revegetation works.	R_007_Phytophthora mapping of Stage One_082017 v2. No Phytophthora was seen during the dieback assessment and no suspicious sites required sampling. However, the report states there is potential that Phytophthora may have been introduced during recent soil disturbance activities. It is recommended that footwear wash down may need to be introduced in the near future.	C
CEMP 19.		Ensure any fill/soil brought onto site is certified disease free.	During construction	R_012_Georgiou environment checklist_August 2018. C_008_Bulk material from eastern portion Management advice on 20 September 2018. The Georgiou fortnightly checklist indicates that there were mulch stockpiles were on site, and it originated from the project site (east of the rail corridor) (C_008). No soil was brought to site.	C
CEMP 20.	Erosion and dust control	Cleared areas will be stabilised to prevent wind-blown dust generating on site.	During construction	R_011_Georgiou environment Checklist_August 2018. R_012_Georgiou environment checklist_August 2018. Site inspection on 20 September 2018. Management advice on 20 September 2018. R_013_Annual dust monitoring report_Sept18. Site inspection indicated that the site was free from dust. An annual dust monitoring report indicated that dust was not an issue during the audit period.	C
CEMP 21.		Water carts will be used in conjunction with earth moving activities and as required based on prevailing weather conditions at the time of construction works.	During construction	Management advice on 20 September 2018. P_008_Hydromulch. Management advised that hydromulch was used to minimise dust and water trucks were used to minimise dust during windy conditions.	C
5.1 Monitoring Program					
CEMP 22.	Monitoring Parameters	Integrity of PRR fencing, signage and other access restrictions/deterrents.	Fortnightly for the first 6 months following commencement of clearing and then quarterly thereafter during construction	R_004_Sept 2018 CEMP Monthly Compliance Checklist. R_005_Aug 2018 CEMP Monthly Compliance Checklist. Monthly reports indicate the integrity of fencing, signage and other access deterrents.	C
CEMP 23.		Approved clearing boundaries.	Fortnightly during clearing, or as otherwise required by regulatory authorities as part of construction site inspections	R_011_Georgiou environment Checklist_August 2018. R_012_Georgiou environment checklist_August 2018. Georgiou environment checklists indicate the clearing boundaries are acceptable.	C

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
CEMP 24.		Total area cleared.	Annually during construction after clearing has commenced	G_004 Total area cleared 20 Sept 2018. Total area cleared during the audit period was 31.73 ha. No clearing has occurred in the PRR area.	C
CEMP 25.		Evidence of unauthorised access within the PRR, e.g. observations of unauthorised vehicles or machinery, damage to fencing.	Opportunistically during other PRR inspections	Management advice on 20 September 2018. Opportunistic visual monitoring indicated that there was unauthorised motorbike activity in the PRR area during the audit period.	C
CEMP 26.		CBC activity / presence within nesting hollows.	Bi-annually (prior to and on completion of the CBC breeding season [July to December])	R_014_CEMP 27 Owl in Tree. On 11 October 2017 one hollow was being used (Tree 004) by a Southern Boobook Owl sitting on three eggs. A clearing constraint was placed on that tree and tagged orange. A further inspection was undertaken in January 2018 to assess presence within the hollow and it was found to be empty. The tree was subsequently removed. The requirement in the CEMP is to assess usage of hollows only for the protection of CBC breeding species, and not for other species. This action is therefore above minimum conformance.	C
CEMP 27.		CBC activity / presence within nesting hollows.	Within seven days of the commencement of clearing where clearing of trees with nesting hollows is proposed	R_006_Alkimos Precinct 1 Fauna Assessment Report – Final. Management advice on 4 December 2018. There were two clearing programs undertaken within the audit period in September 2017 in precinct 1 and in September 2018 in precinct 2. A fauna inspection was undertaken in precinct 1 in August 2017, during the CBC breeding season (R_006), however not within the 7 day timeframe. The inspection identified seven trees in precinct 1 that had the potential to support CBC species for breeding, but no evidence to suggest CBC were breeding on site. CBC's were reported as flying over the site during the inspection. A CBC habitat assessment was undertaken in October 2012 (R_016) which included precinct 2. At that time, precinct 2 was assessed as containing potential CBC breeding habitat. No evidence was provided to show that precinct 2 was inspected within the 7 day timeframe prior to the September 2018 clearing event. This item has been assessed as potentially non-conformant because CBC activity/presence was not surveyed within 7 days prior to clearing in both precinct 1 and precinct 2. It is recommended that pre-clearing surveys are conducted within 7 days prior to the area being cleared, to check for nesting hollows in potential breeding trees in areas within 30 m of the construction area (if clearing is conducted between July – December).	PNC
CEMP 28.		Record CBC injury/deaths occurring on site.	Opportunistically	R_004_Sept 2018 CEMP Monthly Compliance Checklist. R_005_Aug 2018 CEMP Monthly Compliance Checklist. Management advice on 20 September 2018. The procedure to record CBC injury and death is part of the inspection checklists. No CBC deaths were recorded during the audit period.	C
CEMP 29.		Visual observations of erosion.	Opportunistically during construction	R_011_Georgiou environment Checklist_August 2018. R_012_Georgiou environment checklist_August 2018. Georgiou environment checklists indicate that erosion and sediment control are acceptable.	C

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
CEMP 30.		Visual observations of dust generation.	Opportunistically during construction	R_011_Georgiou environment Checklist_August 2018. R_012_Georgiou environment checklist_August 2018. Georgiou environment checklists indicate that air quality and dust control are acceptable. R_013_Annual dust monitoring report_Sept18. Visual inspection during the site visit indicated that the project area was free from dust. An annual dust monitoring report (R_013) indicated that dust was not an issue during the audit period.	C
CEMP 31.		Dust suppression equipment / actions.	Opportunistically during construction	Management advice on 20 September 2018. P_008_Hydromulch. Management advised that hydromulch was used on site and water trucks were used to minimise dust during windy conditions.	C
CEMP 32.		Visual observation of vegetation health.	Monthly during construction	R_011_Georgiou environment Checklist_August 2018. R_012_Georgiou environment checklist_August 2018. R_004_Sept 2018 CEMP Monthly Compliance Checklist. R_005_Aug 2018 CEMP Monthly Compliance Checklist. Georgiou environment checklists indicate that vegetation protection and health is acceptable.	C
CEMP 33.		Complaints register.	Opportunistically during construction	D_003_Alkimos Complaint Register. A complaints register has been maintained during the audit period.	C
CEMP 34.		Total area cleared. Clearing register.	Annually during construction after clearing has commenced	G_004 Total area cleared 20 Sept 2018. Total area cleared during the audit period was 31.73 ha as indicated on a figure (G_004).	C
CEMP 35.		Vegetation health monitoring as described in the PRRMP.	As described in the PRRMP	Refer to PRRMP 51 in Appendix 2. Not applicable during this audit period.	N/A
CEMP 36.		Hygiene register.	Quarterly during construction	D_002_Plant_Equipment_Register. Hygiene register was being maintained during the audit period.	C
CEMP 37.		Dieback infested areas mapped.	Prior to commencement of clearing	R_007_Phytophthora mapping of Stage One_082017 v2. No Phytophthora was seen during the dieback assessment in August 2017 and no suspicious sites required sampling.	C
7.1 Compliance Reporting					
CEMP 38.	CEMP and technical review and adaptive management	CEMP review shall be initiated: <ul style="list-style-type: none">following significant incidentswhere monitoring indicates that performance is not being achieved against KPIsperiodically every 12 months.	As required/every 12 months	Management advice on 20 September 2018. The CEMP will be reviewed as part of the audit process. As this is the initial annual audit, evidence of the CEMP review was not available at the time of this report preparation.	N/A
CEMP 39.		Technical review of and evaluation of the monitoring program will be undertaken annually as part of the CEMP to ensure monitoring parameters, timing, location and outputs are addressing all key risk areas and management plan objectives adequately. The review will be undertaken by Lendlease and the Environmental Consultant with advice from technical specialists as appropriate (e.g. Dieback, vegetation and fauna specialists).	Annually	Management advice on 20 September 2018. The monitoring program in the CEMP will be reviewed as part of the audit process. As this is the initial annual audit, evidence of the CEMP monitoring program review was not available at the time of this report preparation.	N/A

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
CEMP 40.		<p>To ensure uncertainty is reduced over time, and that plan outcomes/performance indicators are achieved, the following will be evaluated during review stages and incorporated into revisions of the CEMP:</p> <ul style="list-style-type: none">• new and relevant data/information gained as a result of implementing the plan or from external sources (e.g. academic literature, EPBC Act policy statements)• effectiveness of CEMP coordination, scheduling, monitoring, risk management, auditing and reporting activities• risks, including in response to the risk level, changing circumstances or the results from implementing corrective actions• effectiveness of management measures with significant levels of uncertainty, relatively long implementation timeframes, and upon which the plan is highly dependent consequences of significant environmental incidents.	Annually	<p>Management advice on 20 September 2018.</p> <p>Evaluation of the CEMP outcomes and performance indicators will be reviewed as part of the audit process. As this is the initial annual audit, evidence of the CEMP evaluation was not available at the time of this report preparation.</p>	N/A

Appendix 2
Compliance with Parks and Recreation
Reserve Management Plan

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
4.1 Implementation					
PRRMP 1.		Management of the habitat in the retained vegetation area is proposed to be the responsibility of the WAPC.	At handover	C_001_Letter to DEE notification of commencement_04_10_17. Commencement of the activity has occurred in 2017, this requirement was not applicable during the audit period. The responsibility of management of retained vegetation is Lendlease.	N/A
4.2 Delineation of areas to be retained					
PRRMP 2.	Management measures for delineating retention areas	Delineate areas of PRR along clearing boundaries through the installation of survey pegs and/or temporary fencing along the entire stage boundary.	Prior to clearing (each stage where adjacent to PRR)	P_001_fenced PRR area. P_002_Fenced PRR area. Fences were observed during the site inspection on 20 September 2018 in the PPR area adjacent to clearing in Precinct 1.	C
PRRMP 3.		Install permanent fencing to delineate PRR.	Prior to the commencement of work on site, where site works are adjacent (up to 50 m) of the PRR	P_001_fenced PRR area. P_002_Fenced PRR area. Site Management advice on 20 September 2018. Fencing of the PRR adjacent to the precinct 1 clearing was sighted during the site inspection. The whole PRR will be fenced as clearing stages adjacent to the PRR area progresses.	C
PRRMP 4.		Restrict access to unwanted tracks in PRR areas through the installation of appropriate fencing or barriers.	During construction	P_001_fenced PRR area. P_002_Fenced PRR area. Fences were observed during the site inspection on 20 September 2018 in the area adjacent to clearing in Precinct 1.	C
PRRMP 5.		Provide GPS co-ordinates of areas approved to be cleared and those required to be retained to the contractor to ensure no unapproved clearing is undertaken.	During construction	C_006_Email evidence of CW GPS details. C_009_Email of GPS data for precinct 2 Email correspondence shows that GPS co-ordinates and CAD drawings were provided to the clearing contractor (Georgiou) after clearing commenced in October 2017 onwards for precinct 1 (C_006). Email correspondence shows that GPS co-ordinates and CAD drawings were provided to the clearing contractor (Georgiou) prior to clearing of precinct 2 in September 2018 (C_009).	C
PRRMP 6.		Install appropriate temporary signage to restrict unauthorised access to the PRR.	Pre and during construction	R_004_Sept 2018 CEMP Monthly Compliance Checklist. R_005_Aug 2018 CEMP Monthly Compliance Checklist. P_003_PRR Signage. Appropriate signage has been installed to restrict unauthorised access to the PRR area.	C
PRRMP 7.		Install permanent signage to encourage public education and awareness on: <ul style="list-style-type: none">where to access the PRRthe importance of retained bushlandthe detrimental effects of rubbish, weeds and pathogens on biodiversitythe importance of keeping to the designated walking tracks.	During and post-construction up until handover	Permanent public education signage was yet to be installed during the audit period, and was not yet required.	N/A
4.3 Protection of retained vegetation					
PRRMP 8.	Tenure and zoning	Vegetation to be retained is protected in perpetuity and vested with WAPC and reserved as conservation to be managed by CoW or DBCA.	By handover	This requirement was not applicable during the audit period. The responsibility of management of retained vegetation is Lendlease.	N/A
4.4 Rehabilitation of PRR					
PRRMP 9.	Contractor engagement	Appoint an experienced revegetation contractor(s) to undertake seed collection from 50 ha, weed control and other site preparation, and direct seeding/seedling planting.	Prior to the seed collection season (approximately October–April) before clearing commences	Management advice on 20 September 2018. A revegetation contractor was not appointed prior to clearing commencing in September 2017. However, there was planning for a contractor to be appointed at the start of the next audit period, in late 2018. Seed collection needs to occur over 50 ha over of the total proposed clearing area of 257 ha. As only approximately 30 ha of CBC habitat has been cleared during the audit period, adequate uncleared areas remain to complete the 50 ha seed collection requirement; however, as seed collection did not take place prior to clearing, this requirement is potentially non-conformant due to the timing requirement.	PNC
PRRMP 10.		Appoint an experienced pest control contractor to undertake measures to control pest fauna (i.e. grazing fauna such as rabbits), based on monitoring results.	Prior to commencement of planting	Management advice on 20 September 2018. A pest control contractor had not been appointed and planting had not yet commenced, so this item was not required during the audit period.	N/A
PRRMP 11.		Appoint an experienced dieback contractor to undertake baseline dieback assessment of the PRR.	Prior to the commencement of work on site, where site works are adjacent (up to 50 m) of the PRR	R_007_Phytophthora mapping of Stage One_082017 v2. A dieback contract was appointed to conduct a baseline dieback assessment in Stage 1 prior to commencement in August 2017. The assessment covers a small proportion of the PRR area, adjacent to site works in Stage 1. No Phytophthora was seen during this assessment and no suspicious sites required sampling. However, the report states there is potential that Phytophthora may have been introduced during recent soil disturbance activities. It is recommended that a follow up dieback assessment is conducted over the broader PRR area as clearing continues adjacent to the PRR, to ascertain the baseline dieback status of the PRR.	C

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
PRRMP 12.		Induct all personnel working on site in relation to the following: <ul style="list-style-type: none"> restricted and/or 'no-go' areas, including the PRR and other areas of protected vegetation identified on site key requirements of the PRRMP (including measures to protect CBC, hygiene measures etc) key requirements of the Construction Environmental Management Plan (CEMP). 	Prior to commencing work on site	R_002_Alkmios Induction Presentation (BEACH VISTA). D_001_Alkmios Induction Register. R_003_Site Induction 2. Personnel working on site undertook a site specific induction that covered off on the requirements listed.	C
PRRMP 13.	Baseline assessment	Establish three baseline vegetation monitoring quadrats as described in Table 12.	Prior to seed collection (refer to Table 12)	Management advice on 20 September 2018. A revegetation contractor was yet to be appointed at the time of the audit to establish vegetation monitoring quadrats. As seed collection had not occurred, this item was not applicable during the audit period.	N/A
PRRMP 14.	Weed and pathogen control	Undertake weed control at least twice within PRR rehabilitation areas.	Prior to direct seeding / seedling planting and/ or commencement of rehabilitation activities	Management advice on 20 September 2018. Weed control is yet to be undertaken within the PRR. Direct seeding did not occur during the audit period.	N/A
PRRMP 15.		Weed control methods to be in accordance with industry standards (e.g. RIAWA, DBCA standards).	During weed control	Management advice on 20 September 2018. Weed control is yet to be undertaken within the PRR.	N/A
PRRMP 16.		Control methods for any weeds listed as Declared Pests to be undertaken in accordance with guidelines of the Department of Agriculture and Food WA.	During weed control	Management advice on 20 September 2018. Weed control is yet to be undertaken within the PRR.	N/A
PRRMP 17.		Undertake ongoing maintenance weed control.	Biannually for five years from the initial planting completion date, or as advised by rehabilitation contractor	Management advice on 20 September 2018. Weed control is yet to be undertaken within the PRR, as planting did not occur during the audit period.	N/A
PRRMP 18.		Engage experienced dieback consultant to conduct baseline dieback survey of the rehabilitation areas.	Prior to rehabilitation works	Management advice on 20 September 2018. Rehabilitation is yet to commence.	N/A
PRRMP 19.		Conduct baseline dieback survey within PRR rehabilitation areas to establish any areas where dieback infestations currently occur.	Prior to rehabilitation works	R_007_Phytophthora mapping of Stage One_082017 v2. A dieback baseline study was undertaken in August 2017. No Phytophthora was seen during the dieback assessment of the PRR and no suspicious sites required sampling. It is recommended that a follow up dieback assessment is conducted over the broader PRR area prior to rehabilitation works, to ascertain the baseline dieback status of the PRR.	C
PRRMP 20.		If vehicles are required to enter PRR rehabilitation areas, all vehicles, machinery and equipment will be free of mud and soil prior to entering retained vegetation to prevent introduction and spread of weeds and pathogens.	During construction and rehabilitation works	Management advice on 20 September 2018. No vehicles were required to enter the PRR area during the audit period. It is recommended that as seed collection and rehabilitation works commence in the PRR, that accurate records of vehicle, equipment and equipment hygiene are kept preventing the spread of weeds and pathogens.	N/A
PRRMP 21.		Ensure any materials (soil, mulch etc) brought into PRR rehabilitation areas is certified dieback free.	During rehabilitation works	Management advice on 20 September 2018. Rehabilitation is yet to commence and no material was brought into the PRR areas during the audit period.	N/A
PRRMP 22.	Pest control	Conduct pest control in PRR, based on monitoring detecting significant pest presence.	Ongoing as required	Management advice on 20 September 2018. A pest control contractor was yet to be appointed at the time of the audit.	N/A
PRRMP 23.	Seed collection	Compile list of appropriate species to be planted in rehabilitation areas based on flora and vegetation surveys and baseline assessment.	Prior to seed collection	Management advice on 20 September 2018. A revegetation contractor was yet to be appointed at the time of the audit.	N/A
PRRMP 24.		Prior to clearing within the Project Area, collect seed from 50 ha of CBC habitat, targeting any suitable foraging species that are suitable to the vegetation types within the rehabilitation area.	October to April prior to clearing of Project Area First collection preferably approximately 1½ years prior to first seedling planting	Management advice on 20 September 2018. Seed collection was not conducted prior to initial clearing in September 2017. Section 4.4 of the PRRMP provides flexibility of the timing of seed collection if initial clearing was to commence outside the optimal seed collection season (between October – April), which it did. Seed collection may have occurred prior to initial clearing in September, outside the optimal timeframe, on advice from a rehabilitation contractor. However, advice was not sought prior to initial clearing and seed collection did not occur during the audit period. At the time of the audit, planning was underway to appoint an experienced revegetation contractor to collect seed during the next appropriate season. This item has been assessed as potentially non-conformant because seed was not collected prior to clearing within the project area.	PNC
PRRMP 25.		If sufficient seed is not available from within the Project Area, additional collection areas within 50 km of the Project Area will be sourced.	December to March prior to seeding	Management advice on 20 September 2018. Seed was not collected during the audit period, therefore this item has been assessed as not applicable for the audit period.	N/A
PRRMP 26.		Appropriate licences to be obtained from DBCA for seed collection.	Prior to seed collection	Management advice on 20 September 2018. Seed was not collected during the audit period.	N/A
PRRMP 27.	Seedling planting	Determine areas suitable for rehabilitation.	Prior to seedling planting	Management advice on 20 September 2018. Rehabilitation planning was yet to commence at the time of the audit.	N/A
PRRMP 28.		Propagate seedlings from seed collected from Project Area.	September to May following seed collection	Management advice on 20 September 2018. Seedlings were not propagated during the audit period.	N/A

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
PRRMP 29.		Undertake seedling planting including an initial seed/seedling mix of: <ul style="list-style-type: none">at least 15 speciestwo primary CBC feeding speciesa mix of overstorey and mid/understorey species as appropriate.	During seedling planting	Management advice on 20 September 2018. Seedlings were not planted during the audit period.	N/A
PRRMP 30.		Protect seedlings with tree guards if required or apply other suitable measures, i.e. baiting.	During seedling planting	Management advice on 20 September 2018. Seedlings were not planted during the audit period.	N/A
PRRMP 31.		Ensure all plants used in rehabilitation are suitable as foraging, breeding or roosting habitat for Carnaby's black-cockatoo as listed by Groom (2011; Appendix 1) or other species suitable for the vegetation types being rehabilitated within PRR areas.	During rehabilitation	Management advice on 20 September 2018. Rehabilitation was yet to commence at the time of the audit.	N/A
PRRMP 32.		Procure seedlings of suitable provenance to conduct top-up planting in any areas not meeting 80% survival rates.	When monitoring indicates 80% survival rates have not been met	Management advice on 20 September 2018. Seedlings were not procured during the audit period.	N/A
PRRMP 33.	Direct seeding	Determine whether any areas are suitable for direct seeding.	Prior to seeding	Management advice on 20 September 2018. Planning for direct seeding did not occur during the audit period.	N/A
PRRMP 34.		Determine seed mix based on target vegetation type, seed availability and planned seedling program.	Prior to seeding	Management advice on 20 September 2018. Planning for direct seeding did not occur during the audit period.	N/A
PRRMP 35.		Treat seed to break dormancy factors, as appropriate for species.	Prior to seeding	Management advice on 20 September 2018. Planning for direct seeding did not occur during the audit period.	N/A
PRRMP 36.		Prepare soil with any methods necessary to increase germination success (e.g. scarification), as required.	Prior to seeding	Management advice on 20 September 2018. Planning for direct seeding did not occur during the audit period.	N/A
PRRMP 37.		Place mulch or brushing where appropriate to increase success of revegetation, in any areas subject to erosion.	Prior to seeding	Management advice on 20 September 2018. Planning for direct seeding did not occur during the audit period.	N/A
PRRMP 38.		Undertake direct seeding based on seed mix, in consideration of target vegetation type, seed availability and planned seedling program.	During seeding	Management advice on 20 September 2018. Planning for direct seeding did not occur during the audit period.	N/A
4.5 Retention and management of Carnaby's Black Cockatoo nesting habitat					
PRRMP 39.	Management measures for retention and management of black cockatoo nesting habitat	Identify and mark trees with hollows to be removed and relocated to PRR areas.	Prior to clearing of Project Area	R_006_Alkimos Precinct 1 Fauna Assessment Report – Final. Management advice on 20 September 2018. A fauna inspection was undertaken in precinct 1 in August 2017 (R_006) prior to clearing. The inspection identified seven trees (two with hollows) in precinct 1 that had the potential to support CBC species for breeding, but no evidence to suggest CBC were breeding on site. All potential breeding trees have been removed, and the two hollows have been retained from tree 004 and tree 006 for re-use in the PRR. A total of 12 nesting hollows will be either created or translocated into PRR areas to enhance breeding habitat.	C
PRRMP 40.		Remove hollows from trees identified as having hollows suitable for relocation.	Prior to clearing of Project Area	Management advice on 4 December 2018. Two hollows have been retained from tree 004 and tree 006 for re-use in the PRR.	C
PRRMP 41.		Engage contractor to undertake hollow construction and installation works.	During rehabilitation works	Management advice on 20 September 2018. A contractor to undertake hollow construction/installation was not appointed during the audit period. The timing of this action was not required during the audit period.	N/A
PRRMP 42.		Install relocated natural hollows and artificial nesting boxes within PRR areas in accordance with requirements outlined in Groom (2010; Appendix 1).	During rehabilitation works	Management advice on 20 September 2018. Planning for hollow construction/installation did not commence during the audit period. The timing of this action was not required during the audit period.	N/A
PRRMP 43.		Induct all personnel working on site in relation to restricted and/or 'no-go' areas, including the PRR and other areas of protected vegetation identified on site.	Prior to commencing work on site	Refer to PRRMP 12.	C
PRRMP 44.		Where necessary, hollows will be repaired, cleared of bee colonies and any other actions to ensure condition is maintained.	When monitoring indicates hollows are damaged or otherwise unviable for use by CBC	Management advice on 20 September 2018. Planning for hollow management did not commence during the audit period.	N/A
PRRMP 45.		Hollows will be inspected prior to and upon completion of the CBC breeding season for condition and evidence of black cockatoo usage.	Bi-annually (prior to and on completion of the CBC breeding season [July to December])	Management advice on 20 September 2018. Hollow management did not commence during the audit period.	N/A
5.1 Monitoring Program					
PRRMP 46.	Monitoring Parameter	Condition of fencing to delineate the area of retained vegetation, and barriers used to block unwanted access tracks.	Fortnightly for the first 6 months following commencement of clearing and then quarterly thereafter during construction	R_004_Sept 2018 CEMP Monthly Compliance Checklist. R_005_Aug 2018 CEMP Monthly Compliance Checklist. P_001_fenced PRR area. Appropriate fences have been installed and maintained to restrict unauthorised access to the retained vegetation in the development area and in the PRR area.	C

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
PRRMP 47.		Approved clearing boundaries.	Fortnightly during clearing, or as otherwise required by regulatory authorities as part of construction site inspections	R_011_Georgiou environment Checklist_August 2018. R_012_Georgiou environment checklist_August 2018. Fortnightly inspections record that the site clearing boundaries are acceptable.	C
PRRMP 48.		Total area cleared.	Annually during construction after clearing has commenced	G_004 Total area cleared 20 Sept 2018. Total area cleared during the audit period was 31.73 ha. No clearing has occurred in the PRR area.	C
PRRMP 49.		Evidence of unauthorised access within the PRR, e.g. observations of unauthorised vehicles or machinery, damage to fencing.	Opportunistically during other PRR inspections	Management advice on 20 September 2018. Opportunistic visual monitoring indicated that there was unauthorised motorbike activity in the PRR area during the audit period.	C
PRRMP 50.		Integrity of PRR fencing, signage and other access restrictions/deterrents.	Fortnightly for the first 6 months following commencement of clearing and then quarterly thereafter during construction	R_004_Sept 2018 CEMP Monthly Compliance Checklist. R_005_Aug 2018 CEMP Monthly Compliance Checklist. Monthly reports indicate the integrity of fencing, signage and other access deterrents.	C
PRRMP 51.		Status of retained vegetation.	At handover to CoW or DBCA	Not required during this audit period.	N/A
PRRMP 52.		Establish three baseline vegetation monitoring quadrats within remnant native vegetation of the same vegetation type as rehabilitation areas to determine: <ul style="list-style-type: none"> native species composition of remnant native vegetation within PRR areas to determine suitable species for use in rehabilitation list of CBC foraging, roosting and nesting habitat species present within remnant native vegetation within PRR areas to determine suitable species for use in rehabilitation baseline levels of weed infestation including list of weed species currently present within PRR areas to inform general PRR condition monitoring. 	Prior to seed collection	Management advice on 20 September 2018. A revegetation contractor was yet to be appointed at the time of the audit to establish vegetation monitoring quadrats.	N/A
PRRMP 53.		Establish other permanent quadrats or transects as required to assist PRR condition monitoring and maintenance.	As required	Management advice on 20 September 2018. A revegetation contractor was yet to be appointed at the time of the audit to establish vegetation monitoring quadrats.	N/A
PRRMP 54.		Vegetation health including: <ul style="list-style-type: none"> weed density significant plant pathogens predation by significant pests 	Opportunistically Annually in spring following commencement of construction until handover to CoW or DBCA	Management advice on 20 September 2018. A revegetation contractor was yet to be appointed at the time of the audit to monitor vegetation health within the PRR area.	N/A
PRRMP 55.		Monitoring of seed collection records.	Annually, during planting/direct weeding	Management advice on 20 September 2018. Seed collection was not conducted during the audit period.	N/A
PRRMP 56.		Establish three baseline vegetation monitoring quadrats (10 m by 10 m) within remnant native vegetation of the same vegetation type as rehabilitation areas to determine: <ul style="list-style-type: none"> native species composition of remnant native vegetation within PRR areas to determine suitable species for use in rehabilitation list of CBC foraging, roosting and nesting habitat species present within remnant native vegetation within PRR areas to determine suitable species for use in rehabilitation baseline levels of weed infestation including list of weed species currently present within PRR areas to inform general PRR condition monitoring. 	Monitoring annually in spring following rehabilitation, for five years	Refer to PRRMP 52.	N/A
PRRMP 57.		Percentage cover of weed species within vegetation monitoring quadrats within the retained vegetation.	Monitoring annually in spring following rehabilitation, for five years	Management advice on 20 September 2018. A revegetation contractor was yet to be appointed at the time of the audit to monitor weeds within the quadrats within the PRR area.	N/A
PRRMP 58.		Undertake monitoring of: <ul style="list-style-type: none"> overstorey and mid/understorey species (number and species types) number of primary feeding species for CBC. 	Monitoring annually in spring following rehabilitation, for five years	Management advice on 20 September 2018. A revegetation contractor was yet to be appointed at the time of the audit to monitor species within the quadrats within the PRR area.	N/A
PRRMP 59.		Number of nesting hollows installed within the Project Area.	During hollow monitoring (bi-annually)	Management advice on 20 September 2018. Nesting hollows have not been created/installed within the PRR area.	N/A
PRRMP 60.		CBC presence within nesting hollows.	Bi-annually (prior to and on completion of the CBC breeding season [July to December])	Management advice on 4 December 2018. Nesting hollows were yet to be created/installed in the PRR area during the audit period, so monitoring CBC presence within the nesting hollows was not required.	N/A
PRRMP 61.		Evidence of damage/deterioration, presence of bee colonies.	Monitor evidence of damage/deterioration, presence of bee colonies	Management advice on 20 September 2018. A contractor was yet to be appointed at the time of the audit to monitor bee species within the PRR area.	N/A

Audit code	Activity	Action	Timing	Evidence/comment	Conformance status
7.1 Review and Audit					
PRRMP 62.	PRRMP and technical review and adaptive management	PRRMP review shall be initiated: <ul style="list-style-type: none">• following significant incidents• where monitoring indicates that performance is not being achieved against KPIs• periodically every 12 months.	As required/every 12 months	Management advice on 20 September 2018. The PRRMP will be reviewed as part of the audit process. As this is the initial annual audit, evidence of the PRRMP review was not available at the time of this report preparation.	N/A
PRRMP 63.		Technical review of and evaluation of the monitoring program will be undertaken annually as part of the PRRMP to ensure monitoring parameters, timing, location and outputs are addressing all key risk areas and management plan objectives adequately. The review will be undertaken by Lendlease and the Environmental Consultant with advice from technical specialists as appropriate (e.g. Dieback, vegetation and fauna specialists).	Annually	Management advice on 20 September 2018. The monitoring program in the PRRMP will be reviewed as part of the audit process. As this is the initial annual audit, evidence of the PRRMP monitoring program review was not available at the time of this report preparation.	N/A
PRRMP 64.		To ensure uncertainty is reduced over time, and that plan outcomes/performance indicators are achieved, the following will be evaluated during review stages and incorporated into revisions of the PRRMP: <ul style="list-style-type: none">• new and relevant data/information gained as a result of implementing the plan or from external sources (e.g. academic literature, EPBC Act policy statements)• effectiveness of PRRMP coordination, scheduling, monitoring, risk management, auditing and reporting activities• risks, including in response to the risk level, changing circumstances or the results from implementing corrective actions• effectiveness of management measures with significant levels of uncertainty, relatively long implementation timeframes, and upon which the plan is highly dependent• consequences of significant environmental incidents.	Annually	Management advice on 20 September 2018. Evaluation of the PRRMP outcomes and performance indicators will be reviewed as part of the audit process. As this is the initial annual audit, evidence of the PRRMP evaluation was not available at the time of this report preparation.	N/A