EPBC Annual Compliance Report 2021
Lynwood Quarry, EPBC 2012/6560

Prepared for Holcim

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Project Manager	Katherine Lang
Prepared by	Kathrine Pellowe
Reviewed by	Alex Gorey
Approved by	Andrew Whitford
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Template 2.8.1

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Abbreviations

Abbreviation	Description
BGWMP	Box-Gum Woodland Management Plan
CEEC	Critically Endangered Ecological Community
DAWE	Commonwealth Department of Agriculture, Water and the Environment
EP&A Act	NSW *Environmental Planning and Assessment Act 1979*
EPBC Act	Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*
MNES	Matters of National Environmental Significance
RLMP	Rehabilitation and Landscape Management Plan

1. Introduction

Lynwood Quarry (the quarry) is a hard rock quarry owned and operated by Holcim (Australia) Pty Ltd (Holcim) located west of Marulan, New South Wales (NSW). Holcim is the trading name for Holcim (Australia) Pty Ltd which, as a member of the Holcim group, is one of the leading suppliers of heavy construction material products in Australia; operating over 80 quarries, over 200 fixed concrete plants and a fleet of over 900 concrete delivery trucks. Holcim began quarry operations at Lynwood Quarry in 2015 and since this time it has provided high quality sand and aggregates for use in construction and landscaping across the local, regional and Sydney markets.

1.1. Project history

Development consent under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) was originally granted for the quarry in December 2005. The key features of the approved operations are shown in Figure 1 in **Appendix D**.

Consideration of listed matters of national environmental significance (MNES) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was undertaken in 2005 as part of the original EPBC Act environmental assessment for the quarry. This assessment did not identify any MNES pertinent to the development. Holcim commenced construction of the quarry in late 2010 with operations commencing in October 2015.

However, MNES were identified part way through construction works as a result of pre-clearance site inspections by environmental personnel. They included the *Leucochrysum albicans var. tricolor* (Hoary Sunray) and *White Box, Yellow Box, Blakely's Red Gum Grassy Woodland and Derived Native Grassland* which is listed as a Critically Endangered Ecological Community (CEEC). The Hoary Sunray is listed as an endangered species under the EPBC Act. At the time of the original ecological assessment in 2005 the White Box, Yellow Box, Blakely's Red Gum Grassy Woodland and Derived Native Grassland was not listed as threatened under the EPBC Act. The ecological community was subsequently listed under the EPBC Act in May 2006. Approximately 19.6 ha of the CEEC was identified within the Project Area, of which 7.9 hectares was approved to be impacted by the quarry development.

Following the identification of MNES, two referrals were prepared for the quarry and approved under the EPBC Act:

- The first referral (EPBC 2012/6560) related to the impacts of Lynwood Quarry on MNES associated with the NSW approved quarry at the time of the referral. That referral was found to be a controlled action and on 13 September 2013 was granted approval subject to conditions.
- The second referral (EPBC 2016/7653) related to a second quarrying area at Lynwood Quarry referred to as the Granite Pit. The extension of quarrying into the Granite Pit was referred in 2016 and was found to not be a controlled action.

On 10 November 2021, Holcim received a notice of a breach of conditions of their EPBC Act approval from the Commonwealth Department of Agriculture, Water and the Environment (DAWE). This notice specified that the Box Gum Woodland Management Plan (BGWMP) had not been implemented as

required and that the monitoring and record keeping of works had not been done as per the conditions of approval.

As a result of the non-compliance, DAWE has specified that Holcim is required to revise and review the BGWMP and the offsets package that was submitted as part of the EPBC Approval 2012/6560. Work towards this has begun and is scheduled to be completed mid-2022.

This document provides an annual compliance report for EPBC Approval 2012/6560 and provides a consolidated review of the compliance actions identified by DAWE in September 2021, works program for corrective actions.

1.2. Description of activities

The approved controlled action (2012/6560) comprises aspects of the quarry resulting in surface disturbance as shown in Figure 1.4 in **Appendix A**. Ecological impacts associated with the action include impacts on the identified MNES, specifically, the removal of:

- 7.9 hectares of the EPBC listed White Box, Yellow Box, Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC (Box Gum Woodland).
- approximately 160 individuals of *Leucochrysum albicans var. tricolor* (Hoary Sunray) (refer to Figure 1.3 in Appendix 1).

A range of measures to avoid or mitigate impacts on MNES were implemented as part of the Lynwood Quarry development, and a Biodiversity Offset Package has been approved to compensate for residual and unavoidable impacts (refer to Figure 1.4 in **Appendix A** which outlines the Biodiversity Offset Area).

A Box Gum Woodland Management Plan (BGWMP) (**Appendix A**) was prepared and approved in accordance with Condition 2 of the approval, providing a framework for the implementation of ecological management actions, regeneration and revegetation strategies, procedures, controls and monitoring programs for the Biodiversity Offset Area. The Biodiversity Offset Area aims to protect and enhance the extent and condition of critically endangered box gum woodland, provide protection for Hoary Sunray habitat and increase local and regional biodiversity connectivity.

1.3. Purpose

This annual compliance report for January to December 2021 has been prepared to meet the reporting requirements of Condition 8 of the EPBC Approval 2012/6560. Condition 8 of the EPBC Approval 2012/6560 states:

'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 the BGWMP as specified in the conditions. Documentary evidence providing proof of the date of publication must be provided to the Department at the same time as the compliance report is published. Non-compliances with any of the conditions of this approval must be reported to the Department within 2 business days of becoming aware of the non-compliance.'

Holcim is required to submit an annual report by 20 March of each year.

2. EPBC Approval Conditions and Compliance

The proposed action was granted approval as a controlled action (EPBC 2012/6560) under the EPBC Act subject to conditions to ensure the protection, sustainability and viability of the MNES within the Project Area. The conditions of approval are detailed in Table 1, along with a statement of compliance for the 2021 reporting period.

Table 1: EPBC Approval Conditions – Compliance Status

Condition no./reference	Condition	Compliance status	Evidence/comments
1	The person taking the action must not clear more than 7.9 hectares of the ecological community White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.	**Compliant**	Less than 7.9 hectares of the ecological community White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland approved to be cleared as part of the controlled action has been removed as of 31 December 2021.
2	To assist in mitigating the impacts of the proposal on White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (box gum woodland (box gum woodland), the person taking the action must prepare and submit a Box Gum Woodland Management Plan (BGWMP) for Minister's written approval prior to commencement of the action. The BGWMP must include:	**Compliant**	The BGWMP was submitted to the Minister for approval on 24 September 2013 and approval was granted on 11 November 2013. Confirmation of this approval is provided in **Appendix B**. A copy of the BGWMP is provided in **Appendix A**.
2 cont.	a. Management actions designed to improve the ecological quality of box gum woodland on the project area (refer to Map at Schedule 1) and proposed biodiversity offset area and protect it from degradation for the duration of the action's impact on box gum woodland.	**Compliant**	Covered in the BGWMP (**Appendix A**).
2 cont.	b. Regeneration and revegetation strategies for box gum woodland on the project area and the proposed biodiversity offset area (refer to Map at Schedule 1) to improve the ecological quality of these areas of box gum woodland.	**Compliant**	Covered in the BGWMP (**Appendix A**).

Condition no./reference	Condition	Compliance status	Evidence/comments
2 cont.	c. An ecological monitoring program to monitor the success of the management actions in the BGWMP and define measurable targets of management actions, performance indicators, and an adaptive management framework for the duration of the action's impact on box gum woodland.	**Compliant**	Covered in the BGWMP (**Appendix A**).
2 cont.	d. Management of the offset site as above from commencement of the action. The action must not commence until the BGWMP is approved by the Minister. The approved BGWMP must be implemented.	**Non-Compliant**	As noted in Condition 6 below, the date of commencement of the action was 20 December 2013, with approval granted for the BGWMP on 11 November 2013. Therefore, the BGWMP was approved prior to the commencement of the action. The condition also requires the BGWMP to be implemented. Several Regeneration and Revegetation Monitoring Program requirements have not been completed during the 2020 and 2021 reporting period. DAWE consulted with Holcim and issued a non-compliance in September 2021. These are outlined in **Table 2** and **Table 3**. Corrective actions have been identified and are in progress, these are further outlined in **Table 4**.
3	To compensate for the loss of 7.9 hectares of box gum woodland the person taking the action must secure the lands identified as the 'Proposed Biodiversity Offset Area' in the Map at Schedule 1 of this notice as a biodiversity offset and protect the lands for the duration of the action's impact through a conservation agreement under section 69 of the NSW National Parks and Wildlife Act 1974. The conservation agreement must state; 'This agreement must not be terminated without the written consent of 'The Minister Administering the Commonwealth Environment Protection and Biodiversity Conservation Act 1999'.	**Non-Compliant**	A section 69 Conservation Agreement application was lodged with then NSW Office of Environment and Heritage (OEH) on 18 November 2013 (now dealt with via the NSW Biodiversity Conservation Trust [BCT]). After processing of the application by the then OEH, a conservation agreement was drafted in 2017 and submitted to OEH. After review by OEH, the draft agreement was provided back to Holcim with comments. The conservation agreement has not yet been finalised, however, Holcim has recently refocussed on progressing the finalisation of the agreement. The final timing of the agreement is unknown and is partly dependent on BCT timeframes. It is planned that the wording within the draft agreement will reflect this condition. Final wording of the approved document is at the discretion of the BCT. The offset has been managed as a conservation area while the agreement is being finalised. A meeting on site with the BCT is scheduled for March 23 2022.

Condition no./reference	Condition	Compliance status	Evidence/comments
4	Prior to the commencement of the action the person taking the action must provide evidence to the Department of; a. Their ownership of the offset lands described in Condition 3 along with offset attributes, shapefiles and textual descriptions and maps to clearly define the location and boundaries of the offset sites. b. Lodgement of the section 69 conservation agreement application form with the NSW Office of Environment and Heritage.	**Compliant**	Holcim provided evidence of the ownership of the offset lands described in Condition 3 along with offset attributes, shapefiles and textual descriptions and maps to clearly define the location and boundaries of the offset sites on 26 November 2013. A section 69 Conservation Agreement was lodged with the then OEH on 18 November 2013. Confirmation of lodgement is provided as **Appendix C**. As noted in Condition 6 below, the date of commencement of the action was 20 December 2013. The section 69 application was therefore lodged prior to commencement of the action.
5	If the person taking the action is unable to comply with Conditions 3 and 4 above they must propose an alternative offset strategy for box gum woodland that meets the current Commonwealth EPBC Act Environmental Offsets Policy. The proposed action must not commence until the alternative proposed offset has been approved in writing by the Minister.	**Non-Compliant**	Holcim have not complied with Condition 3 and the offset strategy for Box Gum Woodland (BGWMP and Conservation Agreement). Review of whether the strategy meets the current Commonwealth EPBC Act Environmental Offsets Policy is currently being carried out in response to the request from DAWE under Condition 11. If any changes are proposed to the Plan, this will be approved in writing by the Minister.
6	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.	**Compliant**	Holcim notified the Department on 5 December 2013 the action was scheduled to commence in January 2014. The action was later commenced by Holcim on 20 December 2013. Written notification of the actual commencement date was overlooked due to staffing changes. Formal notification was provided to the Department in the 2014 compliance report, dated May 2015, submitted and published on Holcim's website. This is a historical non-compliance, however as it has been addressed previously it has been considered compliant for the purpose of this report and the reporting period it covers.

Condition no./reference	Condition	Compliance status	Evidence/comments
7	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to these conditions of approval, including measures taken to implement the offset and BGWMP, 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 the audits may also be publicised through the general media.	**Compliant**	A compliance register was developed for Lynwood Quarry to maintain all records and evidence to substantiate activities undertaken on the site to implement this approval, the BGWMP and to protect the Biodiversity Offset Area. During the 2021 reporting period, Holcim have maintained records for the Lynwood Quarry. These records substantiate all activities associated with or relevant to these conditions of approval, including measures taken to implement the offset and BGWMP. ELA notes that given the BGWMP has not been implemented, there are no records relevant to this plan.
8	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 the BGWMP as specified in the conditions. Documentary evidence providing proof of the date of publication must be provided to the Department at the same time as the compliance report is published. Non-compliance with any of the conditions of this approval must be reported to the Department within 2 business days of becoming aware of the non-compliance.	**Compliant**	The 2014, 2015, 2016, 2017, and 2018 annual compliance reports are published on the Holcim website: http://www.holcim.com.au/lynwood.html The 2019 and 2020 compliance report were not published in the timeframe specified in the condition, however both were published in July 2021. These are historical non-compliances, however as they haves been addressed previously, they have been considered compliant for the purpose of this report and the reporting period it covers. This 2021 compliance report will be published in the timeframe specified in the condition, therefore the condition is assessed as compliant for the 2021 compliance period. The 2022 compliance report is planned to be initiated in January 2023 so that it can be submitted within the required timeframe.
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.	**N/A**	During the 2021 reporting period, an independent audit was not requested. The last independent audit was completed in the 2020 reporting period.

Condition no./reference	Condition	Compliance status	Evidence/comments
10	If the person taking the action wishes to carry out any activity otherwise than in accordance with the Plan as specified in the conditions, the person taking the action must submit to the Department for the Minister's written approval a revised version of that Plan. The varied activity shall not commence until the Minister has approved the varied Plan in writing. The Minister will not approve a varied Plan unless the revised Plan would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised Plan, that Plan must be implemented in place of the Plan originally approved.	**Non-Compliant**	No proposed variations or changes to the approved plans have been undertaken however, the intended management practises of the Plan have not occurred during the 2021 reporting period. DAWE consulted with Holcim in September 2021 and the points raised are outlined in **Table 2** and **Table 3**. Corrective action that have been identified and are in progress are further outlined in **Table 4**. Depending upon the outcome of the corrective actions there may be changes to the Plan. Management activities will continue to be actioned throughout the next reporting period.
11	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species and ecological communities to do so, the Minister may request that the person taking the action make specified revisions to the Plan specified in the conditions and submit the revised Plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approved Plan must be implemented. Unless the Minister has approved the revised Plan then the person taking the action must continue to implement the Plan originally approved.	**Compliant**	DAWE consulted with Holcim in September 2021 and requested that Holcim make specified revisions to the Plan. Holcim are currently taking action to fulfill the requested revisions. These are outlined in **Table 2** and **Table 3**. Corrective action that have been identified and are in progress are further outlined in **Table 4**. Management activities will continue to be actioned throughout the next reporting period
12	If, at any time after 5 years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister.	**Compliant**	The action was commenced by Holcim on 20 December 2013 and was substantially progressed during 2014. This was within 5 years of the date of the approval.
13	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish the Plan and Program referred to in these conditions of approval on their website. The Plan and Program must be published on the website within 1 month of being approved.	**Compliant**	Completed and reported on in 2014. The BGWMP has been uploaded to the Holcim website and is accessible at http://www.holcim.com.au/lynwood.html. Assessed as compliant for the reporting period as the approved document is published and available.

The BGWMP required by Condition 2 contains management actions designed to improve and protect the condition of Box Gum Woodland in the Conservation Area. These management actions are discussed in Table 2 and Table 3 below.

Table 2: Box Gum Woodland Management Plan – Regeneration and Revegetation Program Requirements

Activity	Description	Timeframe as defined in the BGWMP	Progress in 2021	Compliance status
Fencing	Fence entire Biodiversity Offset Area (offset area).	2013/14	All required fencing has been completed.	**Compliant**
Natural regeneration of derived native grassland	Exclusion of stock from the offset area.	2013/14	The offset area is free from grazing activities by stock.	**Compliant**
Seed collection for direct seeding	Seed collection to target box-gum woodland using local provenance. Direct seeding of 5.5 ha of the offset area.	2013/14	Completed	**Compliant**
Site preparation for direct seeding	Light scarification of the ground if deemed essential to seed germination (i.e. if seeding coincides with very dry conditions)	2014/15	Completed	**Compliant**
Direct seeding	Direct seeding of 5.5 ha. Seeding to be conducted using a tractor with fertilizer spreader and vermiculate.	2014/15	Completed	**Compliant**
Planting of tube stock	5.5 ha of the existing native pasture to be revegetated using tube stock at a density of 600 stems per hectare. No deep ripping is to be conducted.	2014/15	Not commenced. Tube stock planting has been scheduled for 2022.	**Non-Compliant**
Tube stock propagation	Tube stock quantity to be sufficient to revegetate 5.5 ha.	2013/14	Not commenced. Tube stock propagation has been scheduled for 2022.	**Non-Compliant**
Site preparation for tube stock planting	Slashing/mowing of 5.5 ha site prior to planting.	2014/15	Not commenced. site preparation for tube stock planting is scheduled for 2022.	**Non-Compliant**
Weed management within revegetation/ regeneration area	Biannual weed management action to be conducted across 30% (approximately 7 ha) of the offset area. Spraying to occur prior to the flowering of weed species with follow up spraying to be undertaken after the initial round of spraying has taken effect.	6-monthly until 2017/18	The timeframe has now passed however this item was never undertaken. .	**Non-Compliant**

Activity	Description	Timeframe as defined in the BGWMP	Progress in 2021	Compliance status
Monitoring of revegetation/ regeneration area	Annual monitoring to be undertaken in order to determine the success or otherwise of revegetation works and the progress of natural regeneration. Permanent monitoring plots to be established during the first year of monitoring.	Yearly	Monitoring has been undertaken by SLR in 2021. The monitoring report is to be complete by mid 2022. Holcim also undertook ecological monitoring during the 2020 reporting period. The monitoring determined the progress of natural regeneration but did not determine the success or otherwise of revegetation works. Revegetation works are currently being reviewed and potentially revised. Refer to **Table 4** for further detail.	**Compliant**

Table 3: Box Gum Woodland Management Plan – Monitoring Program Requirements

Activity	Description	Timeframe as defined in the BGWMP	Progress in 2021	Compliance status
Weed Management	Weed assessments are to be undertaken by the Environment Officer every six months in the offset area. Outbreaks of weeds are to be controlled using spraying, slashing or manual removal. Where appropriate, the local weeds authority and the Goulburn-Mulwaree Council will be consulted regarding weed control measures.	6-monthly from establishment of offset area	Active Weed management has not be carried out in the offset area within the audit period. A preliminary site assessment of the biodiversity offset area was carried out in December 2021 by ELA ecologists. This included an assessment of weeds and control recommendations.	**Non-Compliant**
Feral animals	Feral fauna species are to be visually monitored during the Environmental Officer's six-monthly inspections and during fauna surveys undertaken once every three years. Measures to control feral species are to be implemented as required and in consultation with the Rural Lands Protection Board, where necessary.	Opportunistic and during scheduled 6-monthly and 3-yearly monitoring.	Feral fauna species were visually monitored for during the fauna surveys of the 2021 ecological monitoring conducted by SLR Consulting Australia Pty Ltd.	**Compliant**

Activity	Description	Timeframe as defined in the BGWMP	Progress in 2021	Compliance status
			The result are to be included in the report for completion mid 2022	
Retained vegetation	The condition of retained vegetation is currently monitored once every three years by a qualified ecologist to identify any change in habitat quality. Permanent monitoring plots are located in the northern Habitat Management Area, on Joarimin Creek, and in the Cultural Heritage Management Zone. The permanent monitoring plot in the Cultural Heritage Management Zone in the offset area will form part of the offset monitoring requirements. The following will be recorded: • General health of vegetation; • Evidence of natural regeneration; • Occurrence and abundance of weed species; • Signs of disturbance, either by stock or humans; • Evidence of feral animals; and • Any observable impacts of the operation, such as the effectiveness of sediment and erosion control structures. At each vegetation plot, species diversity and structural composition is to be recorded. Photo monitoring will also be undertaken at established photo monitoring points at each monitoring site. Fauna will also be monitored at these sites.	3-yearly	Ecological monitoring was conducted by SLR Consulting Australia Pty Ltd during the 2020 reporting period and is not due again until 2023.	**Compliant**
Revegetation areas	Following revegetation works, monitoring is to be undertaken to assess the progress of the revegetation program. The offset area will be included in the existing monitoring schedule for revegetation areas. Specifically, the monitoring inspections will assess: • The extent of the vegetation cover and species diversity, and any requirement for additional revegetation works to be undertaken; • The general health of the vegetation • Any occurrence of weed species in the revegetation area and any requirements for weed control • Feral animals and the need for control;	3-monthly for first three years following completion of rehabilitation works. Annually thereafter.	Revegetation has not been completed.	**Non-Compliant**

Activity	Description	Timeframe as defined in the BGWMP	Progress in 2021	Compliance status
	• Erosion and the need for repair of eroded areas; • Fire management • Any signs of disturbance, either by animals or humans; and • The success of any management programs implemented following previous monitoring inspections.			
Revegetation areas (cont.)	In addition to annual monitoring the Environmental Officer will inspect the offset area revegetated areas every three months for the first three years after the completion of rehabilitation works. This inspection will include: • The general health of the vegetation and the need for fertilisation; • The growth of the vegetation and the need to replace any dead plants; • Any erosion and the need for sediment and erosion controls to be implemented; • Any occurrence of weed species in the revegetation area and any requirements for weed control activities: and • Signs of disturbance and the need to access controls.	3-monthly for first three years following completion of rehabilitation works. Annually thereafter	Rehabilitation works have not been completed	**Non-Compliant**
Box Gum Woodland	Ecological monitoring of retained box gum woodland patches will be undertaken annually against benchmark sites for a period of 5 years with the monitoring frequency to be reassessed after that time. This monitoring will assess the condition and recovery of box gum woodland at the site. Permanent plots and photographic monitoring sites will be established to allow for comparison between monitoring events.	Annually for years 0-5 Following establishment of Offset area, biannually for years 6-11 following successful implementation of rehabilitation.	Ecological monitoring of retained Box Gum Woodland patches against benchmark sites was last undertaken by SLR Consulting Australia Pty Ltd in 2021. Final results and reporting is expected mid 2022. Rehabilitation has not been carried out. Actions to rectify this are in progress. Refer to **Table 4**	**Compliant**

3. Correcting Non-Compliances

Six non-compliances with the conditions of the EPBC approval and nine non-compliances with the BGWMP were recorded for Holcim during the 2021 reporting period. The identified non-compliances and proposed corrective actions and timeframes are presented in Table 4.

Table 4: Correcting Non-compliances

EPBC approval condition/BGWMP requirement	Non-compliance	Date detected	Department notified	Future corrective actions	Tentative timeframe for completion
Condition 11	The offset site being unmanaged for 6 years and associated lost gain of environmental outcomes	September 2021	Holcim and DAWE meeting facilitated by DAWE in September 2021.	DAWE require: • Baseline surveys of the site to establish if the offset site described in the Lynwood Quarry Box Gum Woodland Management Plant 2013 still meets the offset policy and principles to determine changes to the original calculations of offset site quality. • The resubmission of the Offset Assessment Guide calculators, including evidence to support the data. • The extent and quality of the Box Gum Woodland onsite and what other previously identified species are present and viable. • Mapping of the erosion and sedimentation extent and the impact that it currently has on the protected matters, the condition of the fencing and the fire history on the site. • The baseline data to inform the next phase including recalculation of the offset, the viability of the offset, the lost gains and the management of the site.	Prior to Spring 2022

EPBC approval condition/BGWMP requirement	Non-compliance	Date detected	Department notified	Future corrective actions	Tentative timeframe for completion
				• The management plan to be revised and approved prior to Spring 2022.	
Condition 2(d)	The condition requires the BGWMP to be implemented. Several Regeneration and Revegetation Monitoring Program requirements have not been completed during the 2020 and 2021 reporting period.	September 2021	Holcim and DAWE meeting September 2021	As for Condition 11	Spring 2022 and ongoing
Condition 3	The offset has not been managed as a conservation area while the agreement is being finalised. DAWE consulted with Holcim and issued a non-compliance in September 2021.	September 2021	Holcim and DAWE meeting September 2021	As for Condition 11	Spring 2022 and ongoing
Condition 5	Holcim have not complied with Condition 3 and the offset strategy for Box Gum Woodland (BGWMP and Conservation Agreement). Review of whether the strategy meets the current Commonwealth EPBC Act Environmental Offsets Policy is currently being carried out in response to the request from DAWE under Condition 11. If any changes are proposed to the Plan, this will be approved in writing by the Minister.	During preparation of this report.	Within this report	As for Condition 11	Spring 2022
Condition 10	There has been no management of the offset area for 6 years. DAWE consulted with Holcim in September 2021.	September 2021	Holcim and DAWE meeting September 2021	As for Condition 11	Management activities will be commenced throughout the next reporting period

EPBC approval condition/BGWMP requirement	Non-compliance	Date detected	Department notified	Future corrective actions	Tentative timeframe for completion
	Depending upon the outcome of the corrective actions under Condition 11 there may be changes to the Plan.				
BGWMP Regeneration and Revegetation Program Requirements	Planting of tube stock	September 2021	Holcim and DAWE meeting September 2021	Dates for tube stock planting to be confirmed as part of the review of the BGWMP under Condition 11. These dates will then be incorporated into the compliance register and completed.	31/12/22
BGWMP Regeneration and Revegetation Program Requirements	Tube stock propagation	September 2021	Holcim and DAWE meeting September 2021	Dates for tube stock propagation to be confirmed as part of the review of the BGWMP under Condition 11. These dates will then be incorporated into the compliance register and completed.	31/12/22
BGWMP Regeneration and Revegetation Program Requirements	Site preparation for tube stock planting	September 2021	Holcim and DAWE meeting September 2021	Dates for site preparation to be confirmed as part of the review of the BGWMP under Condition 11. These dates will then be incorporated into the compliance register and completed.	31/12/22
BGWMP Regeneration and Revegetation Program Requirements	Monitoring of revegetation/ regeneration area	September 2021	Holcim and DAWE meeting September 2021	Monitoring was carried out in 2021, final results and reporting is due mid 2022.	Prior to Spring 2022
BGWMP Monitoring Program Requirements	Weed Management	During preparation of this report	Within this report	Active weed management actions to be carried out within the Offset Site in accordance with the condition assessment carried out in December 2021	Prior to Spring 2022
BGWMP Monitoring Program Requirements	Feral animals	During preparation of this report	During preparation of this report	Visual survey of feral fauna was carried out in 2021, final results and reporting is due mid 2022.	Prior to Spring 2022

EPBC approval condition/BGWMP requirement	Non-compliance	Date detected	Department notified	Future corrective actions	Tentative timeframe for completion
BGWMP Monitoring Program Requirements	Revegetation Areas	September 2021	Holcim and DAWE meeting September 2021	Following revegetation works, Holcim will re-establish monitoring in the 2022 reporting period as required.	31/12/22
BGWMP Monitoring Program Requirements	Revegetation Areas (cont)	September 2021	Holcim and DAWE meeting September 2021	Following revegetation works, Holcim will re-establish monitoring in the 2022 reporting period as required.	31/12/22
BGWMP Monitoring Program Requirements	**Box Gum Woodland**	**During preparation of this report.**	**Within this report**	**Monitoring for the 2021 period was carried out by SLR, final results and reporting is due mid 2022.** **During 2022, Holcim will undertake annual monitoring of the BGWMP areas to determine the success or otherwise of revegetation works and the progress of natural regeneration.**	**31/12/22**

Holcim will endeavour to restore full compliance with the EPBC Act Approval and BGWMP during 2022. As part of improving compliance management as it relates to the EPBC Act Approval and BGWMP, Holcim will continue to update their compliance schedule outlining compliance conditions, actions to be completed, due dates, outcomes and sign off in 2022.

4. New Environmental Risks

No new environmental risks are noted for the next reporting period.

5. Declaration of Accuracy

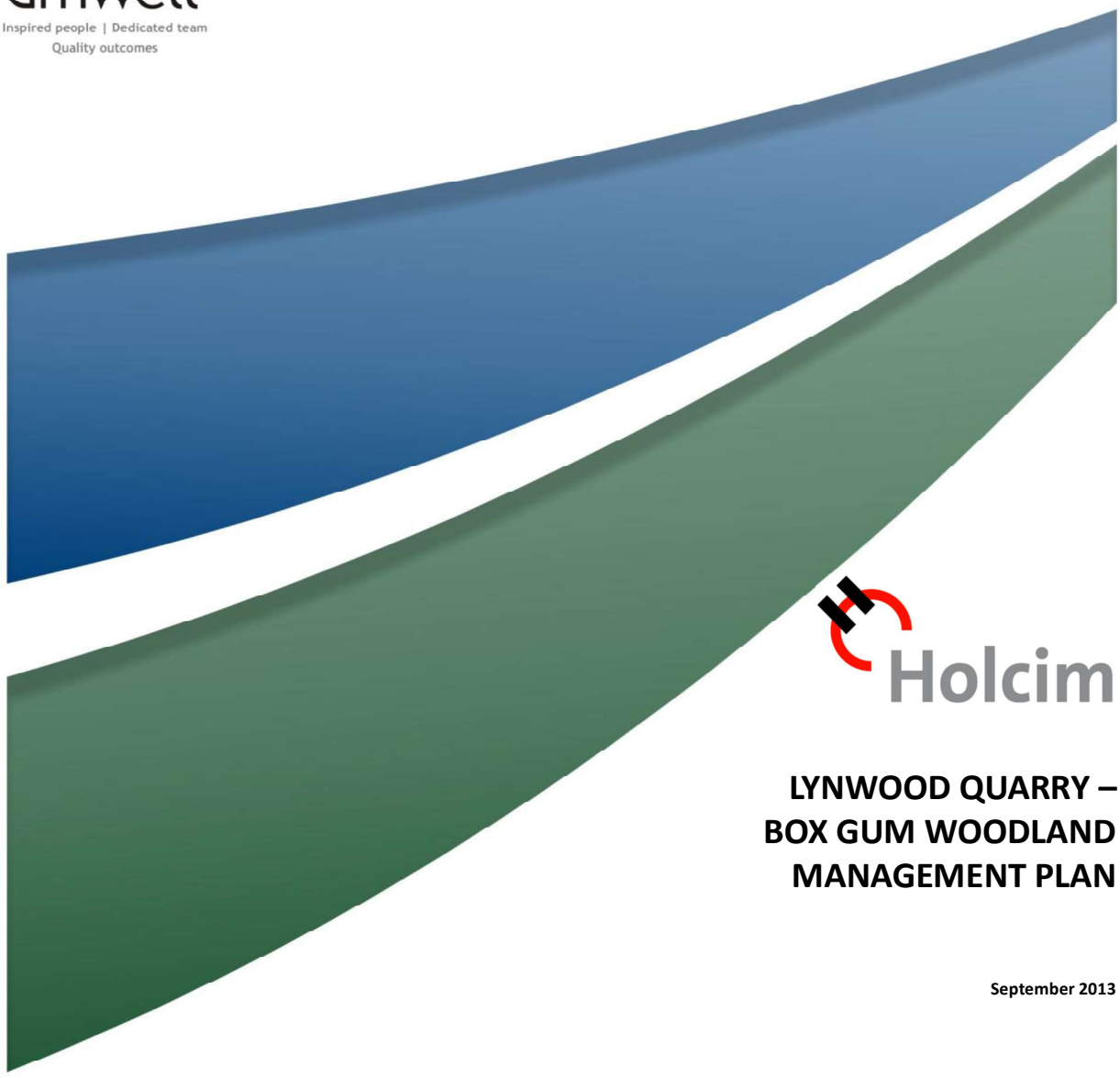
In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed	
Full name	Andrew Whitford
Position	Manager, Restoration Ecology and Land Management
Organisation	Eco Logical Australia
Date	4 April 2022

Appendix A Box Gum Woodland Management Plan

umwelt

Inspired people | Dedicated team
Quality outcomes



Holcim

LYNWOOD QUARRY – BOX GUM WOODLAND MANAGEMENT PLAN

September 2013

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September 2013

Prepared by
Umwelt (Australia) Pty Limited

on behalf of
Holcim (Australia) Pty Ltd

Project Director:	**John Merrell**
Project Manager:	**Gabrielle Allan**
Report No.	**2999/R12/FINAL**
Date:	**September 2013**

Newcastle

75 York Street
Teralba NSW 2284

Ph. 02 4950 5322

www.umwelt.com.au

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Glossary of Terms

BGW	Box Gum Woodland
BGWMP	Box Gum Woodland Management Plan
Box Gum Woodland	'White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland' Critically Endangered Ecological Community
CEEC	Critically Endangered Ecological Community
DECCW	Department of Environment, Climate Change and Water (now Office of Environment and Heritage)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
Ha	Hectares
Holcim Australia	Holcim (Australia) Pty Ltd
The Minister	Minister administering the EPBC Act (includes a delegate of the Minister)
MNES	Matters of National Environmental Significance
Mtpa	Million tonnes per annum
NSW	New South Wales
NPW Act	*National Parks and Wildlife Act 1974* (NSW)
SEWPaC	Department of Sustainability, Environment, Water, Population and Communities (Commonwealth)

1.0 Introduction

Lynwood Quarry (the quarry) is a hard rock quarry currently under construction west of Marulan in the Southern Tablelands region of NSW (refer to **Figure 1.1**). Holcim (Australia) Pty Ltd (Holcim Australia) was granted development consent in December 2005 by the NSW Minister for Planning to construct and operate the quarry with a production rate of up to 5 million tonnes per annum (Mtpa) (refer to **Figure 1.2**). Holcim Australia commenced construction of the quarry in late 2010, with operation of the quarry planned to commence in the last quarter of 2014.

During construction, ecological matters of national environmental significance (MNES) were identified within the site. In September 2012, the future works associated with construction and operation of the quarry were referred to the Australian Government under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). On 25 October 2012, the project was deemed to be a controlled action requiring assessment and approval under the EPBC Act. The project was assessed by preliminary documentation and on 13 September 2013 the project was granted approval under the EPBC Act (EPBC Ref: 2012/6560) subject to conditions.

This Box Gum Woodland Management Plan (BGWMP) has been developed to meet the requirements of the approval decision for the Lynwood Quarry. As stipulated in Condition 2 of the approval decision, which is described in **Section 1.3**, and summarised below, this management plan includes:

- management actions;
- regeneration and revegetation strategies; and
- an ecological monitoring program for box gum woodland.

1.1 Background

Ecological impacts associated with the development of the quarry include impacts on ecological MNES, specifically, the removal of 7.9 hectares of the EPBC-listed critically endangered ecological community (CEEC), White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland (hereafter referred to as box gum woodland); and around 160 individuals of the EPBC-listed endangered plant species hoary sunray (*Leucochrysum albicans var. tricolor*), out of a very large total population of approximately 558,000 plants (refer to **Figure 1.3**).

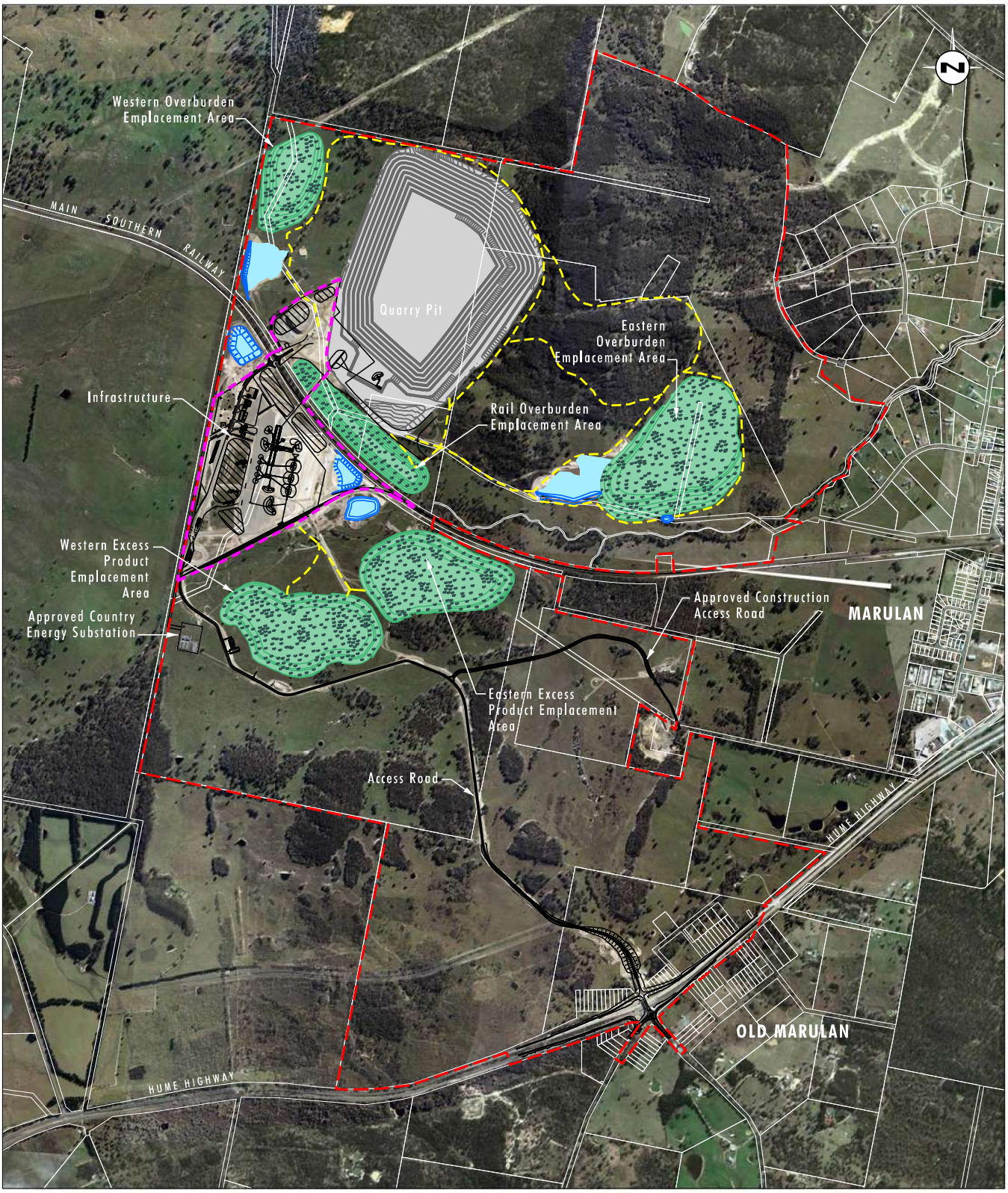
A range of measures to avoid or mitigate impacts on MNES will be implemented as part of the project, however due to residual and unavoidable impacts on box gum woodland, a Biodiversity Offset Package is required.

As shown in **Figure 1.3**, box gum woodland occurs in three discreet locations within the project area. In addition to the 7.9 hectare patch impacted by the action, there is also a small 1.4 hectare patch located to the north of the site access road, near Marulan Creek (refer to **Section 4.2**), and approximately 27 hectares to the south of the proposed access road which will be incorporated into the proposed Biodiversity Offset Area.

The Biodiversity Offset Package will comprise two components; a 185 hectare direct land offset (the Biodiversity Offset Area) in the south western part of Holcim Australia's holdings (refer to **Figure 1.4**) which will protect all box gum woodland to the south of the access road; and a package of direct actions (non-land) which will enhance quality and resilience of the Biodiversity Offset Area. These components are detailed in **Section 2.0**.

FIGURE 1.1

Locality Plan



Base Source: LPI 2010, Holcim Australia (Aerial Photo May 2012), Google Earth (2011)

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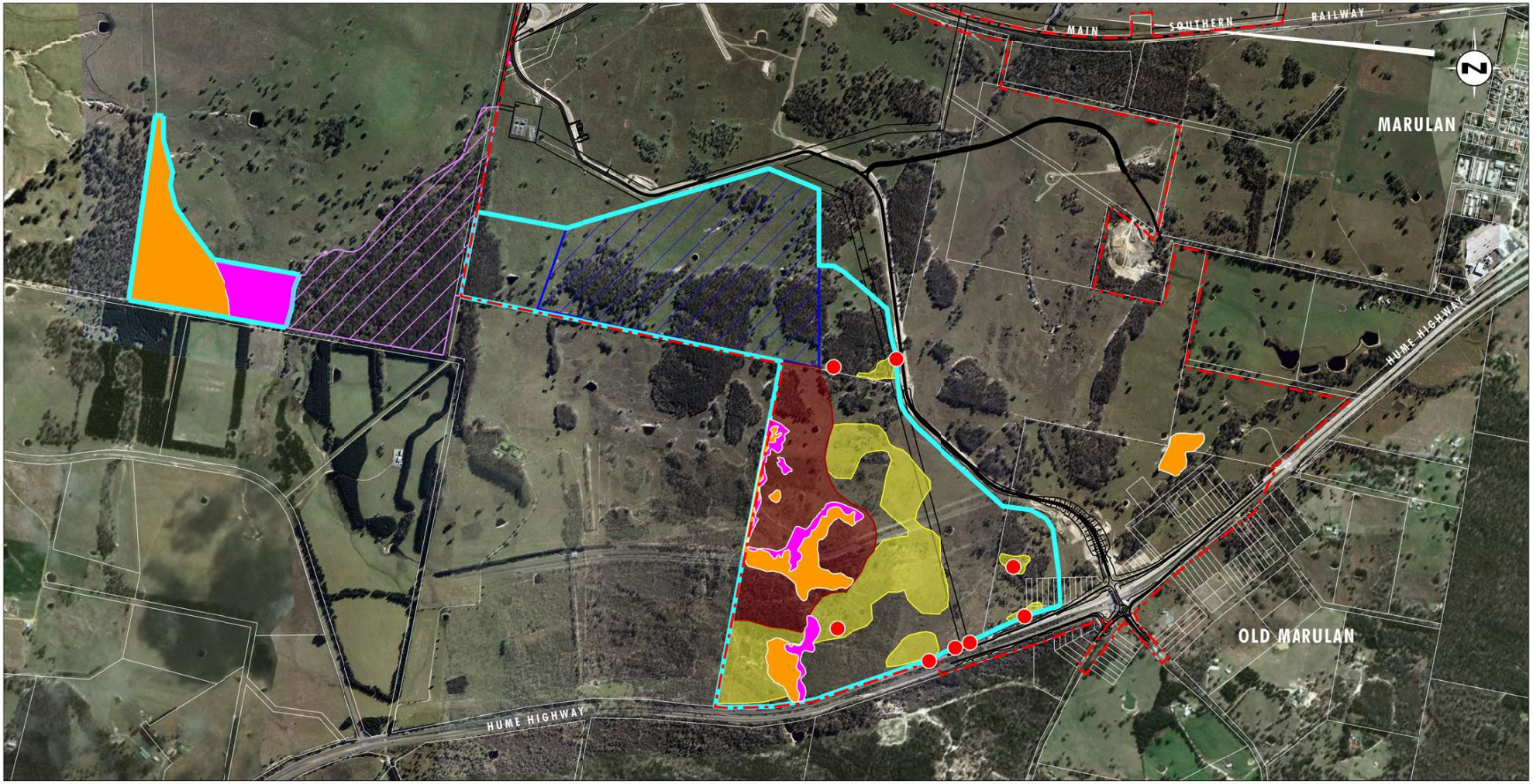
Legend

- Project Area
- Infrastructure Area
- Haul Road
- NSW EP&A Act Approved Disturbance Area
- Quarry Pit
- Emplacement Area
- Rehabilitated Area
- Dam

FIGURE 1.2

Lynwood Quarry Project
- Indicative Year 30 Quarry Plan



Source: LPI 2010, Holcim Australia (Aerial Photo May 2012), Google Earth (2011)

0 0.25 0.5 1.0km
1:20 000

Legend

- Project Area
- Biodiversity Offset Area

DIRECT LAND OFFSETS:

- Box Gum Woodland Derived Native Grassland (CEEC)
- Box Gum Woodland (CEEC)
- Hoary Sunray Habitat
- Location of Hoary Sunray

DIRECT ACTIONS:

- Box Gum Woodland CEEC Regeneration Area

COMPLEMENTARY ACTIONS:

- Habitat Management Area
- Cultural Heritage Management Zone

FIGURE 1.3

Box Gum Woodland and Hoary Sunray Distribution, and Biodiversity Offset Area

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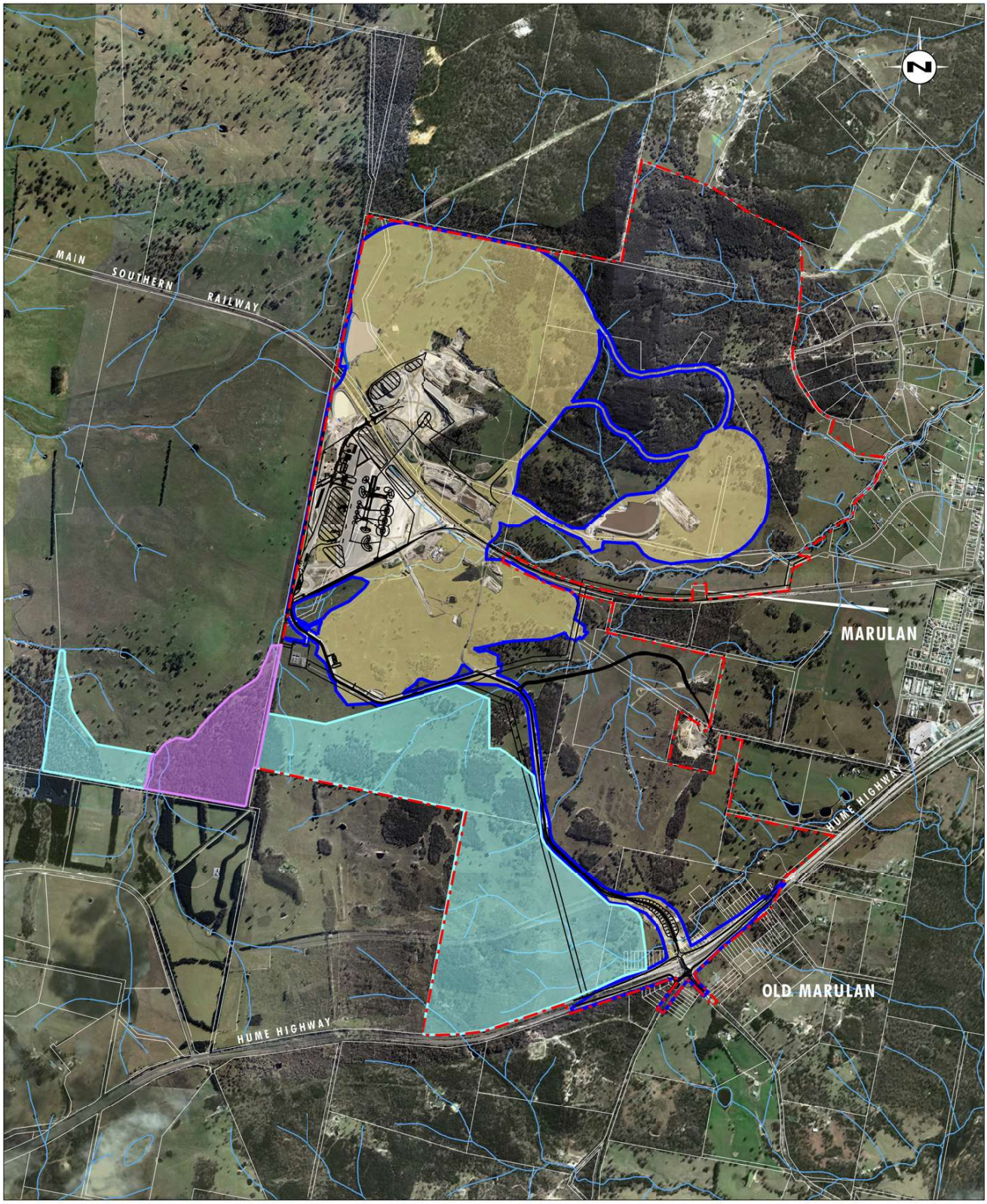

Source: LPI 2010, Holcim Australia (Aerial Photo May 2012), Google Earth (2011)

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Legend

- Project Area
- NSW EP&A Act Approved Disturbance Area
- EPBC Act Controlled Action Disturbance Area
- Biodiversity Offset Area
- Habitat Management Area
- Drainage

FIGURE 1.4

Overview of Biodiversity Offset Area

1.2 Purpose and Scope

The purpose of this BGWMP is to provide a framework for the implementation of ecological management actions, regeneration and revegetation strategies, procedures, controls and monitoring programs for the Biodiversity Offset Area. Specifically, the strategy aims to protect and enhance the extent and condition of critically endangered box gum woodland, provide protection for hoary sunray habitat, increase local and regional biodiversity connectivity and protect sites of cultural heritage significance.

This BGWMP has been developed for a 185 hectare area in the south western part of Holcim Australia's Marulan holdings identified as the proposed Biodiversity Offset Area in EPBC Referral 2012/6560 and described further in **Section 2.0** of this BGWMP. The Biodiversity Offset Area was identified due not only to it being able to specifically target the MNES significantly impacted by the proposal, but it also adds further protection to other MNES and heritage values in addition to enhancing connectivity by protecting non-MNES remnant vegetation as part of an overall strategy to optimise biodiversity values.

The action must not commence until this BGWMP has been approved by the Minister. The approved BGWMP must be implemented (EPBC Approval Condition no. 2).

1.3 Regulatory Requirements

The Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) deemed the project to be a 'controlled action' under the EPBC Act as it was likely to result in significant impacts on EPBC-listed threatened species and ecological communities. The project was assessed by preliminary documentation and on 13 September 2013 the project was granted approval under the EPBC Act (EPBC Ref: 2012/6560) subject to the preparation and approval of a BGWMP and related actions, as summarised below:

Approval Condition 2.

To assist in mitigating the impacts of the proposal on White Box-Yellow Box-Blakely's Red Gum Woodland and Derived Native Grassland (box gum woodland), the person taking the action must prepare and submit a Box Gum Woodland Management Plan (BGWMP) for the Minister's written approval prior to commencement of the Action. This BGWMP must include:

a. *management actions designed to improve the ecological quality of box gum woodland on the project area (refer to Map at Schedule 1) and proposed biodiversity offset area and protect it from degradation for the duration of the action's impact on box gum woodland.*
b. *regeneration and revegetation strategies for box gum woodland on the project area and the proposed biodiversity offset area (refer to Map at Schedule 1) to improve the ecological quality of these areas of box gum woodland.*
c. *an ecological monitoring program to monitor the success of the management actions in the BGWMP and define measureable targets of management actions, performance indicators and an adaptive management framework for the duration of the action's impact on box gum woodland.*
d. *Management of the offset site as above from commencement of the action.*

The action must not commence until the BGWMP is approved by the Minister. The approved BGWMP must be implemented.

Approval Condition 3.

To compensate for the loss of 7.9 hectares of box gum woodland, Holcim must secure the lands identified as the 'Proposed Biodiversity Offset Area' in the Map at Schedule 1 of this notice as a biodiversity offset and protect the lands for the duration of the action's impact through a conservation agreement under section 69 of the NSW National Parks and Wildlife Act 1979. The conservation agreement must state: 'This agreement must not be terminated without the written consent of 'The Minister Administering the Commonwealth Environment Protection and Biodiversity Conservation Act 1999'.

Other relevant conditions of approval are referred to within this plan and in the summary of commitments in **Section 8.0**. A copy of the conditions of approval is also presented in **Appendix 1**.

An assessment of the consistency of the Biodiversity Offset Area with the EPBC Offset Policy released in October 2012, and the accompanying Offset Assessment Guide, has been undertaken and is included in **Section 2.0**.

1.4 Authority Consultation

Consultation with SEWPaC has been undertaken as part of the EPBC Referral process and the BGWMP will be subject to Commonwealth review and approval.

In addition, Holcim Australia will consult with the NSW Office of Environment and Heritage (OEH) in relation to the preparation of a Conservation Agreement under Section 69 the NSW *National Parks and Wildlife Act 1974* (NPW Act) to provide for the long term conservation of the proposed Biodiversity Offset Area. The Conservation Agreement will be registered on the title of the land and would therefore be transferred should any future sale of the land occur.

1.5 Roles and Responsibility

Roles and responsibilities associated with the implementation of this BGWMP are presented in **Table 1.1** below.

Table 1.1 – Roles and Responsibilities

Title	Roles and Responsibilities
Operations Manager	• ensure that sufficient resources are allocated for the implementation of the BGWMP • authorising internal and external reporting requirements as well as subsequent revisions of the BGWMP • implementation of the BGWMP to ensure compliance

Table 1.1 – Roles and Responsibilities (cont.)

Title	Roles and Responsibilities
Environmental Officer	• coordinate the day to day implementation of the BGWMP, including the design and implementation of all ecological management and rehabilitation activities • ensure that sufficient time and resources are allocated to allow for the implementation of ecological management and rehabilitation strategies for the Biodiversity Offset Area • ensure that sufficient resources and time are allocated to implement the BGWMP monitoring programs • ensure that the results of the BGWMP monitoring programs are utilised to refine completion criteria for the site as well as to evaluate the effectiveness of regeneration/rehabilitation practices so as to facilitate continual improvement • periodically review progress against condition improvement targets • ensure all internal and external reporting requirements are met • facilitate that all relevant records are effectively maintained on site • ensure that personnel involved in carrying out and monitoring the BGWMP activities are appropriately qualified, licensed and experienced to undertake the task • manage/control access to biodiversity offset area • ensure staff and contractors are informed and trained where relevant in relation to controls on activities within the Biodiversity Offset Area
Holcim Staff and Contractors	• receive training regarding controls on activities within the Biodiversity Offset Area • observe boundaries of Biodiversity Offset Area when undertaking work on site • undertake activities in Biodiversity Offset Area in line with directions from Operations Manager and Environmental Officer

2.0 Offset Description

The Biodiversity Offset Package comprises two components. A direct land offset (the Biodiversity Offset Area), as described by **Section 2.1** and a package of direct actions (non-land) described in **Section 2.2**, which will enhance quality and resilience of the Biodiversity Offset Area.

2.1 Direct Land Offset

The Biodiversity Offset Area is shown on **Figure 1.4** and consists of a 185 hectare area located in the south western part of Holcim Australia's holdings. The Biodiversity Offset Area contains both land directly targeting box gum woodland, as well as complementary areas that include non-target MNES, cultural heritage and native vegetation management areas.

The Biodiversity Offset Area consists of two patches of box gum woodland, each containing both woodland and grassland forms of the community; a large patch of hoary sunray habitat; as well as a habitat management area and cultural heritage management area linking the two patches together, which comprise the complementary actions discussed in **Section 2.3**.

The Biodiversity Offset Area was identified as the preferred offset for the following reasons:

- the area specifically targets the MNES significantly affected by the proposal;
- adds further protection to other MNES and heritage values; and
- enhances connectivity with other habitat and riparian management areas, by protecting non-MNES remnant vegetation as part of an overall strategy to optimise biodiversity values.

The following table provides a summary of the key features of the Biodiversity Offset Area and the offset values as presented in the EPBC Referral. The Biodiversity Offset Area as described in this BGWMP is considered to be consistent with the requirements of the EPBC Environment Offsets Policy (SEWPaC 2012)[1].

Table 2.1 – Offset Statistics

Aspect	**Quantity**
Total area of offset	185 Ha
Area of BGW (Woodland form)	18.9 Ha
Area of BGW (Grassland form)	8.3 Ha
Total extant BGW in offset	27.2 Ha
Area of native pasture to be rehabilitated to BGW	22.0 Ha
Other MNES	
Hoary sunray habitat	27.3 Ha
Hoary sunray estimated numbers	200,000 individual plants
Summary	
Total impact to BGW	7.9 hectares comprised of: 7.4 Ha woodland form; and 0.5 Ha grassland form
Resulting offset ratio (extant vegetation)	27.2 Ha ÷ 7.9 Ha = **3.4**
Resulting offset ratio, inclusive of rehabilitation	27.2 Ha + 22.0 Ha = **49.2 Ha** 49.2 Ha ÷ 7.9 Ha = **6.2**

[1] Australian Government (2012) *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*, Department of Sustainability, Environment, Water, Population and Communities (October 2012).

2.2 Additional Direct Actions

In addition to the direct land offsets shown in **Table 2.1**, a number of additional direct actions will be undertaken to improve the quality and resilience of the MNES protected within the land offsets. These are summarised in **Table 2.2**, and are detailed in the Offset Management Program in **Section 5.3**.

Table 2.2 – Summary of Direct Actions

Action	Description
Fencing and establishment of exclusion zones	Fence entire Biodiversity Offset Area and map on operational plans.
	Implement staged removal of grazing stock from Biodiversity Offset Areas supporting box gum woodland. Guide stock removal by outcomes of regeneration and weed monitoring.
Weed management	Undertake weed suppression
Regeneration and revegetation	Undertake natural regeneration of box gum woodland derived native grassland through the exclusion of stock.
	Revegetate 11 hectares of the 22 hectare proposed regeneration area (existing native pasture) within the Biodiversity Offset Area with direct seeding and also tube stock propagated from local provenance seed targeting box gum woodland species consistent with the community species list (Australian Government 2006a)[2].

2.3 Complementary Actions

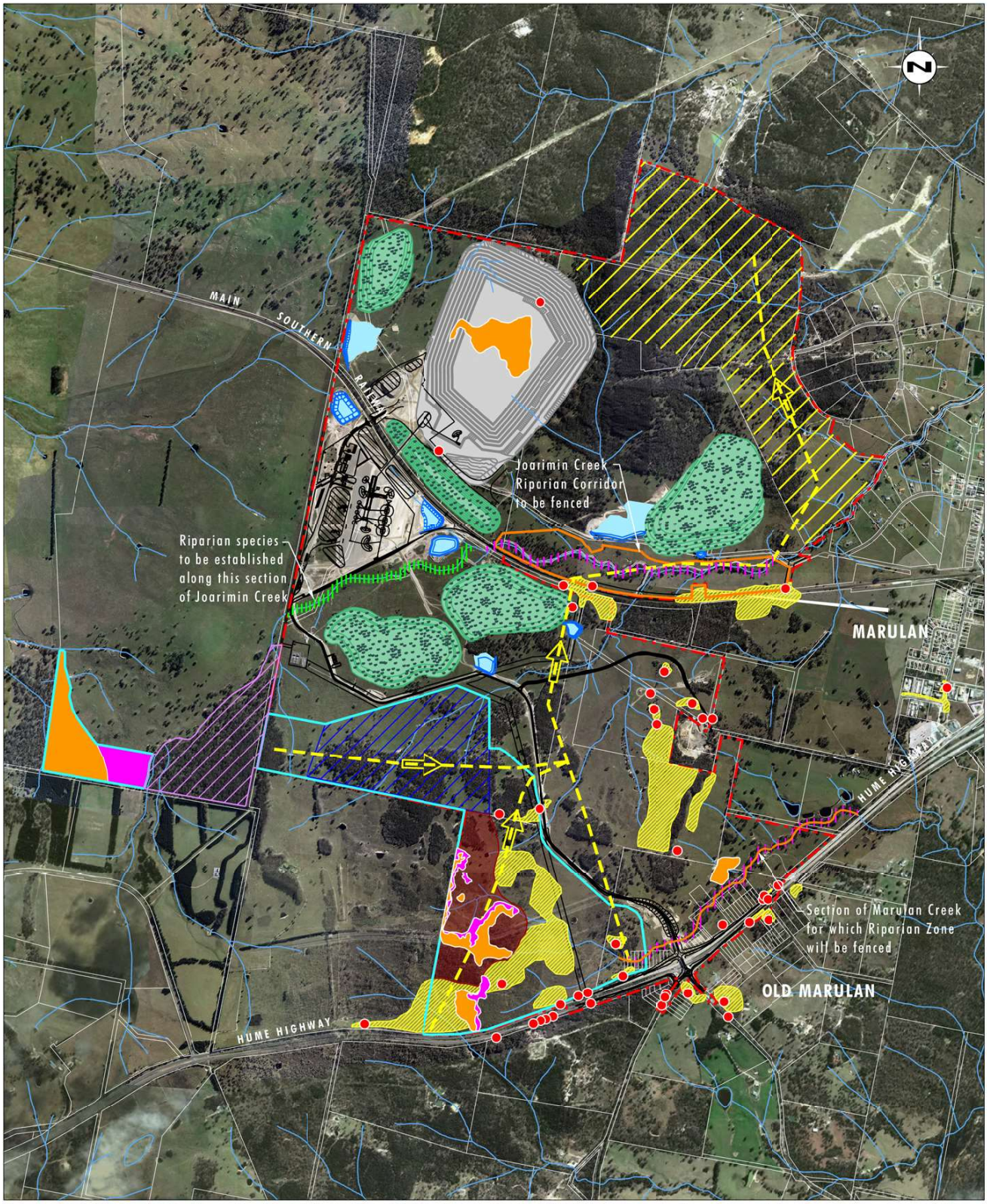
In addition to the areas of the offset targeting box gum woodland, the offset also includes a significant area of hoary sunray habitat, as well as patches of non-MNES vegetation and an existing cultural heritage management zone. The offset creates a contiguous corridor through the south of Holcim Australia's holdings, which links to existing habitat management areas and stepping stone corridors (refer to **Figure 2.1**) that have been established under previous planning approvals.

The corridor that results from implementation of this offset package will provide further enhanced connectivity within the area south of Marulan. The Biodiversity Offset Area will be under consistent long-term management and along with the habitat and cultural heritage management areas already committed to by Holcim Australia, represents an important link from a regional perspective.

These areas will perform a significant connectivity role that will enhance the viability and value of the Biodiversity Offset Area.

The Biodiversity Offset Area also includes the existing cultural heritage management zone. This area forms part of the corridor linking the two patches of box gum woodland and the habitat management area. The cultural heritage management zone will continue to be managed in accordance with the existing Lynwood Quarry Aboriginal Heritage Management Plan (Umwelt 2011a)[3]; in addition to the existing Lynwood Quarry Rehabilitation and Landscape Management Plan (Umwelt 2011b)[4].

[2] Australian Government (2006a) *Species List for the EPBC Act Policy Statement – White Box – Yellow Box – Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands,* Department of the Environment and Heritage, Canberra (May 2006).
[3] Umwelt (Australia) Pty Limited (2011a*) Caring for Country Lynwood Quarry, Marulan Aboriginal Heritage Management Plan Revision 2,* Report prepared for Holcim (Australia) Pty Limited.
[4] Umwelt (Australia) Pty Limited (2011b) *Lynwood Quarry Rehabilitation and Landscape Management Plan Revision 2,* Report prepared for Holcim (Australia) Pty Limited.



Source: LPI 2010, Holcim Australia (Aerial Photo May 2012), Google Earth (2011)

0 0.5 1 1.5km
1:30 000

Legend

- Project Area
- Existing Approved Habitat Management Area
- Existing Approved Core Riparian Corridor
- Existing Approved Cultural Heritage Management Zone
- Stepping-Stone Corridor
- Box Gum Woodland Derived Native Grassland (CEEC)
- Box Gum Woodland (CEEC)
- Hoary Sunray Habitat
- Location of Hoary Sunray
- Biodiversity Offset Area
- Box Gum Woodland CEEC Regeneration
- Habitat Management Area
- Drainage

FIGURE 2.1

Biodiversity Offset Area and Habitat Management Features

2.4 Process for Establishing the Offset

Holcim Australia will prepare a Conservation Agreement under Section 69 of the NPW Act to provide for the long term conservation of the proposed Biodiversity Offset Area. The lands must be protected for the duration of the action's impact. The Conservation Agreement will be registered on the title of the land and would therefore be transferred should any future sale of the land occur. This will require consultation with the NSW Office of Environment and Heritage (OEH).

As per EPBC Approval Condition no. 3, the Conservation Agreement must state *'This agreement must not be terminated without the written consent of the Minister administering the Commonwealth Environment Protection and Biodiversity Conservation Act 1999'*.

Holcim Australia must provide evidence to SEWPaC that it owns the offset land, provide SEWPaC with attribute information and maps and evidence that it has lodged a conservation agreement application form with OEH prior to the commencement of the action (EPBC Approval Condition no. 4).

3.0 Objectives and Targets

Consistent with the EPBC Environment Offsets Policy (SEWPaC 2012), the Biodiversity Offset Area is to provide 'an overall conservation outcome that improves or maintains the viability of the aspect of the environment that is protected by national environment law and affected by the proposed development'. In this case the 'aspect of the environment' is box gum woodland as a matter of national environmental significance.

Holcim Australia commit to the following objectives and targets to ensure the maintenance or improvement of box gum woodland.

3.1 Objectives

The key management actions designed to enhance the quality and extent of box gum woodland include active and passive regeneration and revegetation initiatives. The specific objectives for revegetation and regeneration activities to be implemented to offset significant impacts as a result of the quarry include the following:

- enhance the ecological quality of existing box gum woodland within the Biodiversity Offset Area and protect it from degradation for the duration of the action's impact on box gum woodland;
- re-establish box gum woodland through regeneration and revegetation strategies in areas of native pasture that are consistent with the structure and floristics of the listed community; and
- improve connectivity between remnants of woodland within the Biodiversity Offset Area.

3.2 Targets

The following targets have been developed so that the required works are completed in accordance with this BGWMP, the conditions of approval and rehabilitation and biodiversity management objectives are achieved. Timeframes for targets are identified in **Section 4.4**.

General Management Targets

- no more than 7.9 hectares of box gum woodland has been cleared (EPBC Approval Condition no. 1);
- the Biodiversity Offset Area has been fenced;
- the Biodiversity Offset Area has been appropriately separated from ongoing quarry operations;
- an adaptive management process has been developed and implemented;
- the monitoring program is being implemented in line with **Section 6.0**; and
- a Conservation Management Agreement has been registered for the site under Section 69 of the NPW Act.

3.3 Performance Indicators

The following performance indicators are to be used to assess the findings of the monitoring program against the approval conditions.

- revegetation areas within the Biodiversity Offset Area contain a flora species assemblage characteristic of the EPBC listed box gum woodland community, including a range of vegetation structural elements such as trees, shrubs, ground cover forbs and grasses, and litter as per the box gum woodland listing advice (Australian Government 2006b)[5] and recovery plan (DECCW 2011)[6];
- success of the revegetation is in keeping with targets established under the *Lynwood Quarry Rehabilitation and Landscape Management Plan* (Umwelt 2011b) as summarised below:
  - vegetation has been established;
  - the rehabilitated area is stable;
  - the area is free of significant weed or feral animal problems;
  - the rehabilitated community is representative of the targeted vegetation community;
  - monitoring has indicated that natural regeneration is occurring; and
  - the area has been appropriately separated from ongoing quarry operations;
- success of the revegetation is in keeping with targets which have been developed for box gum woodland regeneration and revegetation areas:
  - no less than 75 percent of planted and regenerating trees are healthy and growing as determined by monitoring;
  - weeds comprise less than 5 percent (foliage cover) of the perennial ground storey; and
  - bare ground comprises no more than 15 percent of the ground layer;
- natural regeneration of the dominant overstorey species (white box, yellow box or Blakely's red gum) within the Biodiversity Offset Area regeneration zones (refer to **Figure 2.1**) is present as determined through monitoring;
- there is no evidence of pest animal infestation within offset area that are adversely impacting vegetation quality (e.g. rabbit warrens, fox dens, competition for hollows from wasps, bees, mynas, etc.); and
- accurate records are being maintained substantiating all activities associated with the BGWMP and approval conditions (EPBC Approval Condition no. 7).

[5] Australian Government (2006b) *White Box – Yellow Box – Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands Listing Advice,* Department of the Environment and Heritage, Canberra.
[6] Department of Environment, Climate Change and Water NSW (2011) *National Recovery Plan for White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland,* Department of Environment, Climate Change and Water NSW, Sydney (May 2011).

3.4 Process for Review and Refinement of Targets

The preliminary targets as described in **Section 3.2** will be reviewed annually (during the annual reporting process) and revised as appropriate throughout the life of the quarry with the targets to be used as the basis for further refinement following:

- the commencement of ecological management activities; and
- consideration of the results of monitoring programs.

It is envisaged that this process will occur as part of subsequent reviews of the BGWMP and throughout the adaptive management process.

Progress against the targets will be assessed and discussed in an annual report to SEWPaC (refer to **Section 6.0**), which will include the identification of any failures of the criteria, and corrective measures taken to address any such issue or to improve offset management techniques. The monitoring program developed to assess the performance of the Offset Area is outlined in **Section 5.0**.

4.0 Management Actions

4.1 Existing Management Commitments

The existing State planning approval for the Lynwood Quarry required Holcim Australia to implement a range of management and improvement actions which are complementary to the management of the Biodiversity Offset Area. This BGWMP assumes the application of all existing management plans (as summarised in **Sections 4.1.1** to **4.1.3**) to the proposed Biodiversity Offset Area in addition to further measures to enhance or rehabilitate box gum woodland as described in **Section 4.4**.

All box gum woodland within the Biodiversity Offset Area would be subject to revegetation or rehabilitation, and ongoing management in accordance with the BGWMP.

All other box gum woodland within Holcim Australia's Lynwood Quarry holdings would be managed in accordance with existing management plans and approvals (refer to **Section 4.2**).

In the event of any inconsistency between this BGWMP and any other existing management plans, this BGWMP prevails to the extent of the inconsistency within the area subject to this plan.

4.1.1 General Native Vegetation Management

The Lynwood Quarry Rehabilitation and Landscape Management Plan (Umwelt 2011b) commits to a number of activities for the management of native vegetation which would be applied to the Biodiversity Offset Area and the Habitat Management Area. These are listed below:

- exclusion of stock from operational and sensitive areas, including the Habitat Management Area, Cultural Heritage Management Zone and core riparian areas;
- feral animal and noxious weed control;
- management of erosion and sedimentation;
- management of fire regimes;
- rehabilitation of disturbed areas with local indigenous species;
- use of local indigenous species in landscaped areas and the linkage and integration of new areas with existing vegetated areas to improve ecological function and provide habitat;
- management of surface water;
- adaptive management, as required, if a previously unrecorded or assessed threatened species is identified in the Project Area during construction or operation;
- ongoing monitoring and maintenance of all revegetation works and habitat enhancement activities; and
- creation of habitat corridors linking isolated remnant vegetation stands.

4.1.2 Habitat Management Areas

An additional 29.8 hectare Habitat Management Area will form part of the corridor between the eastern and western portions of the Biodiversity Offset Area. Management of this area will involve enhancement of the floristic and fauna habitat values through restriction of access, management and general exclusion of stock, and planting or assisted regeneration of indigenous species in accordance with the Lynwood Quarry Rehabilitation and Landscape Management Plan (Umwelt 2011b).

While not necessarily achieving the same level of restoration as the Biodiversity Offset Area, these areas will perform a significant connectivity role that will enhance the viability and value of the Biodiversity Offset Area.

4.1.3 Rehabilitation of Disturbed Areas

Although outside of the Biodiversity Offset Area, land disturbed by the quarry will be rehabilitated in accordance with the Lynwood Quarry Rehabilitation and Landscape Management Plan (Umwelt 2011b) using native species with the objective of facilitating development of native vegetation communities comparable in composition to those presently found within the quarry area. Rehabilitation will be undertaken progressively throughout the life of the quarry as areas become available. Rehabilitation practice and staging will be managed in accordance with the Lynwood Quarry Rehabilitation and Landscape Management Plan (Umwelt 2011b).

Rehabilitation works will include the spreading of cleared vegetation (including weed-free mulch created during clearing) over the rehabilitated surfaces to provide organic matter and a local seed source, plus seeding of top-soiled areas with native species. A revegetation species list has been developed on the basis of extant vegetation communities and will enable use of species mixes targeted at development of vegetation communities appropriate to the landscape and adjacent remnant communities.

4.2 Management of Box Gum Woodland outside Biodiversity Offset Area

Within the project area, 1.4 hectares of box gum woodland will be retained outside the Biodiversity Offset Area. This patch will not be disturbed by the action, however it has not been included as part of the offset as it is located on the northern side of the access road, and is disconnected from the Biodiversity Offset Area.

This patch will be managed in accordance with existing management plans and approvals, in particular, the Lynwood Quarry Rehabilitation and Landscape Management Plan (Umwelt 2011b). As described in **Section 4.1.1**, management of this patch would include (but not be limited to) the following actions:

- exclusion of stock;
- feral animal and noxious weed control;
- management of erosion and sedimentation;
- management of fire regimes; and
- rehabilitation of disturbed areas with local indigenous species.

All other box gum woodland within the project area not disturbed by the action are within the offset area, with the management measures to be implemented for these areas outlined within this BGWMP.

4.3 Adaptive Management

A strong feedback loop between monitoring and management will be established. Adaptive management of the Biodiversity Offset Area will be responsive to any new ecological data that may arise through the monitoring described in **Section 5.0**, legislative change or any other studies completed at the site. This will enable a flexible approach to management requirements of the Biodiversity Offset Area, allowing ongoing feedback and refinement of the management strategy.

Adaptive management will be a key mechanism to address the risks to the successful implementation of this BGWMP (refer to **Section 1.5**). This will involve ongoing evaluation of management measures required to address issues such as weed infestation, bushfire, feral animals and revegetation failure.

The guide to undertaking strategic assessments (Australian Government 2012)[7] describes the framework of adaptive management as a systematic process for continually improving management practices through learning from the outcomes of previous management. **Figure 4.1** is reproduced from the guide and illustrates the process of adaptive management to be implemented in this BGWMP.

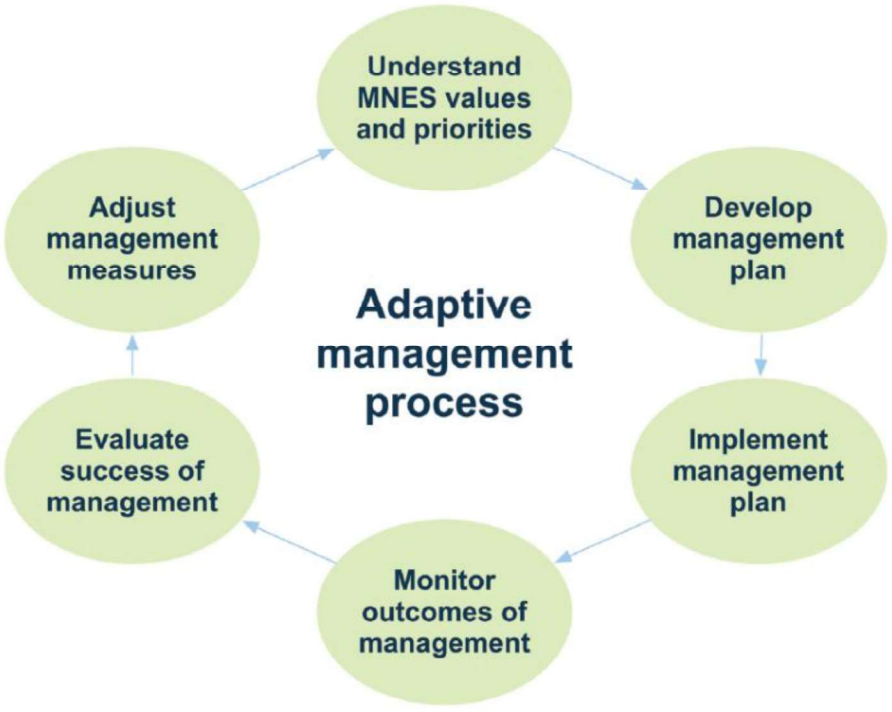


Figure 4.1 – Adaptive Management Process
Source: Figure 2 in Australian Gov't (2012)

[7] Australian Government (2012) *A Guide to Undertaking Strategic Assessments: Environment Protection and Biodiversity Conservation Act 1999*, Department of Sustainability, Environment, Water, Population and Communities (November 2012).

The flowchart presented in **Figure 4.2** provides a summary of the hierarchy of management plans associated with the management of the Biodiversity Offset Area. The overarching management plan is the Lynwood Quarry Rehabilitation and Landscape Management Plan (Umwelt 2011b), which links in to the Aboriginal Heritage Management Plan and this BGWMP. The green elements of the flow chart represent components of the BGWMP, while blue elements represent established plans under the NSW State Government Approval.

Key components of the BGWMP will be the adaptive management continual improvement loop between the monitoring and management programs.

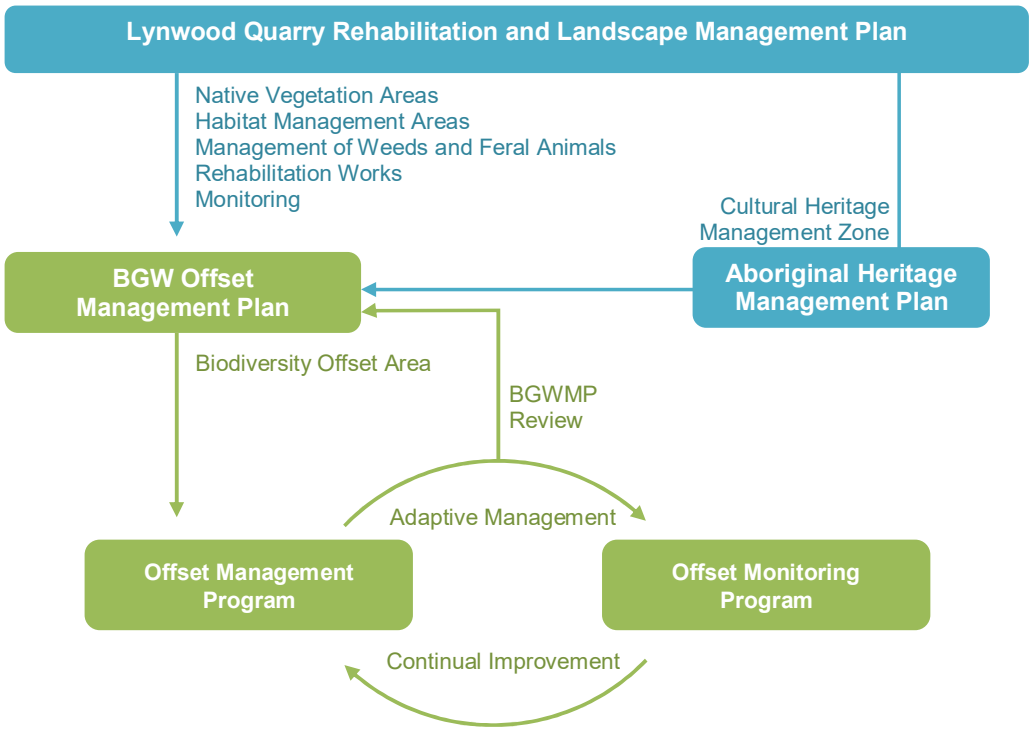


Figure 4.2 – Hierarchy of Management Plans

4.4 Offset Management Program

The Offset Management Program as shown in **Tables 4.1** to **4.4** details the direct actions and an estimate of the associated investment required by Holcim Australia to improve the quality and resilience of box gum woodland in the Biodiversity Offset Area.

Management and rehabilitation activities over an initial five year period estimated to a value of approximately $100,000 (including a 10 percent contingency) will be funded by Holcim Australia.

Table 4.1 – Offset Management Program: Establishment of Biodiversity Offset Area

Activity	Description	Responsibility	Timeframe	Estimated Budget
Fencing	Fence entire Biodiversity Offset Area. Estimated cost includes installation of 2,550 metres of stock proof perimeter fence by fencing contractor.	Operations Manager	2013/14	$38,250.00

Table 4.2 – Offset Management Program: Regeneration and Revegetation

Activity	Description	Responsibility	Timeframe	Estimated Budget
Natural regeneration of derived native grassland	Natural regeneration of derived native grassland through fencing and exclusion of stock.	Operations Manager	2013/14	See **Table 4.1**
Seed collection for direct seeding	Seed collection will target key box gum woodland using local provenance where available. 11 hectares (50%) of the existing native pasture will require active revegetation works in the form of tube stock planting or direct seeding. 5.5 hectares will be direct seeded and the remainder will be planted with tube stock. A seeding rate of 2000g/ha has been used with this mix to be comprised of both canopy and understorey species. It is not considered necessary to include grass species in the seed mix given the quality of existing groundcover.	Environmental Officer	2013/14	$9,240.00
Site preparation for direct seeding	Depending on conditions at the time of seeding, light scarification of the ground surface may be required in order to create niche areas for seeds to germinate. In order to minimise the impact on the existing native grassland. This method will only be used where considered essential to seed germination and establishment.	Environmental Officer	2014/15	$1,600.00
Direct seeding	It is assumed that 5.5 hectares of the site will be revegetated using direct seeding. Seeding will be conducted using a tractor with fertiliser spreader (no fertiliser to be used) and vermiculate (bulking agent).	Environmental Officer	2014/15	$1,600.00

Table 4.2 – Offset Management Program: Regeneration and Revegetation (cont.)

Activity	Description	Responsibility	Timeframe	Estimated Budget
Tube stock propagation (including local provenance seed collection).	5.5 hectares of the existing native pasture will be revegetated using tube stock. The final target rate for box-gum grassy woodlands is 30/40 stems per hectare of canopy species with scattered shrubs (Rawlings et al 2010). In order to allow for seedling mortalities as revegetation areas mature, it is recommended that small trees (trees that have grown to less than 10cm diameter at breast height) have a density of at least 400 stems per hectare. As trees mature to dimensions greater than 10cm diameter and taller than breast height it is considered that 250 stems per hectare is a minimum target density (Rawlings et al 2010). In order to account for mortality of seedlings a planting rate of 600 stems per hectare has been allowed.	Environmental Officer	2013/14	$5,940.00
Site preparation for tube stock planting	Slashing/mowing of 5.5 hectare site prior to planting.	Environmental Officer	2014/15	$800.00
Planting of tube stock	It is assumed that 5.5 hectares of the site will be revegetated using tube stock and a planting rate of 600 stems per hectare has been allowed. Given that the native grasslands at the site are considered to be in good health no allowance has been made for deep ripping of the substrate. It is considered that deep ripping may expose the disturbed ground to infestation of exotic grass and broadleaf species.	Environmental Officer	2014/15	$6,600.00

Table 4.3 – Offset Management Program: Operational Management Actions

Activity	Description	Responsibility	Timeframe	Estimated Budget
Weed management within revegetation/regeneration area	Weed density is considered to be low to moderate within the Biodiversity Offset Area. It is considered that weed management will be required to be undertaken on a biennial basis across 30% (approximately 7 hectares) of the Biodiversity Offset Area. Spraying will be timed to occur prior to flowering of weed species with follow up spraying to be conducted after the initial round of spraying has taken effect. This approach will ensure that weed management works provide an effective kill of target species. It is considered that 7 hectares could be covered in 1.5 days (3 days per year).	Environmental Officer	6 monthly until 2017/18	$3,000.00 per annum
Monitoring of revegetation/regeneration areas	Annual monitoring will be conducted in order to determine the success or otherwise of revegetation works and the progress of natural regeneration. Permanent monitoring plots will be established within the Biodiversity Offset Area during this first year of monitoring. Includes 8 hours field work for two ecologists and reporting.	Environmental Officer	2015/16 2016/17 2017/18	$3,220.00 per annum

Table 4.4 – Offset Management Program: Contingency Costs

Activity	Description	Responsibility	Timeframe	Estimated Budget
Adaptive management costs	Allowance for further land management works such as weed management, feral fauna control, supplementary direct seeding or tube stock propagation and planting if required.	Operations Manager	2016/17 2017/18	$3,000.00 $2,000.00
Total contingency costs	Allowance of 10% contingency to allow for price increases etc.	Operations Manager	Life of Project	$9,369.00

5.0 Offset Monitoring Program

The Biodiversity Offset Area will be subject to ongoing monitoring and maintenance actions to ensure that the area progresses towards meeting the objectives and targets set out in **Section 3.0** in a timely manner. The monitoring program will monitor the success of the management actions, in addition to compliance with the approval conditions, against performance indicators described in **Section 3.3**.

Monitoring events will identify any corrective actions required or whether assistance is required to achieve targets. Monitoring events will target issues such as progression of regenerating native vegetation and the need for targeted weeding programs.

Monitoring requirements for the Biodiversity Offset Area are detailed in **Table 5.1**.

5.1 Monitoring Schedule

The following monitoring program has been developed to integrate with existing commitments as detailed in the Lynwood Quarry Rehabilitation and Landscape Management Plan (Umwelt 2011b).

Monitoring results will be assessed and utilised in the continual improvement of revegetation techniques and management actions, and will be documented as part of the annual reporting.

Table 5.1 – Monitoring Program

Focus	Monitoring	Frequency
Weeds	The Biodiversity Offset Area will be subject to six monthly weed assessments by the Environmental Officer. Outbreaks of weeds, in particular noxious weeds as defined by the *Noxious Weeds Act 1993*, will be controlled using suitable control measures such as spraying, slashing or manual removal. Where appropriate, the local weeds authority and Goulburn-Mulwaree Council will be consulted regarding weed control measures.	6 monthly from establishment of Biodiversity Offset Area.
Feral animals	Feral fauna species will be visually monitored during the Environmental Officer's six monthly inspections and during fauna surveys undertaken once every three years. Measures to control feral species will be implemented as required and in consultation with the Rural Lands Protection Board, where necessary.	Opportunistic and during scheduled 6 monthly and 3 yearly monitoring.
Retained vegetation	The condition of retained vegetation is currently monitored on a three yearly basis by a suitably qualified and experienced ecologist to identify any change in habitat quality (either deterioration or improvement). Permanent plots are located within the northern Habitat Management Area, on Joarimin Creek, and in the Cultural Heritage Management Zone. The permanent 400 m² vegetation plot in the Cultural Heritage Management Zone within the Biodiversity Offset Area will form part of the Offset Monitoring requirements. The following will be recorded on a standard recording sheet: • general health of vegetation; • evidence of natural regeneration; • occurrence and abundance of weed species; • signs of disturbance, either by stock or humans; • evidence of feral animals; and • any observable impacts of the operations, such as the effectiveness of sediment and erosion control structures. At each vegetation plot, species diversity and structural composition of the vegetation will be recorded. This will allow a comparison of flora species and abundance over time. Photo monitoring will also be taken from established photo monitoring points at each monitoring site. Fauna will also be monitored at these sites. Details of fauna surveys are included in the Lynwood Quarry Rehabilitation and Landscape Management Plan (Umwelt 2011b).	3 yearly.

Table 5.1 – Monitoring Program (cont.)

Focus	Monitoring	Frequency
Revegetation areas	Following revegetation works, monitoring will be undertaken to assess the progress of the revegetation program with the aim of monitoring plant health and the need for implementation of management works or replacement planting or seeding. The Biodiversity Offset Area will be included in the existing monitoring schedule for revegetation areas. Specifically, the monitoring inspections will assess: • the extent of the vegetative cover and species diversity, and any requirement for additional revegetation works to be undertaken; • the general health of the vegetation; • any occurrences of weed species in the revegetation area and any requirements for weed control activities; • feral animals and the need for control; • erosion and the need for repair of eroded areas; • fire management; • any signs of disturbance, either by animals or humans; and • the success of any management programs implemented following previous monitoring inspections. In addition to annual monitoring, the Environmental Officer will inspect the Biodiversity Offset Area revegetated areas every three months for the first three years after the completion of rehabilitation works. This inspection will include: • the general health of the vegetation and the need for fertilisation; • the growth of the vegetation and the need to replace any dead plants; • any erosion and the need for sediment and erosion controls to be implemented; • any occurrences of weed species in the revegetation area and any requirements for weed control activities; and • signs of disturbance and the need to access controls.	Three monthly for first three years following completion of rehabilitation works. Annually thereafter.
Box gum woodland	Ecological monitoring of retained box gum woodland patches will be undertaken annually against benchmark sites for a period of 5 years with the monitoring frequency to be reassessed after that time. This monitoring will assess the condition and recovery of box gum woodland at the site and provide data to drive the adaptive management of these areas to aid recovery. To allow for comparison between monitoring events, permanent plots and photographic monitoring points will be established. The purpose of the permanent monitoring plots will be to target natural regeneration and determine ground layer vegetation changes. Success of planting and other management actions will be monitored by estimation of growth and survival rates across a representative sample of the relevant areas.	Annually for years 0-5 following establishment of Biodiversity Offset Area. Biannually for years 5-11 (or for 6 years following successful implementation of rehabilitation).

5.2 Risks to the Implementation of the BGWMP

A risk based approach to the implementation of this BGWMP has been considered such that risks to the establishment and management of the Biodiversity Offset Area are identified and a strategy developed to avoid or minimise the potential for them to occur. **Table 5.2** summarises the risks identified and sections of this BGWMP where they are discussed.

Table 5.2 – Risk Assessment for Implementation of BGWMP

		CONSEQUENCE (C)				
		Insignificant (F)	Minor (I)	Moderate (D)	Major (J)	Significant (S)
LIKELIHOOD (L)	Remote (R)	Negligible (N)	Negligible (N)	Very Low (L)	Low (W)	Medium (M)
	Unlikely (U)	Negligible (N)	Very Low (L)	Low (W)	Medium (M)	High (H)
	Possible (P)	Very Low (L)	Low (W)	Medium (M)	High (H)	Very High (V)
	Likely (L)	Low (W)	Medium (M)	High (H)	Very High (V)	Extreme (E)
	Almost Certain (C)	Medium (M)	High (H)	Very High (V)	Extreme (E)	Extreme (E)

Risk	L	C	Rating	Addressed?
Inadequate resourcing to implement the management strategy	P	J	H	Section 4.4
Inadequate resourcing to meet the monitoring and reporting requirements	P	J	H	Section 4.4
Weed infestation within Biodiversity Offset Area leading to degradation of biodiversity values	P	D	M	Section 4 and 5
Pest and feral fauna species within Biodiversity Offset Area leading to degradation of biodiversity values	P	D	M	Section 4 and 5
Failure to meet revegetation targets within Biodiversity Offset Area	P	D	M	Section 4.3 and 5.3
Unauthorised/uncontrolled access to Biodiversity Offset Area leading to damage	L	D	H	Section 4.4
Biomass management impacting on offset values (e.g. grazing, stocking rates etc)	P	I	W	Section 4.4

5.3 Corrective Actions

As identified in the preceding section, there are a range of uncertainties associated with implementation of the BGWMP. In order to ensure delivery of the stated outcomes, and compliance with the approval conditions, a range of further actions are to be undertaken in the event it becomes apparent that performance indicators are not being met. Examples where this may occur include:

- habitat improvement targets are not achieved;
- habitat values as determined by regular monitoring and reporting identifies a declining trend; and
- populations of MNES decline.

The results of monitoring will feed into the adaptive management process (**Section 4.3**). The Environmental Officer will utilise the results of the monitoring activities to identify any corrective actions required to meet the objectives and targets specified in **Section 3.0**. An example of this is shown in **Figure 5.1** below.

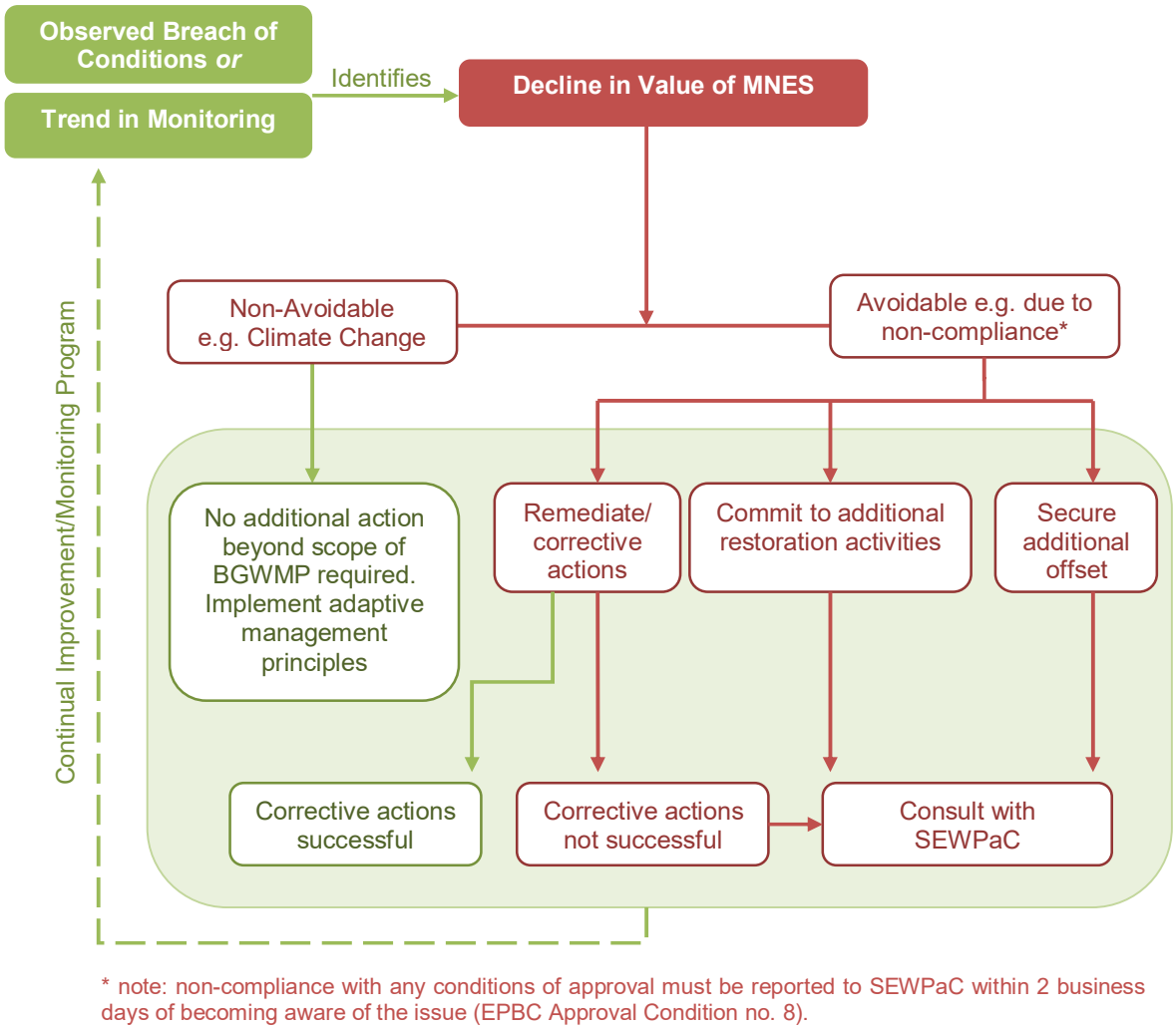


Figure 5.1 – Identifying the Need for Corrective Actions

The following indicative triggers and corrective actions have been identified however would be subject to review based on the adaptive management process.

Table 5.3 – Corrective Action Measures[8]

Issue Identified by Monitoring	Potential Corrective Actions
Species Composition/Weed Infestation	
No regeneration of plants, or indicator species missing	• fence site and exclude grazing • use fire or smoke-water to stimulate germination • control exotic weeds to reduce competition • plant seedlings grown from quality seed
Low species diversity	• revegetate with high diversity patches
Exotic annual grasses dominate	• herbicide control of grasses • strategic burning • strategic grazing • nutrient removal by harvesting, scalping or carbohydrate addition • revegetate with native perennial grasses • 'no kill' cropping • dense tree revegetation to shade out weeds, followed by thinning
Exotic broadleaf weeds abundant or dominant	• use broadleaf herbicides • hand weed or chip • use bush regeneration principles to manage
Patches of perennial grass weeds occurring	• spot spray or dig out small clumps • crash graze periodically • manage grazing to stimulate native pasture • spring burn • monitor and maintain control
Patches of annual grass weeds	• crash graze or burn patches in spring to stop seed set of annual grasses • light grazing in autumn and winter to maintain native grass vigour • apply carbohydrate and sow *Themeda* • monitor and maintain control
Structure and Habitat	
Dense tree or shrub regeneration	• assess whether thinning is necessary • leave if patches are small and plants are native • thin with fire • thin manually
Low habitat value for wildlife	• add logs or branches • increase the number of vegetation layers in the patch • place nesting boxes for target species • control feral predators

[8] Rawlings, K., Freudenberger, D. and Carr, D. (2010) *A guide to managing box gum grassy woodlands*, Department of the Environment, Water, Heritage and the Arts, Canberra (2010).

Table 5.3 – Corrective Action Measures[9] (cont.)

Issue Identified by Monitoring	Potential Corrective Actions
Damage from Pest Species, Livestock etc	
Grazing and browsing damage to plants	• fence to exclude domestic, feral and native animals as necessary • change grazing regimes • control feral species
Soil disturbance from animals	• control feral species • reduce total grazing pressure to maintain groundcover
Feral predators killing or competing with wildlife	• control feral species at a landscape scale • remove exotic berry bushes providing habitat (hawthorn, pyracantha, cotoneaster, etc.)
Tree dieback from insect pressure, herbicide drift, water stress	• prevent stock camping beneath trees • scalp soil beneath tree canopy to remove nutrients; sow with natives such as red grass or *poa* • fence to prevent bark browsing • increase patch size through revegetation • re-vegetate with dense shrubs to increase diversity and insectivorous birds • do not fertilise and prevent fertiliser drift • avoid using defoliants near woodlands when windy

Note: Refer to Rawlings *et al*, 2010 for appropriate application of controls.

[9] Rawlings, K., Freudenberger, D. and Carr, D. (2010) *A guide to managing box gum grassy woodlands*, Department of the Environment, Water, Heritage and the Arts, Canberra (2010).

6.0 Reporting Requirements

6.1 Record Keeping

As per EPBC Approval Condition no. 7, Holcim Australia will maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the Biodiversity Offset Area and the BGWMP.

These records may be subject to audit by SEWPaC or an independent auditor, as described in **Section 6.3**.

6.2 Annual Report

Within three months of every 12 month anniversary of the commencement of the action, Holcim Australia will publish an annual report on its website. Documentary evidence providing proof of date of publication must also be provided to SEWPaC at the time of publishing (EPBC Approval Condition no. 8).

The annual report will contain the following information:

- compliance with each of the conditions of approval;
- description of implementation of the BGWMP as specified in the conditions of approval;
- rehabilitation and management activities undertaken within the reporting period, including estimated costs;
- results of monitoring events for the reporting period; and
- required amendments to the management or monitoring processes as identified by the adaptive management mechanism.

Utilising the adaptive management mechanism outlined in **Section 4.3**, the results of monitoring and management works undertaken will be utilised to inform updates to the management controls to be undertaken in the Biodiversity Offset Area.

Annual reporting and monitoring will continue for six years after the successful implementation of rehabilitation, i.e. all the targets in **Section 3.2** are met consistently for 6 consecutive years. Reporting thereafter will be in accordance with the commitments identified in **Section 8.0**.

6.3 Independent Audit

If directed by the Minister, Holcim Australia must ensure that an independent audit of compliance with the conditions of approval is conducted, and a report submitted to the Minister. The auditor must be approved by the Minister prior to the commencement of the audit (EPBC Approval Condition no. 9).

7.0 Review of Management Plan

This BGWMP will be reviewed internally every 3 years. The BGWMP may be updated in between this period if:

- updated management techniques are identified; or
- the adaptive management framework identifies that current management methods are not effective and require amendment.

Amendments to the BGWMP in response to adaptive management and continual improvement requirements that are not inconsistent with the conditions of approval (EPBC 2012/6560) do not need to be submitted to SEWPaC for approval. Notwithstanding this, if Holcim Australia wish to undertake any activities other than in accordance with the BGWMP as specified in the conditions of approval, a revised version of the BGWMP must be submitted to SEWPaC for the Minister's written approval (EPBC Approval Condition no. 10).

The Minister may also request specific revisions be made to the BGWMP if they believe that it is necessary or convenient for the better protection of the listed ecological community. This revised BGWMP must be submitted to SEWPaC for the Minister's written approval (EPBC Approval Condition no. 11).

8.0 Summary of Commitments

The following **Table 8.1** summarises the commitments made in this BGWMP.

Table 8.1 – Summary of Commitments

Action	Commitment
Publically publish the BGWMP	This BGWMP will be published on Holcim Australia's website within one month of approval by SEWPaC (unless agreed otherwise by the Minister).
Long term conservation of the Biodiversity Offset Area	Establishment of a conservation agreement under Section 69 the NSW *National Parks and Wildlife Act 1974* which would then be listed on the title of the land to ensure it is transferred with any future land sale. Evidence that the conservation agreement application form has been lodged with OEH must be provided to SEWPaC prior to commencement of action.
Direct land offset of 27.2 hectares of box gum woodland	Set aside and fence Biodiversity Offset Area and commence management activities in first year of offset establishment.
Rehabilitation of 22 hectares of native pasture to box gum woodland	Focus on re-establishment of a canopy and removal of weed species with a secondary objective of enhancing understorey diversity. Commence rehabilitation works including reseeding/tube stock planting, and active weed management in first year of offset establishment.
Direct actions to benefit land offsets	Undertake regeneration activities, management and monitoring as per the Offset Management Program in **Section 4.4**.
Enhancement of connectivity between patches of EPBC box gum woodland through management of non-EPBC vegetation	Re-establish continuous canopy connectivity between the eastern and western ends of the Biodiversity Offset Area through habitat management and rehabilitation activities.
Monitoring of Biodiversity Offset Area	0-5 years after establishment. Annual monitoring and reporting to determine success of rehabilitation and general condition including weed and pest animal presence, presence of hoary sunray and other MNES.
	5-11 years (or for 6 years following successful implementation of rehabilitation). Biennial monitoring of condition and performance of rehabilitation.
	12 years+. Monitoring and reporting as per the Rehabilitation and Landscape Management Plan (Umwelt 2011b).
Adaptive management	Implement an adaptive management element into ongoing management of Biodiversity Offset Area.
Annual Reporting	Annual report published on website, and evidence of proof of publication to SEWPaC within 3 months of the anniversary of commencement of the action.
Reporting non-compliances	All non-compliances with the conditions of approval must be reported to SEWPaC within 2 business days.
Record keeping	Holcim Australia will maintain records of all activities undertaken in relation to the Biodiversity Offset Area and BGWMP.
Independent audit	If requested by the Minister, Holcim Australia must ensure that an independent audit of compliance with the conditions of approval is conducted.
Update of BGWMP	Every three years or as required based on adaptive management program. For any activity not consistent with the conditions of approval, a revised BGWMP must be provided to SEWPaC for review and approval.
Resourcing	Holcim Australia to commit to provide funding for ongoing resources to ensure compliance with BGWMP.

9.0 References

Australian Government 2006a. *Species List for the EPBC Act Policy Statement - White Box – Yellow Box – Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands,* Department of the Environment and Heritage, Canberra (May 2006).

Australian Government 2006b. *White Box – Yellow Box – Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands Listing Advice,* Department of the Environment and Heritage, Canberra (2006).

Australian Government 2012. *A Guide to Undertaking Strategic Assessments: Environment Protection and Biodiversity Conservation Act 1999*, Department of Sustainability, Environment, Water, Population and Communities (November 2012).

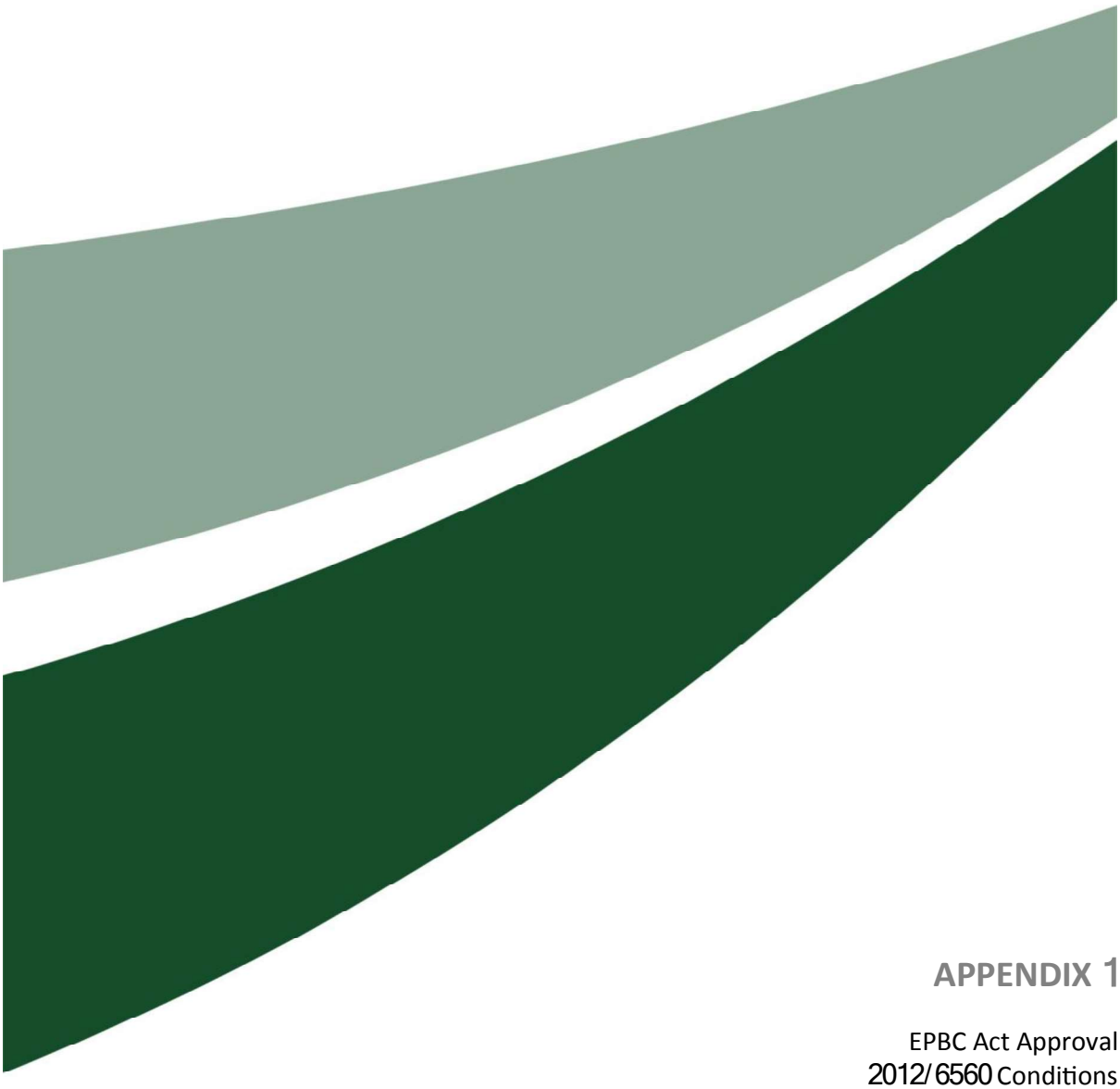
Department of Environment, Climate Change and Water NSW 2011. *National Recovery Plan for White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland,* Department of Environment, Climate Change and Water NSW, Sydney (May 2011).

Department of Sustainability, Environment, Water, Population and Communities 2012. *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*, (October 2012).

Rawlings, K., Freudenberger, D. and Carr, D. 2010. *A guide to managing box gum grassy woodlands*, Department of the Environment, Water, Heritage and the Arts, Canberra.

Umwelt (Australia) Pty Limited 2011a. *Caring for Country Lynwood Quarry, Marulan Aboriginal Heritage Management Plan Revision 2,* Report prepared for Holcim (Australia) Pty Limited.

Umwelt (Australia) Pty Limited 2011b. *Lynwood Quarry Rehabilitation and Landscape Management Plan Revision 2,* Report prepared for Holcim (Australia) Pty Limited.



APPENDIX 1

EPBC Act Approval
2012/6560 Conditions

EPBC Ref: 2012/6560

Mr Stephen Mossie
General Manager – NSW & ACT Aggregates
Holcim (Australia) Pty Ltd
PO Box 5697
WEST CHATSWOOD NSW 1515

Dear Mr Mossie

Decision on Approval
Lynwood Quarry, NSW (EPBC 2012/6560)

I am writing to you in relation to a proposal to expand and operate an existing quarry pit and construct internal haul roads and rail spur and loading facility located approximately 1km west of the township of Marulan NSW.

I have considered the proposal in accordance with Part 9 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and have decided to grant an approval to Holcim (Australia) Pty Ltd. The details of my decision are attached. The proposal must be undertaken in accordance with the conditions specified in the approval.

I would appreciate your assistance by informing me when you provide the information specified in the conditions and who will be the contact person responsible for the administration of the approval decision.

You should also note that this EPBC Act approval does not affect obligations to comply with any other laws of the Commonwealth, state or territory that are applicable to the action. Neither does this approval confer any right, title or interest that may be required to access land or waters to take the action.

The department has an active audit program for proposals that have been referred or approved under the EPBC Act. The audit program aims to ensure that proposals are implemented as planned and that there is a high degree of compliance with any associated conditions. Please note that your project may be selected for audit by the department at any time and all related records and documents may be subject to scrutiny. Information about the department's compliance monitoring and auditing program is enclosed.

The department has recently published an *Environmental Impact Assessment Client Service Charter* (the Charter) which outlines the department's commitments when undertaking environmental impact assessments under the EPBC Act. A copy of the Charter can be found at: http://www.environment.gov.au/epbc/publications/index.html.

If you have any questions about this decision, please contact the project manager, Pat Guinane, by email to Patrick.Guinane@environment.gov.au, or telephone (02) 6275 9010 and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

James Tregurtha
Assistant Secretary
South-Eastern Australia Environment Assessments
13 September 2013

Australian Government

Department of Sustainability, Environment, Water, Population and Communities

Approval

Lynwood Quarry, Marulan NSW (EPBC 2012/6560)

This decision is made under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999*.

Proposed action

person to whom the approval is granted	Holcim (Australia) Pty Ltd
proponent's ACN	099 732 297
proposed action	To establish and operate a quarry pit, construct internal haul roads, and a rail spur and loading facility at Marulan, NSW (see EPBC Act referral 2012/6560).

DECISION to approve:

Approval decision

Controlling Provision	Decision
Listed threatened species and communities (sections 18 & 18A)	Approve
Listed migratory species (sections 20 & 20A)	Approve

conditions of approval

This approval is subject to the conditions specified below.

expiry date of approval

This approval has effect until 1 January 2038

Decision-maker

name and position

James Tregurtha
Assistant Secretary
South-Eastern Australia Environment Assessments

Signature

date of decision 13 September 2013

Proposed Conditions of Approval:

1. The person taking the action must not clear more than 7.9 hectares of the ecological community *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland*.

2. To assist in mitigating the impacts of the proposal on *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* (box gum woodland), the person taking the action must prepare and submit a Box Gum Woodland Management Plan (BGWMP) for Minister's written approval prior to commencement of the action. The BGWMP must include;

    a. Management actions designed to improve the ecological quality of box gum woodland on the project area (refer to Map at Schedule 1) and proposed biodiversity offset area and protect it from degradation for the duration of the action's impact on box gum woodland.

    b. Regeneration and revegetation strategies for box gum woodland on the project area and the proposed biodiversity offset area (refer to Map at Schedule 1) to improve the ecological quality of these areas of box gum woodland.

    c. An ecological monitoring program to monitor the success of the management actions in the BGWMP and define measurable targets of management actions, performance indicators, and an adaptive management framework for the duration of the action's impact on box gum woodland.

    d. Management of the offset site as above from commencement of the action.

    The action must not commence until the BGWMP is approved by the Minister. The approved BGWMP must be implemented.

3. To compensate for the loss of 7.9 hectares of box gum woodland the person taking the action must secure the lands identified as the *'Proposed Biodiversity Offset Area'* in the Map at Schedule 1 of this notice as a biodiversity offset and protect the lands for the duration of the action's impact through a conservation agreement under section 69 of the NSW *National Parks and Wildlife Act 1974*. The conservation agreement must state; *'This agreement must not be terminated without the written consent of 'The Minister Administering the Commonwealth Environment Protection and Biodiversity Conservation Act 1999'.*

4. Prior to the commencement of the action the person taking the action must provide evidence to the Department of;

    a. Their ownership of the offset lands described in Condition 3 along with offset attributes, shapefiles and textual descriptions and maps to clearly define the location and boundaries of the offset sites.

    b. Lodgement of the section 69 conservation agreement application form with the NSW Office of Environment & Heritage.

5. If the person taking the action is unable to comply with Conditions 3 and 4 above they must propose an alternative offset strategy for box gum woodland that meets the current Commonwealth EPBC Act Environmental Offsets Policy. The proposed action must not commence until the alternative proposed offset has been approved in writing by the Minister.

6. 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.

7. The person taking the action must maintain accurate records substantiating all activities associated with or relevant to these conditions of approval, including measures taken to implement the offset and BGWMP, 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.

8. 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 the BGWMP as specified in the conditions. Documentary evidence providing proof of the date of publication must be provided to the Department at the same time as the compliance report is published. Non-compliance with any of the conditions of this approval must be reported to the Department within 2 business days of becoming aware of the non-compliance.

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.

10. If the person taking the action wishes to carry out any activity otherwise than in accordance with the Plan as specified in the conditions, the person taking the action must submit to the Department for the Minister's written approval a revised version of that Plan. The varied activity shall not commence until the Minister has approved the varied Plan in writing. The Minister will not approve a varied Plan unless the revised Plan would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised Plan, that Plan must be implemented in place of the Plan originally approved.

11. If the Minister believes that it is necessary or convenient for the better protection of listed threatened species and ecological communities to do so, the Minister may request that the person taking the action make specified revisions to the Plan specified in the conditions and submit the revised Plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approved Plan must be implemented. Unless the Minister has approved the revised Plan then the person taking the action must continue to implement the Plan originally approved.

12. If, at any time after 5 years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister.

13. Unless otherwise agreed to in writing by the Minister, the person taking the action must publish the Plan and Program referred to in these conditions of approval on their website. The Plan and Program must be published on the website within 1 month of being approved.

Definitions

a) Department, the Australian Government Department administering the *Environment Protection and Biodiversity Conservation Act 1999*.

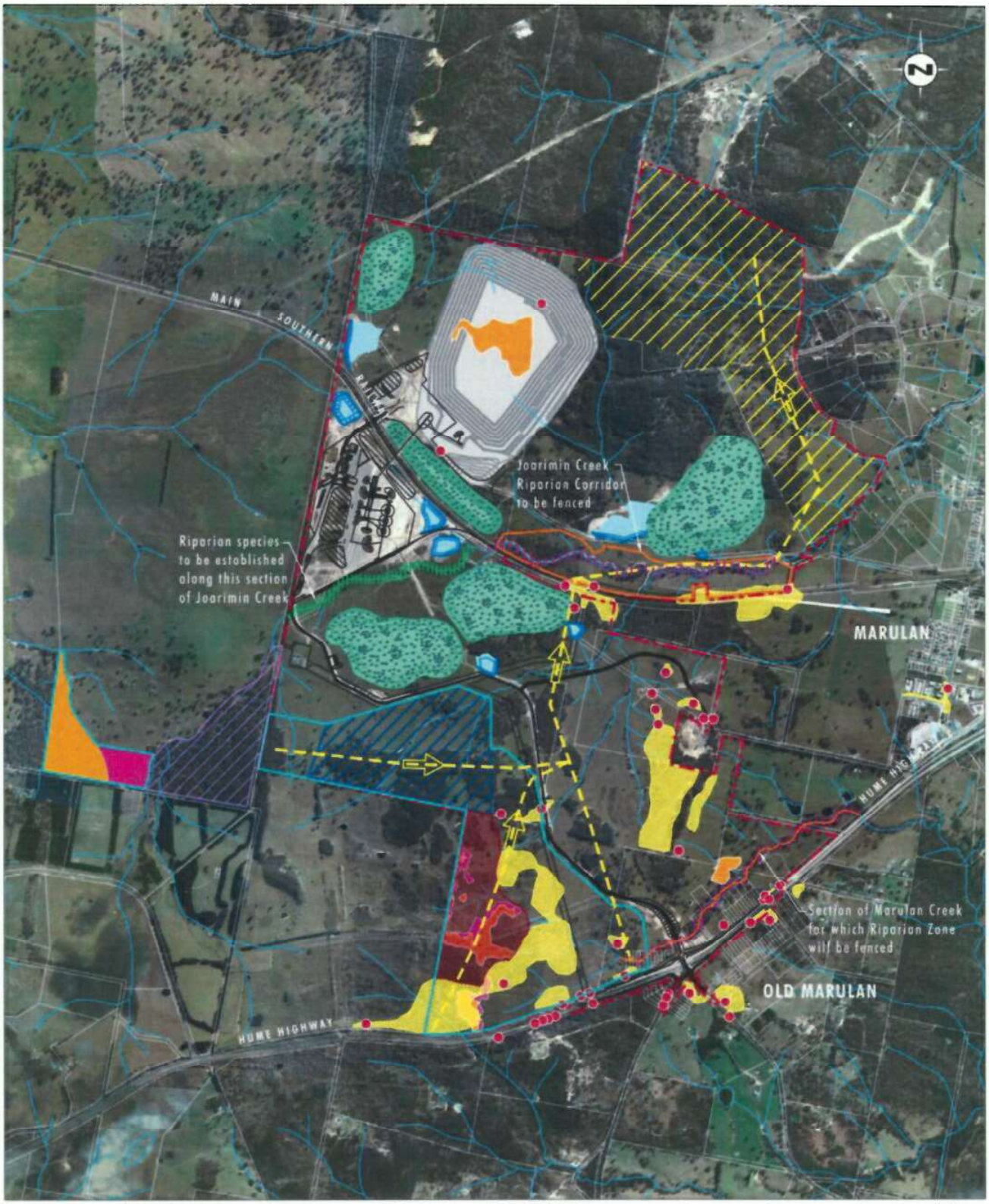
b) Minister, the Minister administering the *Environment Protection and Biodiversity Conservation Act 1999* and includes a delegate of the Minister.

c) Commencement, means the earthworks, vegetation removal or construction of any infrastructure, excluding fences and signage, associated with the proposed action.

d) Offset attributes, mean an '.xls' file capturing relevant attributes of the Offset Area, including the EPBC reference ID number, the physical address of the offset site, coordinates of the boundary points in decimal degrees, the EPBC protected matters that the offset compensates for, any additional EPBC protected matters that are benefiting from the offset, and the size of the offset in hectares.

e) Shapefiles, means an ESRI Shapefile containing '.shp', '.shx' and '.dbf' files and other files capturing attributes of the Offset Area, including the shape, EPBC reference ID number and EPBC protected matters present at the relevant site. Attributes should also be captured in '.xls' format.

Schedule 1



Source: LPI 2010, Holcim Australia (Aerial Photo May 2012), Google Earth (2011)

0 0.5 1 1.5km
1 30 000

Legend

- Project Area
- Existing Approved Habitat Management Area
- Existing Approved Core Riparian Corridor
- Existing Approved Cultural Heritage Management Zone
- Stepping-Stone Corridor
- Box Gum Woodland Derived Native Grassland (CEEC)
- Box Gum Woodland (CEEC)
- Hoary Sunray Habitat
- Location of Hoary Sunray
- Proposed Biodiversity Offset Area
- Proposed Box Gum Woodland CEEC Regeneration
- Proposed Habitat Management Area
- Drainage

FIGURE 3.2

Proposed Biodiversity Offset Area and Habitat Management Features

Newcastle

75 York Street
Teralba NSW 2284

Ph. 02 4950 5322

www.umwelt.com.au

Appendix B Lynwood Quarry, Marulan NSW EPBC Approval 2012/6560

Australian Government
Department of Sustainability, Environment, Water, Population and Communities

EPBC Ref: 2012/6560

Mr Stephen Mossie
General Manager – NSW & ACT Aggregates
Holcim (Australia) Pty Ltd
PO Box 5697
WEST CHATSWOOD NSW 1515

Dear Mr Mossie

Decision on Approval
Lynwood Quarry, NSW (EPBC 2012/6560)

I am writing to you in relation to a proposal to expand and operate an existing quarry pit and construct internal haul roads and rail spur and loading facility located approximately 1km west of the township of Marulan NSW.

I have considered the proposal in accordance with Part 9 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and have decided to grant an approval to Holcim (Australia) Pty Ltd. The details of my decision are attached. The proposal must be undertaken in accordance with the conditions specified in the approval.

I would appreciate your assistance by informing me when you provide the information specified in the conditions and who will be the contact person responsible for the administration of the approval decision.

You should also note that this EPBC Act approval does not affect obligations to comply with any other laws of the Commonwealth, state or territory that are applicable to the action. Neither does this approval confer any right, title or interest that may be required to access land or waters to take the action.

The department has an active audit program for proposals that have been referred or approved under the EPBC Act. The audit program aims to ensure that proposals are implemented as planned and that there is a high degree of compliance with any associated conditions. Please note that your project may be selected for audit by the department at any time and all related records and documents may be subject to scrutiny. Information about the department's compliance monitoring and auditing program is enclosed.

GPO Box 787 Canberra ACT 2601 • Telephone 02 6274 1111 • Facsimile 02 6274 1666
www.environment.gov.au

The department has recently published an *Environmental Impact Assessment Client Service Charter* (the Charter) which outlines the department's commitments when undertaking environmental impact assessments under the EPBC Act. A copy of the Charter can be found at: http://www.environment.gov.au/epbc/publications/index.html.

If you have any questions about this decision, please contact the project manager, Pat Guinane, by email to Patrick.Guinane@environment.gov.au, or telephone (02) 6275 9010 and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

James Tregurtha
Assistant Secretary
South-Eastern Australia Environment Assessments
13 September 2013

2

Australian Government

Department of Sustainability, Environment, Water, Population and Communities

Approval

Lynwood Quarry, Marulan NSW (EPBC 2012/6560)

This decision is made under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999*.

Proposed action

person to whom the approval is granted	Holcim (Australia) Pty Ltd
proponent's ACN	099 732 297
proposed action	To establish and operate a quarry pit, construct internal haul roads, and a rail spur and loading facility at Marulan, NSW (see EPBC Act referral 2012/6560).

DECISION to approve:

Approval decision

Controlling Provision	Decision
Listed threatened species and communities (sections 18 & 18A)	Approve
Listed migratory species (sections 20 & 20A)	Approve

conditions of approval

This approval is subject to the conditions specified below.

expiry date of approval

This approval has effect until 1 January 2038

Decision-maker

name and position

James Tregurtha
Assistant Secretary
South-Eastern Australia Environment Assessments

Signature

date of decision 13 September 2013

Proposed Conditions of Approval:

1. The person taking the action must not clear more than 7.9 hectares of the ecological community *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland*.

2. To assist in mitigating the impacts of the proposal on *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* (box gum woodland), the person taking the action must prepare and submit a Box Gum Woodland Management Plan (BGWMP) for Minister's written approval prior to commencement of the action. The BGWMP must include;

    a. Management actions designed to improve the ecological quality of box gum woodland on the project area (refer to Map at Schedule 1) and proposed biodiversity offset area and protect it from degradation for the duration of the action's impact on box gum woodland.

    b. Regeneration and revegetation strategies for box gum woodland on the project area and the proposed biodiversity offset area (refer to Map at Schedule 1) to improve the ecological quality of these areas of box gum woodland.

    c. An ecological monitoring program to monitor the success of the management actions in the BGWMP and define measurable targets of management actions, performance indicators, and an adaptive management framework for the duration of the action's impact on box gum woodland.

    d. Management of the offset site as above from commencement of the action.

    The action must not commence until the BGWMP is approved by the Minister. The approved BGWMP must be implemented.

3. To compensate for the loss of 7.9 hectares of box gum woodland the person taking the action must secure the lands identified as the *'Proposed Biodiversity Offset Area'* in the Map at Schedule 1 of this notice as a biodiversity offset and protect the lands for the duration of the action's impact through a conservation agreement under section 69 of the NSW *National Parks and Wildlife Act 1974*. The conservation agreement must state; *'This agreement must not be terminated without the written consent of 'The Minister Administering the Commonwealth Environment Protection and Biodiversity Conservation Act 1999'.*

4. Prior to the commencement of the action the person taking the action must provide evidence to the Department of;

    a. Their ownership of the offset lands described in Condition 3 along with offset attributes, shapefiles and textual descriptions and maps to clearly define the location and boundaries of the offset sites.

    b. Lodgement of the section 69 conservation agreement application form with the NSW Office of Environment & Heritage.

5. If the person taking the action is unable to comply with Conditions 3 and 4 above they must propose an alternative offset strategy for box gum woodland that meets the current Commonwealth EPBC Act Environmental Offsets Policy. The proposed action must not commence until the alternative proposed offset has been approved in writing by the Minister.

6. 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.

7. The person taking the action must maintain accurate records substantiating all activities associated with or relevant to these conditions of approval, including measures taken to implement the offset and BGWMP, 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.

8. 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 the BGWMP as specified in the conditions. Documentary evidence providing proof of the date of publication must be provided to the Department at the same time as the compliance report is published. Non-compliance with any of the conditions of this approval must be reported to the Department within 2 business days of becoming aware of the non-compliance.

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11. If the Minister believes that it is necessary or convenient for the better protection of listed threatened species and ecological communities to do so, the Minister may request that the person taking the action make specified revisions to the Plan specified in the conditions and submit the revised Plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approved Plan must be implemented. Unless the Minister has approved the revised Plan then the person taking the action must continue to implement the Plan originally approved.

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13. Unless otherwise agreed to in writing by the Minister, the person taking the action must publish the Plan and Program referred to in these conditions of approval on their website. The Plan and Program must be published on the website within 1 month of being approved.

Definitions

a) Department, the Australian Government Department administering the *Environment Protection and Biodiversity Conservation Act 1999*.

b) Minister, the Minister administering the *Environment Protection and Biodiversity Conservation Act 1999* and includes a delegate of the Minister.

c) Commencement, means the earthworks, vegetation removal or construction of any infrastructure, excluding fences and signage, associated with the proposed action.

d) Offset attributes, mean an '.xls' file capturing relevant attributes of the Offset Area, including the EPBC reference ID number, the physical address of the offset site, coordinates of the boundary points in decimal degrees, the EPBC protected matters that the offset compensates for, any additional EPBC protected matters that are benefiting from the offset, and the size of the offset in hectares.

e) Shapefiles, means an ESRI Shapefile containing '.shp', '.shx' and '.dbf' files and other files capturing attributes of the Offset Area, including the shape, EPBC reference ID number and EPBC protected matters present at the relevant site. Attributes should also be captured in '.xls' format.

Schedule 1

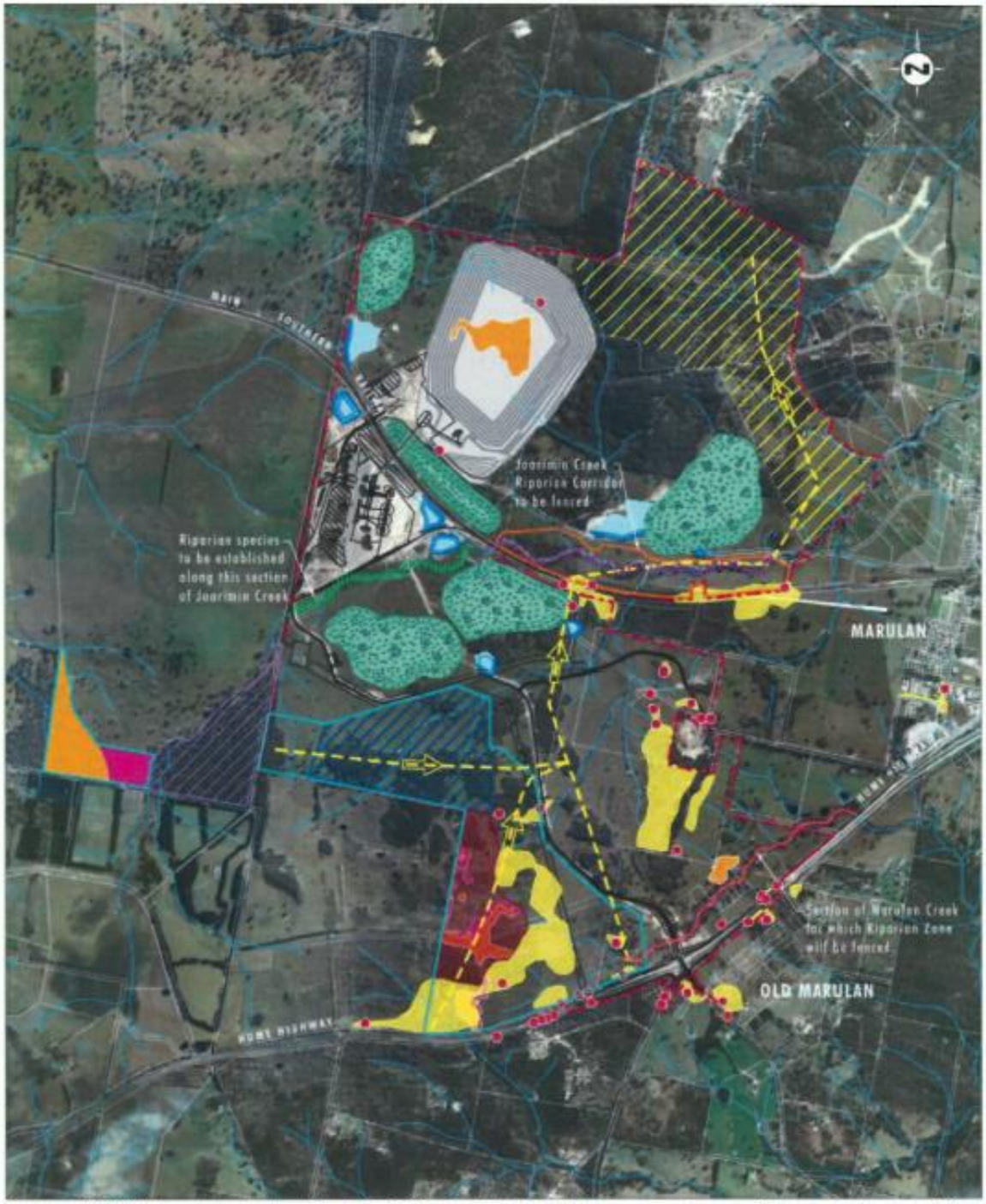


FIGURE 3.2

Proposed Biodiversity Offset Area and Habitat Management Features

Appendix C Draft Conservation Agreement Lodgement 2013

CONSERVATION AGREEMENT

BETWEEN

THE MINISTER ADMINISTERING
THE NATIONAL PARKS AND WILDLIFE ACT 1974 (NSW)

AND

Holcim (Australia) Pty Ltd

FOR

Lynwood Quarry Conservation Agreement

_____
Holcim (Australia) Pty Ltd Director (Print name and sign)

_____
Holcim (Australia) Pty Ltd Secretary (Print name and sign)

_____
Chief Executive OEH (Print name and Sign)

<<This page to be signed by all parties to the Agreement>>

CONSERVATION AGREEMENT UNDER PART 4 DIVISION 12 OF THE NATIONAL PARKS AND WILDLIFE ACT 1974

THIS AGREEMENT is between the **Minister** administering the *National Parks and Wildlife Act 1974* (**Minister**) and **Holcim (Australia) Pty Ltd** the owner of the following lots (and part lots), being the property known as Lynwood Quarry Conservation Area:

- Part Lot 3 in Deposited Plan 1107232,
- Part Lot 2 in Deposited Plan 1116876,
- Part Lot 3 in Deposited Plan 1140546,
- Part Lot 3 in Deposited Plan 1074107,
- Part Lot 508 in Deposited Plan 1208430,
- Lot 2/5 Sec 5 in Deposited Plan 758653,
- Lot 3/5 Sec 5 in Deposited Plan 758653, and
- Lot 4/5 Sec 5 in Deposited Plan 758653.

BACKGROUND

A The Owner is the registered proprietor of the Land. That part of the Land shown by hatching on Diagram A of Annexure A to the Conservation Agreement is the conservation area (Conservation Area). The Conservation Area is approximately 215.89 hectares in size.

B The Conservation Agreement satisfies a commitment made to secure a biodiversity offset relating to *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland Critically Endangered Ecological Community* (CEEC) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) relating to impacts associated with the Lynwood Quarry (EPBC Ref 2012/6560).

C Management of the Lynwood Quarry Conservation Area is undertaken in accordance with the Box Gum Woodland Management Plan.

D It is the intention of the parties that the Conservation Area will not be used as a biodiversity offset or other conservation measure related to any future development or activity, consistent with current NSW Government policy.

E The Conservation Area is to be managed to restore and protect the Conservation Values.

F The Owner and the Minister recognise:

i) The Conservation Area contains Yellow Box – Blakely's Red Gum Grassy Woodland on the Tablelands, South Eastern Highlands Bioregion (PCT 1330) and Red Stringybark – Brittle Gum – Inland Scribbly Gum, dry open forest of the Tablelands and South Eastern Highlands Bioregion (PCT 1093).

ii) The Conservation Area contains areas of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland endangered ecological community (EEC) under the NSW *Biodiversity Conservation Act 2016* (BC Act) and White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC under the EPBC Act and a population of the threatened hoary sunray (*Leucochrysum albicans* var. *tricolor*), listed as endangered under the EPBC Act.

iii) The Conservation Area contains suitable habitat for 35 threatened fauna species and 11 threatened flora species. The Conservation Area contains known records (being from site surveys and/or BioNet) of eight threatened fauna species and two threatened flora species listed under the BC Act and/or the EPBC Act. (refer to Table 3 Annexure B)

iv) The Conservation Area contains vegetation communities heavily modified by past agricultural activities. Broad vegetated corridors exist in near proximity through adjacent Holcim land. These are isolated remnants of vegetation running from the Conservation Area in the south, through to Joarimin Creek and up to the Habitat Management Area in the north. There are a number of large

conservation reserves near the Conservation Area, including Morton National Park, Tarlo River National Park and Bungonia National Park and State Conservation Area (SCA).

1 DEFINITIONS AND INTERPRETATION

1.1 Definitions

In the Conservation Agreement, unless the contrary intention appears:

"**Aboriginal Object**" has the same meaning as in section 5 of the NPW Act;

"**Aboriginal Place**" has the same meaning as in section 5 of the NPW Act;

"**BC Act**" means the *Biodiversity Conservation Act 2016* and regulations in force thereunder;

"**Chief-Executive**" means the Chief-Executive of OEH or a person or organisation to whom the Chief-Executive's rights and duties under this Conservation Agreement have been delegated;

Commented [RV1]: More recent agreements have reference to BCT rather than the Chief-executive – so there may be a new template. Need to check throughout and resolve.

"**Commencement date**" means the date on which the Minister signs the Conservation Agreement;

"**Conservation Agreement**" means this Conservation Agreement entered into under section 69B of the NPW Act;

"**Conservation Area**" means that part of the Land shown by hatching on Diagram A of Annexure A to the Conservation Agreement;

"**Conservation Values**" means the biodiversity values of the Conservation Area specified in Annexure B to the Conservation Agreement;

"**control**", in relation to the Land, means lawful occupation, possession or management of the Conservation Area;

"**controlled burning**" means the controlled application of fire under specified environmental and weather conditions to a predetermined area and at the time, intensity and rate of spread required to attain planned resource management objectives;

"**critical habitat**" has the same meaning as in section 4 of the BC Act;

"**cultural heritage**" refers to the aesthetic, historic, scientific, social, spiritual or other values of a place and associated physical evidence and traditions held by past, present or future generations of peoples, including Aboriginal peoples;

"**damage**" has the same meaning as in section 5 of the NPW Act;

"**development**" has the same meaning as in section 69A of the NPW Act;

"**EPBC Act**" refers to the *Environment Protection and Biodiversity Conservation Act* 1999 (Commonwealth);

"**exotic plant**" means an introduced, alien, exotic, non-indigenous, non-native or a plant species living outside its native distributional range;

"**fauna**" has the same meaning as in section 5 of the NPW Act;

"**geo-heritage**" means any karst environment and any geological deposits and landforms that provide habitat for indigenous fauna and includes values identified as geo-heritage under the heading Conservation Values in Annexure B to the Conservation Agreement;

"**harm**" has the same meaning as in section 5 of the NPW Act;

"**indigenous fauna**" means a species of animal that was established in, or started regularly migrating to New South Wales prior to European settlement and includes fauna listed in Annexure B to the Conservation Agreement;

"**indigenous plants**" means a species of plant that was established in New South Wales prior to European settlement and includes plants listed in Annexure B to the Conservation Agreement;

"**Land**" means the land in folio identifier Part Lot 3 in Deposited Plan 1107232, Part Lot 2 in Deposited Plan 1116876, Part Lot 3 in DP 1140546, Part Lot 3 in Deposited Plan 1074107, Part Lot 508 in Deposited Plan 1208430, Lot 2 Sec5 in Deposited Plan 758653, Lot 3 Sec 5 in Deposited Plan 758653, and Lot 4 Sec 5 in Deposited Plan 758653;

"**Lessee**" means person leasing the land that is secured by real property indicated in the folio identifier Lot 3 Deposited Plan 1107232 at the date of this Conservation Agreement, being **Ranken Group Pty Limited** (previously Vireba Pty Limited) and includes its successors in title and any person appointed as its attorney or receiver in relation to that real property;

"**Minister**" means the Minister for the time being administering the NPW Act and where not repugnant to the context includes the servants, agents and delegates of the Minister;

"**NPW Act**" means the *National Parks and Wildlife Act 1974* (NSW) and any regulations from time to time in force thereunder;

"**native fauna**" has the same meaning as "protected fauna" in section 5 of the NPW Act;

"**native plant**" has the same meaning as in section 5 of the NPW Act;

"**native vegetation**" has the same meaning as in the *Native Vegetation Act 2003* (NSW);

"**DPIE**" means the Department of Planning, Industry and Environment, the NSW Government Public Service agency responsible for administering the NPW Act or a person or organisation to whom DPIE rights and duties under this Conservation Agreement have been delegated;

"**Owner**" means the registered proprietor of the Land from time to time, being **Holcim (Australia) Pty Ltd** as at the date of the Conservation Agreement, and includes any successors in title within the meaning of section 69E of the NPW Act;

"**pest animal**" means any non-native animal having, or with the potential to have, an adverse economic, environmental or social impact on the Conservation Area;

"**pesticide**" has the same meaning as in section 5 of the *Pesticides Act 1999* (NSW);

"**reasonable**" in relation to carrying out an activity, means making a legitimate effort and carrying out the activity in such a way as to have a minimal negative impact on the Conservation Values of the Conservation Area;

"**recovery plan**" means a recovery plan as defined in section 4 of the TSC Act, or a biodiversity conservation program established in accordance with Part 4 Division 6 of the BC Act;

"**road**" allows the passage of vehicles and persons and may be of more developed construction and surface improvement;

"**threatened species, populations and ecological communities**" and "**threatened species, population or ecological community**" have the same meaning as in the BC Act;

"**TSC Act**" means the *Threatened Species Conservation Act 1995* (NSW);

"**track**" allows non-vehicular access only;

"**trail**" allows the passage of vehicles and persons and is of minimal construction, being of limited width and minimal surface improvement; and

"**Year 1**" means twelve month period following the Commencement date.

1.2 **Interpretation**

In the Conservation Agreement, except where the context otherwise requires:

(a) words importing the singular number shall include the plural and masculine gender the feminine or neuter and vice versa; and

(b) any reference to a person shall be deemed to include a corporate body and vice versa.

2 CONSERVATION AGREEMENT UNDER THE NPW ACT

2.1 The Minister enters into the Conservation Agreement relating to the Land with the Owner under section 69B of the NPW Act and clause 17 (2) of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017*.

2.2 The Owner acknowledges that the Minister, the Chief Executive or DPIE may delegate some or all of their roles or duties under the Conservation Agreement to another person or organisation, including the Biodiversity Conservation Trust established under the BC Act. The Minister, the Chief Executive or DPIE may give the Owner notice in writing of any change to their address for service of notices, and the Owner must use the address set out in any such notice.

3 TERM

The Conservation Agreement shall operate in perpetuity.

3.1 This agreement must not be terminated without the written consent of the Minister administering the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999.*

4 OBTAINING OF CONSENTS, PERMITS AND AUTHORISATIONS

The Owner is responsible for obtaining all necessary licenses, consents, authorisations, permits or approvals in order to lawfully comply with and carry out its obligations under the Conservation Agreement or to undertake or enable any other identified action or development under clauses 5 or 6.

5 USE OF THE CONSERVATION AREA

The Owner must not undertake, consent to or permit the following activities on or in the Conservation Area, unless provided for under the Conservation Agreement or with prior written consent of the Chief-Executive:

(a) the sowing or planting of trees, grasses or other plants;

(b) the introduction of any non-indigenous plants or non-indigenous fauna;

(c) the entry of domestic animals including pets (except for the Owner's domestic pets, and only if kept under control/on a leash) and domestic livestock;

(d) the use or application of fertilizers or pesticides;

(e) the use of trail bikes, four wheel drive vehicles or any other vehicle off any formed road (except for management purposes, research, firefighting and/or any emergency requirements);

(f) any works, especially any revegetation work, or any development which has the potential to adversely impact on any of the Conservation Values;

(g) the removal of any biological or inorganic component of the Conservation Area;

(h) any works which will adversely affect the natural flows of water;

(i) grazing of domestic livestock;

(j) any act or omission that may harm any native fauna, native plants, their habitats, cultural heritage or geo-heritage in the Conservation Area or the Conservation Values;

(k) the construction of any new road, access track, trail, building or internal fencing; and

(l) subdivide the Conservation Area.

Commented [RM2]: What about for purposes of weed management?

6 MANAGEMENT OF THE CONSERVATION AREA

6.1 The Owner must undertake the management actions and achieve aims listed in Item 1 of Annexure C to the Conservation Agreement on or in the Conservation Area, at the times specified in Item 1 of Annexure C to the Conservation Agreement, for a minimum period of 10 years from the Commencement date.

6.2 The Owner must undertake the management actions listed in Item 2 of Annexure C to the Conservation Agreement on or in the Conservation Area, from Year 11 for the duration of the Conservation Agreement.

6.3 The Owner must undertake the management actions specified above (in clauses 6.1 and 6.2) according to the permissions and guidelines specified in Item 3 of Annexure C.

6.4 The Owner may undertake additional management actions (not specified in clauses 6.1 and 6.2 above) listed in Item 3 of Annexure C to the Conservation Agreement on or in the Conservation Area, if carried out in the manner prescribed in Item 3 of Annexure C to the Conservation Agreement.

7 MONITORING

7.1 The Owner must engage a suitably qualified person (such as an ecologist) to undertake the monitoring program as set out in Annexure D to the Conservation Agreement (Monitoring Program).

7.2 The Monitoring Program must be undertaken for a minimum 10 year period after commencement of the Conservation Agreement.

7.3 The Monitoring Program may be reviewed and varied after the commencement date of the Conservation Agreement with written approval from DPIE.

8 REPORTING OBLIGATIONS

8.1 The Owner must notify the Chief-Executive in writing as soon as possible after becoming aware of the deterioration of any of the Conservation Values specified in Annexure B, or any threat to the Conservation Values specified in Annexure B.

8.2 Following completion of the Monitoring Program the Owner should (at least every three years) submit to DPIE basic photo point photos for the purpose of identifying changes occurring in the Conservation Area. At the time of submitting the photos, the Owner must also report any unforeseen deterioration of any of the Conservation Values specified in Annexure B, or any threat to the Conservation Values specified in Annexure B. This will form the basis for decisions about ongoing management actions for the Conservation Area. A copy of all monitoring reports should be forwarded to DPIE.

9 USE OF THE CONSERVATION AREA BY SERVANTS, AGENTS, LESSEES OR LICENSEES

The Owner must incorporate the terms of the Conservation Agreement in any lease or licence issued over the Conservation Area, and at all times ensure that any servant, contractor, consultant, agent, lessee, licensee occupying the Conservation Area shall be aware of the relevant provisions of the Conservation Agreement.

10 CHANGE OF OWNERSHIP

10.1 The Owner must notify the Chief-Executive in writing of any change of ownership or control of the Land within twenty-eight (28) days after the change of ownership or control. The notice must include the name and address of the new Owner of the Land or person in control of the Land.

10.2 If the Land is sold or ownership transferred within the first 10 years of this Agreement, the management actions listed in Item 1 of Annexure C and Monitoring Program detailed in Annexure D must be carried out by the new owner for the remaining period.

11 RIGHT TO INSPECT

The Minister may, at any time upon first giving reasonable notice to the Owner, enter upon the Conservation Area to inspect the condition of the Conservation Area and ensure compliance with the Conservation Agreement.

12 OBLIGATIONS OF THE MINISTER

12.1 The Minister agrees to notify the Registrar General when the Conservation Agreement has been entered into so that the Registrar General can carry out his or her responsibilities under section 69G of the NPW Act.

12.2 The Minister will arrange for the provision of technical advice and any other assistance to the Owner as the Minister deems necessary to assist with the implementation of the Conservation Agreement.

13 NON-COMPLIANCE

In the event that the Owner fails to comply with the Conservation Agreement, including, without limitation, damaging or causing damage to the Conservation Area, DPIE may issue a written notice to the Owner requiring the Owner to remedy the non-compliance or damage within a specified time period. This clause does not affect any rights of the parties under section 69G of the NPW Act.

14 DISPUTE RESOLUTION

14.1 Where there is a dispute, difference or claim (dispute), the party raising the dispute must notify the other party in writing of the nature of the dispute, including the factual and legal basis of the dispute (written notice).

14.2 Within fourteen (14) days of the written notice, the Chief-Executive of DPIE and the Owner, or nominated senior representatives of the parties, must attempt to resolve the dispute. If the dispute cannot be resolved within twenty-one (21) days of the written notice, the Chief-Executive of DPIE and the Owner will refer the matter to mediation.

14.3 The parties will agree on the terms of appointment of the mediator and the terms of the mediation in writing within twenty-eight (28) days, failing which the mediation will be at an end and either party may commence court proceedings in respect of the dispute.

14.4 If the matter has not been resolved within twenty-eight (28) days of the appointment of the mediator, the mediation process will be at an end and either party may commence court proceedings in respect of the dispute.

15 COSTS

The Owner will bear costs of, and incidental to, the preparation of the Conservation Agreement, including survey and legal costs.

16 COMMENCEMENT

The Conservation Agreement shall have effect from the day the Minister executes the Conservation Agreement.

Executed as an agreement

SIGNED by
The Chief Executive, Office of Environment and Heritage, as the Minister's delegate under Section 21(1) of the *National Parks and Wildlife Act 1974*

_____
Chief Executive

_____
Print Name

_____
Witness

_____
Date

_____
Witness Name and address

_____
Date

SIGNED by the **OWNER** Executed by **Holcim (Australia) Pty Ltd** pursuant to Section 127 of the *Corporations Act 2001* (Commonwealth).

_____	_____
Director: Holcim (Australia) Pty Ltd	Secretary: Holcim (Australia) Pty Ltd
_____	_____
Date	Date
_____	_____
Witness signature	Witness signature
_____	_____
_____	_____
Witness Name and Address	Witness Name and Address
_____	_____
Date	Date

Address for service of notices on the Owner:

Holcim (Australia) Pty Ltd
799 Pacific Highway
Chatswood, NSW, 2067

Address for service of notices on the Chief Executive DPIE

The Chief Executive
C/O NSW Biodiversity Conservation Trust
PO Box A290 Sydney South NSW 1232

Address for service of notices on the Minister:

NSW Minister for the Environment
GPO Box 5341 Sydney NSW 2001.

Ranken Group Pty Limited (previously Vireba Pty Limited**),** the lessee of Lot 3 DP 1107232 of the Conservation Area, consents to this Agreement.

Date: _____

Witness: _____

Date: _____

ANNEXURE A DIAGRAM A1 – Lynwood Quarry Conservation Area

_____
Director: Holcim (Australia) Pty Ltd)

_____
Chief Executive

_____
Secretary: Holcim (Australia) Pty Ltd)

Insert Survey Diagram here that meets NSW LPI specifications shown here

ANNEXURE B - CONSERVATION VALUES

1. CONSERVATION VALUES

The Owner and the Minister recognise that the Conservation Area contains the following conservation values:

A The Conservation Area contains the following plant community types (PCTs):

- PCT 1330 – Yellow Box – Blakely's Red Gum Grassy Woodland on th Tablelands, South Eastern Highlands Bioregion in the following conditions:
    - Moderate to Good
    - Moderate to God – Derived Native Grassland
    - Low Condition Grassland
- PCT 1093 – Red Stringybark – Brittle Gum – Inland Scribbly Gum, dry open forest of the Tablelands, South Eastern Highlands Bioregion in the following conditions:
    - Moderate to Good
    - Low Condition Grassland

Descriptions of each of these communities are provided below.

PCT 1330 – Yellow Box – Blakely's Red Gum Grassy Woodland on the Tablelands, South Eastern Highlands Bioregion

This community is a tall woodland or grassland that occupies fertile lower parts of the landscape where resources such as water and nutrients are more available. This PCT contains areas of both the grassy woodland and derived native grassland components of the community. The woodland component in the Conservation Area is dominated by Blakely's red gum (*Eucalyptus blakelyi*) and Yellow box (*Eucalyptus melliodora*), with occurrences of Bundy (*Eucalyptus goniocalyx*), Apple box (*Eucalyptus bridgesiana*), Argyle Apple (*Eucalyptus cinerea*) and Red stringybark (*Eucalyptus macrorhyncha*). A small tree layer of Black she-oak (*Allocasuarina littoralis*) is sometimes present. Common shrubs include Sifton bush (*Cassinia arcuata*), Peach heath (*Lissanthe strigosa*) and Nodding blue-lily (*Stypandra glauca*). Common groundcover species include Weeping grass (*Microlaena stipoides*), Speargrass (*Austrostipa scabra*), Purple wiregrass (*Aristida ramosa*), *Poa sieberiana*, Stinking pennywort (*Hydrocotyle laxiflora*), Wattle mat-rush (*Lomandra filiformis* subsp. *coriacea*), *Gonocarpus tetragynus* and Ivy goodenia (*Goodenia hederacea* subsp. *hederacea*).

The grassland component is located within the previously cleared lower slopes and drainage areas. At the woodland interface, regeneration of canopy species is common. The grassland component has been split into two condition types, comprising moderate to good condition derived native grassland and low condition grassland. The moderate to good condition derived native grassland is dominated by a variety of native species, including Sifton bush (*Cassinia arcuata*), Peach heath (*Lissanthe strigosa*), Wattle mat-rush (*Lomandra filiformis* subsp. *coriacea*), Poison rock fern (*Cheilanthes sieberi* subsp. *sieberi*), *Gonocarpus tetragynus*, Ivy goodenia (*Goodenia hederacea* subsp. *hederacea*), Speargrass (*Austrostipa scabra*) and Weeping grass (*Microlaena stipoides*). Hoary sunray (*Leucochrysum albicans* var. *tricolor*), listed as endangered under the EPBC Act was recorded at the permanent monitoring plot established in the moderate to good condition derived native grassland.

The low condition grassland form of this PCT comprises a mixture of exotic and native species. Weed cover is high, consisting of Catsear (*Hypochaeris radicata*), Fireweed (*Senecio madagascariensis*), Serrated tussock (*Nassella trichotoma*), *Setaria parviflora* and Sheep sorrel (*Acetosella vulgaris*). Common native groundcover species include Purple wiregrass (*Aristida ramosa*), Weeping grass (*Microlaena stipoides*), Peach heath (*Lissanthe strigosa*) and *Gonocarpus tetragynus*. A high number of likely Blakely's red gum (*Eucalyptus blakelyi*) and Yellow box (*Eucalyptus melliodora*) seedlings are

present as a result of recent active revegetation works. Parramatta wattle (*Acacia parramattensis*) is dispersed throughout the low condition grasslands.

The Conservation Area contains approximately 68.83 hectares of PCT 1330 Yellow Box – Blakely's Red Gum Grassy Woodland on the Tablelands, South Eastern Highlands Bioregion.

PCT 1093 – Red Stringybark – Brittle Gum – Inland Scribbly Gum, dry open forest of the Tablelands, South Eastern Highlands Bioregion

This vegetation community occurs on poor soils usually on a rocky substrate. Common canopy species include Inland scribbly gum (*Eucalyptus rossii*), Red stringybark (*Eucalyptus macrorhyncha*), Blue-leaved stringybark (*Eucalyptus agglomerata*), Bundy (*Eucalyptus goniocalyx*) and Brittle gum (*Eucalyptus mannifera subsp. mannifera*). There are also occurrences of Broad-leaved peppermint (*Eucalyptus dives*), Argyle apple (*Eucalyptus cinerea*) and Silvertop ash (*Eucalyptus sieberi*). The understorey is open through to entirely absent with characteristic shrub species comprising *Brachyloma daphnoides*, Sifton bush (*Cassinia arcuata*) and Peach heath (*Lissanthe strigosa*). The ground layer is typically sparse and dominated by a range of sedges, grasses and forbs such as Nodding blue-lily (*Stypandra glauca*) and Speargrass (*Austrostipa scabra*). Other common species included Ivy goodenia (*Goodenia hederacea*), *Dianella revoluta*, Twisted mat-rush (*Lomandra obliqua*), *Gonocarpus tetragynus*, Many-flowered mat-rush (*Lomandra multiflora*) and Wattle mat-rush (*Lomandra filiformis* subsp. *coriacea*).

The grassland component is considered to be in low condition as it has a high cover of exotic grasses such as Serrated tussock (*Nassella trichotoma*) and Phalaris (*Phalaris aquatica*). Other common weeds included Catsear (*Hypochaeris radicata*) and Sheep sorrel (*Acetosella vulgaris*). Native species occur at low abundance, including *Leptospermum* sp., Many-flowered mat-rush (*Lomandra multiflora* subsp. *multiflora*), Wattle mat-rush (*Lomandra filiformis* subsp. *coriacea*) and Hairy panic (*Panicum effusum*). Scattered Peach heath (*Lissanthe strigosa*) and Sifton bush (*Cassinia arcuata*) are present in the broader area of this zone. The potential former identity of these low condition grasslands has been determined from landscape position and adjacent intact woodland areas.

The Conservation Area contains approximately 146.51 hectares of PCT 1093 Red Stringybark – Brittle Gum – Inland Scribbly Gum, dry open forest of the Tablelands, South Eastern Highlands Bioregion.

Table 1 shows the area of each plant community type by condition state (refer also to Diagram B1).

Table 1: PCTs present in the Lynwood Quarry Conservation Area

PCT	Condition	Area (ha)
1330 Yellow Box – Blakely's Red Gum Grassy Woodland on the Tablelands, South Eastern Highlands Bioregion	Moderate to Good	23.59
	Moderate to Good - Derived Native Grassland	3.50
	Low Condition Grassland	41.74
1093 Red Stringybark – Brittle Gum – Inland Scribbly Gum, dry open forest of the Tablelands, South Eastern Highlands Bioregion	Moderate to Good	91.86
	Low Condition Grassland	54.65

PCT	Condition	Area (ha)
Dams	N/A	0.55
TOTAL		**215.89**

Note: Values are subject to minor mapping/GIS-based variation

B The Conservation Area contains following threatened ecological communities (TECs) and threatened species:

White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC under the EPBC Act and White Box Yellow Box Blakely's Red Gum Woodland EEC under the BC Act

This community occurs along the western slopes and tablelands of the Great Dividing Range from southern Queensland through New South Wales and the Australian Capital Territory to Victoria. It is listed as a critically endangered ecological community under the EPBC Act and an endangered ecological community under the BC Act. It is characterised by a species-rich understory of native tussock grasses, herbs and scattered shrubs (where shrub cover comprises less than 30% cover) and a dominance or prior dominance of White box (*Eucalyptus albens*) and/or Yellow box (*Eucalyptus melliodora*) and/or Blakely's red gum (*Eucalyptus blakelyi*) trees. Grey box (*Eucalyptus microcarpa* or *Eucalyptus moluccana*) may also be dominant or co-dominant. In the woodland state, tree cover is generally discontinuous and of medium height with canopies that are clearly separated.

Within the Conservation Area this community occurs at the lower footslopes of low rocky hills or the upper margins of valleys extensively modified as a result of agricultural activities. This is where the better soils of the valley meet the poorer soils of the low hills. Blakely's red gum (*Eucalyptus blakelyi*) and Yellow box (*Eucalyptus melliodora*) are the dominant trees and were likely to have been in the grassland areas prior to clearing. Blakely's red gum (*Eucalyptus blakelyi*) is replaced by a dominance of Scribbly gum (*Eucalyptus rossii*), Red stringybark (*Eucalyptus macrorhyncha*), Blue-leaved stringybark (*Eucalyptus agglomerata*), Bundy (*Eucalyptus goniocalyx*) and Brittle gum (*Eucalyptus mannifera* subsp. *mannifera*) woodland on the low hills. The community occurs as grassy woodland and derived native grassland with varying levels of woodland dominance. The Conservation Area is known to contain approximately 23.59 hectares of grassy woodland form and 3.50 hectares of the derived native grassland form. The area of the two condition types present within the Conservation Area is shown in **Table 2** and illustrated in **Diagram B1**).

Table 2: Threatened ecological communities present in the Conservation Area

Threatened Ecological Community	Condition	BC Listed (ha)	EPBC Listed (ha)
White Box – Yellow Box – Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands CEEC	Intact	-	23.59
	DNG	-	3.50
White Box - Yellow Box Blakely's Red Gum Woodland EEC	Intact	23.59	
Total		**23.59**	**27.09**

The areas of Box Gum Woodland CEEC/EEC mapped in the Conservation Area generally correspond with map unit 3 Tableland Grassy Box-Gum Woodland as previously mapped by Umwelt (2005). This map unit was derived from the vegetation classification and mapping project by Tindall *et al.* (2004), which has since been updated in Tozer *et al.* (2010). According to the revised vegetation classification

and mapping project, the mapped patches of Box Gum Woodland are modelled as map unit p24 Tableland Grassy Box-Gum Woodland. This community is described as having the potential to form part of the Box Gum Woodland CEEC/EEC (Tozer *et al.* 2010), which specifically states that '*no map units are directly equivalent to this CEEC/EEC described, however some areas of p24 Tableland Grassy Box-Gum Woodland may match the CEEC/EEC description*'. This community is described by Tozer *et al.* (2010) as containing up to nine different species of eucalypts, so depending on the proportions of a given patch, it may or may not conform to the definition of the Box Gum Woodland CEEC/EEC. Therefore, while the site contains large areas of p24 Tableland Grassy Box-Gum Woodland, only certain areas represent the Box Gum Woodland CEEC/EEC, which is driven by the local biophysical attributes of a given area.

Some areas of the Conservation Area which may have once supported the Box Gum Woodland CEEC/EEC have been modified such that they no longer conform to the definition of Box Gum Woodland CEEC/EEC. For example, some areas have a highly modified understory and are dominated by exotic species.

Threatened Flora Species

Two threatened flora species listed under the BC and/or EPBC Act have been recorded in the Conservation Area, being Hoary sunray (*Leucochrysum albicans* var. *tricolor*) listed as endangered under the EPBC Act and Camden woollybutt (*Eucalyptus macarthurii*) listed as endangered under the BC and EPBC Acts.

Hoary sunray (*Leucochrysum albicans* var. *tricolor*) occurs in localised areas in the eastern portion of the Conservation Area. The population of Hoary sunray (*Leucochrysum albicans* var. *tricolor*) which had previously not been observed despite extensive ecological survey between 2003 and 2004 became apparent in 2011 in large numbers. This followed a period of above average rainfall immediately after an extensive period of drought and the removal of grazing stock in 2010. Approximately 200,000 Hoary sunray (*Leucochrysum albicans* var. *tricolor*) individuals have been recorded in the habitats of the Conservation Area with up to 27.3 hectares of habitat identified (refer to **Diagram B4**).

One record of Camden woollybutt (*Eucalyptus macarthurii*) occurs in the eastern portion of the Conservation Area according to the DPIE BioNet Atlas of NSW Wildlife (refer to **Diagram B4**). This record occurs from 2004 with an estimated accuracy of location of 100 km. It is noted that a stand of planted Camden woollybutt (*Eucalyptus macarthurii*) previously occurred within the disturbance footprint of the approved Lynwood Quarry Project. It was determined in consultation with DPIE (formerly Office of Environment and Heritage) as part of the assessment process for Lynwood Quarry in 2005 that this species was planted on Lynwood Quarry site. It is unknown whether this other record plotted within the Conservation Area actually occurs within the boundaries of the Conservation Area as it has not been relocated.

A list of the threatened species recorded within 10 km of the Conservation Area with the potential to occur based on suitable habitat, is included in **Annexure B**.

Threatened Fauna Species

The Conservation Area contain known records (being from site surveys and/or BioNet) of the following eight threatened fauna species listed under the BC Act (refer to **Diagram B4**):

- Speckled warbler (*Chthonicola sagittata*),
- Varied sittella (*Daphoenositta chrysoptera*),
- Scarlet robin (*Petroica boodang*),
- Dusky woodswallow (*Artamus cyanopterus cyanopterus*),
- Squirrel glider (*Petaurus norfolcensis*),
- Eastern bentwing-bat (*Miniopterus orianae oceanensis*),

- East-coast freetail-bat (*Micronomus norfolkensis*), and
- Eastern false pipistrelle (*Falsistrellus tasmaniensis*).

The Conservation Area contains four broad habitat formations which provide different habitat characteristics that influence the fauna habitat value and the range of species likely to utilise each habitat type. The broad habitat formations were woodland, grassland, riparian and aquatic habitats.

A list of the threatened species recorded within 10 km of the Conservation Area, that have the potential to occur based on suitable habitat is included in **Annexure B**.

C The Conservation Area contains connectivity to adjacent reserves and or bushland areas at local and regional scale.

The remaining areas of remnant woodland occurring within the Holcim lands include dense patches of native woodland as well as scattered trees and vegetated riparian areas. The vegetation communities in the Conservation Area and the wider locality have been heavily modified by agricultural activities. The broad vegetation types include box-gum woodlands, low open forests, riparian woodlands, derived native grasslands and disturbed pasture. Widespread grazing across the region has resulted in the fragmentation and subsequent high disturbance and degradation of these communities.

Broad vegetated corridors in the Holcim lands in the locality include isolated remnants of vegetation from the Conservation Area in the south to Joarimin Creek through to the Habitat Management Area in the north (refer to **Diagram B3**). The corridor occurs to the north of the Main Southern Railway linking remnant vegetation along Joarimin Creek with the Habitat Management Area and adjoining habitat areas to the north. Linkages to this corridor area are provided by a 'stepping stone' habitat to the south of the Main Southern Railway through to the Conservation Area. This section of the corridor is comprised of patches of remnant vegetation crossed by infrastructure in several locations. Despite this, a movement corridor is available for a range of threatened species and fauna generally whilst also supporting pollination and dispersal of local flora.

There are a number of large conservation reserves near the Conservation Area, including Morton National Park, Tarlo River National Park and Bungonia National Park and State Conservation Area (SCA). These areas form large patches of native vegetation in a relatively disturbed agricultural landscape and provide habitat refuges and connectivity for dispersing species.

D The Conservation Area contains sites/objects of high Aboriginal cultural and archaeological value.

The Conservation Area contains 22 Aboriginal sites including eight isolated finds, eight artefact scatters with potential archaeological deposit, five scarred trees and one stone arrangement. Of these Aboriginal sites, two isolated finds, four artefact scatters, five scarred trees and one stone arrangement are within a Cultural Heritage Management Zone set aside for long-term conservation. This area is of especially high Aboriginal cultural and archaeological value as it contains a rare site complex related to male initiation. All of the Aboriginal sites within the Conservation Area are protected and managed in accordance with the Lynwood Quarry Aboriginal Heritage Management Plan and the Conditions of DPIE Aboriginal Heritage Impact Permit #1100264. In compliance with the Aboriginal Heritage Management Plan the sites are fenced with appropriate signage and are subject to monitoring on an annual or triennial basis (refer to **Diagram B7**).

ANNEXURE B

TABLE 3: Threatened species found within 10km radius of site which may occur within the Conservation Area due to the presence of suitable habitat.

Common Species Name	Scientific Species Name	BC Act Listing	EPBC Act Listing	Confirmed on site Y/N
Fauna Species				
Little eagle	*Hieraaetus morphnoides*	V	-	N
White-bellied sea-eagle	*Haliaeetus leucogaster*	V	-	N
Square-tailed kite	*Lophoictinia isura*	V	-	N
Gang-gang cockatoo	*Callocephalon fimbriatum*	V	-	N
Glossy black-cockatoo	*Calyptorhynchus lathami*	V	-	N
Little lorikeet	*Glossopsitta pusilla*	V	-	N
Swift parrot	*Lathamus discolor*	E	CE	N
Powerful owl	*Ninox strenua*	V	-	N
Masked owl	*Tyto novaehollandiae*	V	-	N
Sooty owl	*Tyto tenebricosa*	V	-	N
Brown treecreeper (eastern subspecies)	*Climacteris picumnus victoriae*	V	-	N
Speckled warbler	*Chthonicola sagittata*	V	-	Y
Regent honeyeater	*Anthochaera phrygia*	CE	CE	N
Black-chinned honeyeater (eastern subspecies)	*Melithreptus gularis gularis*	V	-	N
Varied sittella	*Daphoenositta chrysoptera*	V	-	Y
Dusky woodswallow	*Artamus cyanopterus cyanopterus*	V	-	Y
Hooded robin (south-eastern form)	*Melanodryas cucullata cucullata*	V	-	N
Scarlet robin	*Petroica boodang*	V	-	Y
Flame robin	*Petroica phoenicea*	V	-	N
Diamond firetail	*Stagonopleura guttata*	V	-	N
Spotted-tailed quoll	*Dasyurus maculatus*	V	E	N
Koala	*Phascolarctos cinereus*	V	V	N

Common Species Name	Scientific Species Name	BC Act Listing	EPBC Act Listing	Confirmed on site Y/N
Yellow-bellied glider	*Petaurus australis*	V	-	N
Squirrel glider	*Petaurus norfolcensis*	V	-	Y
Greater glider	*Petauroides volans*	-	V	N
Brush-tailed rock-wallaby	*Petrogale penicillata*	E	V	N
Grey-headed flying-fox	*Pteropus poliocephalus*	V	V	N
Yellow-bellied sheathtail-bat	*Saccolaimus flaviventris*	V	-	N
East-coast freetail-bat	*Micronomus norfolkensis*	V	-	Y
Large-eared pied bat	*Chalinolobus dwyeri*	V	V	N
Eastern false pipistrelle	*Falsistrellus tasmaniensis*	V	-	Y
Little bentwing-bat	*Miniopterus australis*	V	-	N
Eastern bentwing-bat	*Miniopterus orianae oceanensis*	V	-	Y
Southern myotis	*Myotis macropus*	V	-	N
Greater broad-nosed bat	*Scoteanax rueppellii*	V	-	N
Fauna Species				
Hoary sunray	*Leucochrysum albicans* var. *tricolor*	-	E	Y
Matted bush-pea	*Pultenaea pedunculata*	E	-	N
Dwarf kerrawang	*Commersonia prostrata*	E	E	N
Black gum	*Eucalyptus aggregata*	V	V	N
Camden woollybutt	*Eucalyptus macarthurii*	E	E	Y^
Tallong midge orchid	*Genoplesium plumosum*	CE	E	N
Wingello grevillea	*Grevillea molyneuxii*	V	E	N
Cotoneaster pomaderris	*Pomaderris cotoneaster*	E	E	N
Pale pomaderris	*Pomaderris pallida*	V	V	N
	Solanum celatum	E	-	N
Bungonia rice-flower	*Pimelea axiflora* subsp. *pubescens*	E	-	N

V= Vulnerable, E= Endangered, CE= Critically Endangered, ^ = Record not confirmed in the Conservation Area.

ANNEXURE B DIAGRAM B1 - VEGETATION COMMUNITIES AND LOCATION OF BIOBANKING PLOTS AND PHOTO POINTS

ANNEXURE B DIAGRAM B2 – REGIONAL SETTING

ANNEXURE B DIAGRAM B3 – BIODIVERSITY CORRIDOR

ANNEXURE B DIAGRAM B4 – THREATENED SPECIES LOCATIONS

ANNEXURE B DIAGRAM B5 – FIRE MANAGEMENT ZONES

ANNEXURE B DIAGRAM B6 – MANAGEMENT ZONES

ANNEXURE B DIAGRAM B7 – LOCATION OF CULTURAL HERITAGE MANAGEMENT ZONE

ANNEXURE B - PHOTO POINT PHOTOGRAPHS

Four photos were taken at each point in a clockwise direction, with the first photo orientated facing north from the north-east corner of the site. Compass directions (magnetic degrees) of each photo from the star picket are given below and GPS reference points for each site are provided in **Annexure D Table 1**.

Photos are presented below.

Biometric Plot 1 - PCT 1093 - Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion (Moderate to Good Condition)

Biometric Plot 1 is dominated by Inland scribbly gum (*Eucalyptus rossii*) and Blue-leaved stringybark (*Eucalyptus agglomerata*), along with a single Red stringybark (*Eucalyptus macrorhyncha*) tree. Brittle gum (*Eucalyptus mannifera* subsp. *mannifera*), Broad-leaved peppermint (*Eucalyptus dives*) and Argyle apple (*Eucalyptus cinerea*) are common in the immediate area. A mid-storey or shrub layer is absent from **Biometric Plot 1**. Whilst very sparse, dominant **Biometric Plot 1** groundcover species include Speargrass (*Austrostipa scabra*), Ivy goodenia (*Goodenia hederacea*), Many-flowered mat-rush (*Lomandra multiflora*), Twisted mat-rush (*Lomandra obliqua*) and Wattle mat-rush (*Lomandra filiformis* subsp. *coriacea*). Weeds are largely absent.

Biometric Plot 1 facing 0º (magnetic)(15/06/2017)

Biometric Plot 1 facing 90º (magnetic) (15/06/2017)

Biometric Plot 1 facing 180º (magnetic) (15/06/2017)

Biometric Plot 1 facing 270º (magnetic) (15/06/2017)

Biometric Plot 2 - PCT 1093 - Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion (Low Condition Grassland)

Weed cover is high (100 percent) and dense in **Biometric Plot 2** and dominated by Phalaris (*Phalaris aquatica*) and Serrated tussock (*Nassella trichotoma*). Other common weeds include Sheep sorrel (*Acetosella vulgaris*), *Trifolium* sp. and Catsear (*Hypochaeris radicata*). Native species are limited to a single *Leptospermum* sp. shrub and a low abundance of Many-flowered mat-rush (*Lomandra multiflora* subsp. *multiflora*), Wattle mat-rush (*Lomandra filiformis* subsp. *coriacea*) and Hairy panic (*Panicum effusum*). Scattered Peach heath (*Lissanthe strigosa*) and Sifton bush (*Cassinia arcuata*) are also present in the broader area of this zone.

This area has not been subject to any revegetation activities.

Biometric Plot 2 facing 0º (magnetic) (15/06/2017)

Biometric Plot 2 facing 90º (magnetic) (15/06/2017)

Biometric Plot 2 facing 180º (magnetic) (15/06/2017)

Biometric Plot 2 facing 270º (magnetic) (15/06/2017)

Biometric Plot 3 - PCT 1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion (Moderate to Good Condition)

Biometric Plot 3 is dominated by Blakely's red gum (*Eucalyptus blakelyi*) with occurrences of Bundy (*Eucalyptus goniocalyx*) and Red stringybark (*Eucalyptus macrorhyncha*). Apple box (*Eucalyptus bridgesiana*) and Yellow box (*Eucalyptus melliodora*) also occur within this zone. **Biometric Plot 3** contains a small tree layer of Black she-oak (*Allocasuarina littoralis*) and a shrub layer dominated by Sifton bush (*Cassinia arcuata*), Peach heath (*Lissanthe strigosa*) and Nodding blue-lily (*Stypandra glauca*). Common groundcover species include Weeping grass (*Microlaena stipoides*), *Gonocarpus tetragynus*, Wattle mat-rush (*Lomandra filiformis* subsp. *coriacea*) and Speargrass (*Austrostipa scabra*).

Weed cover is generally low and includes Scarlet pimpernel (*Lysimachia arvensis*), Sheep sorrel (*Acetosella vulgaris*), Lawn burweed (*Soliva sessilis*) and Catsear (*Hypochaeris radicata*).

Biometric Plot 3 facing 0º (magnetic) (15/06/2017)

Biometric Plot 3 facing 90º (magnetic) (15/06/2017)

Biometric Plot 3 facing 180º (magnetic) (15/06/2017)

Biometric Plot 3 facing 270º (magnetic) (15/06/2017)

Biometric Plot 4 - PCT 1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion (Derived Native Grassland Condition)

Biometric Plot 4 includes sparse regeneration of the canopy species Blakely's red gum (*Eucalyptus blakelyi*) and Bundy (*Eucalyptus goniocalyx*). The shrub layer is dominated by Sifton bush (*Cassinia arcuata*) and Peach heath (*Lissanthe strigosa*). Common groundcover species include Wattle mat-rush (*Lomandra filiformis* subsp. *coriacea*), *Gonocarpus tetragynus*, Speargrass (*Austrostipa scabra*) and Purple wiregrass (*Aristida ramosa*). Approximately 50 individuals of the endangered (EPBC Act) Hoary sunray (*Leucochrysum albicans* var. *tricolor*) were recorded.

Weed cover is low and includes the exotic species Sheep sorrel (*Acetosella vulgaris*) and Catsear (*Hypochaeris radicata*).

Vegetation in **Biometric Plot 4** conforms to *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC* under the EPBC Act and *White Box Yellow Box Blakely's Red Gum Woodland EEC* under the BC Act.

Biometric Plot 4 facing 0º (magnetic) (15/06/2017)

Biometric Plot 4 facing 90º (magnetic) (15/06/2017)

Biometric Plot 4 facing 180º (magnetic) (15/06/2017)

Biometric Plot 4 facing 270º (magnetic) (15/06/2017)

Biometric Plot 5 - PCT 1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion (Low Condition Grassland)

Biometric Plot 5 comprises recent plantings of likely Blakely's red gum (*Eucalyptus blakelyi*) and Yellow box (*Eucalyptus melliodora*) less than 20 cm high (identification of these seedlings will be confirmed during future monitoring when mature material is available). Parramatta wattle (*Acacia parramattensis*) is dispersed throughout the low condition grasslands.

Weed cover is high and consist mainly of Catsear (*Hypochaeris radicata*), Fireweed (*Senecio madagascariensis*), Serrated tussock (*Nassella trichotoma*), *Setaria parviflora* and Sheep sorrel (*Acetosella vulgaris*). Common native groundcover species include Purple wiregrass (*Aristida ramosa*), Weeping grass (*Microlaena stipoides*), Peach heath (*Lissanthe strigosa*) and *Gonocarpus tetragynus*.

This area has been subject to direct seeding activities subsequent to plot establishment.

Biometric Plot 5 facing 0º (magnetic) (15/06/2017)

Biometric Plot 5 facing 90º (magnetic) (15/06/2017)

Biometric Plot 5 facing 180º (magnetic) (15/06/2017)

Biometric Plot 5 facing 270º (magnetic) (15/06/2017)

Photo Point 1 - PCT 1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion (Moderate to Good Condition)

Photo Point 1 comprises intact woodland dominated by Blakely's red gum (*Eucalyptus blakelyi*), Yellow box (*Eucalyptus melliodora*) and Argyle apple (*Eucalyptus cinerea*) with Apple box (*Eucalyptus bridgesiana*) occurring less frequently. The sparse shrub layer is dominated by Sifton bush (*Cassinia arcuata*) and Peach heath (*Lissanthe strigosa*). Common groundcover species include Stinking pennywort (*Hydrocotyle laxiflora*), Wattle mat-rush (*Lomandra filiformis* subsp. *coriacea*), *Poa sieberiana*, *Austrostipa* sp. and Purple wiregrass (*Aristida ramosa*).

Weeds are absent.

Vegetation in Photo Point 1 conforms to *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC* under the EPBC Act and *White Box Yellow Box Blakely's Red Gum Woodland EEC* under the BC Act.

Photo Point 1 facing 0º (magnetic) (16/06/2017)

Photo Point 1 facing 90º (magnetic) (16/06/2017)

Photo Point 1 facing 180º (magnetic) (16/06/2017)

Photo Point 1 facing 270º (magnetic) (16/06/2017)

Photo Point 2 - PCT 1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion (Low Condition Grassland)

Photo Point 2 is dominated by regenerating Blakely's red gum (*Eucalyptus blakelyi*) and Argyle apple (*Eucalyptus cinerea*). The shrub layer is limited to Sifton bush (*Cassinia arcuata*). The ground layer is dominated by the exotic species including Serrated tussock (*Nassella trichotoma*), Catsear (*Hypochaeris radicata*) and *Trifolium* sp. Native groundcover species include Weeping grass (*Microlaena stipoides*) and *Juncus* sp. Weed cover is high.

This area is naturally regenerating.

Photo Point 2 facing 0º (magnetic) (16/06/2017)

Photo Point 2 facing 90º (magnetic) (16/06/2017)

Photo Point 2 facing 180º (magnetic) (16/06/2017)

Photo Point 2 facing 270º (magnetic) (16/06/2017)

ANNEXURE C MANAGEMENT OF THE CONSERVATION AREA

ITEM 1: MANAGEMENT AIMS AND ACTIONS REQUIRED TO BE UNDERTAKEN FOR MINIMUM PERIOD OF 10 YEARS. ALL ACTIONS TO BE UNDERTAKEN IN ACCORDANCE WITH ANNEXURE C ITEM 3 PERMISSIONS AND GUIDELINES.

Aim	Timing	Management action	Indicative minimum cost for management action
Maintenance of active revegetation areas (i.e. weeding, tubestock planting or direct seeding)	Years 1-10	Weed control will be undertaken across the conservation area annually as per a Weed Management Plan that is developed for the site and reviewed every three years post monitoring. Direct seeding completed	**$2,200 per annum** **$22,000 total**
Installation of additional fencing to exclude stock from the Conservation Area	Year 1-5	Install 1,190m of new fence. Cost of new fencing $10/m	**$11,900 total** **Completed**
Removal of Unnecessary Internal Fences	Years 1-5	Remove 2,840 m unnecessary internal fences within Conservation Area. (Does not include the removal of the internal fence surrounding the Cultural Heritage Management Zone).	**$12,496 total** **Completed**
Fence maintenance to exclude stock from the Conservation Area	Years 2-10	Maintain fences as required. Provision of three subsequent rounds of fence maintenance (Years 3, 6 and 9). Total perimeter fence length is 11,950 m. Costing of maintenance based on 1/20th new fencing rate ($10.m).	**$5,975 per round** **$17, 925 total**
Fire management hazard reduction burn (If required) **Undertaken in collaboration with NSW Rural Fire Service or fire management contractor to implement mosaic or partial area hazard reduction burn.**	Year 5 and 10.	Implement hazard reduction burn during low risk fire season. Must take into account the recommended fire intervals given in the *Bush Fire Environmental Assessment Code for New South Wales* (Rural Fire Service February 2006) and the guidelines contained in the *Threatened Species Hazard Reduction Lists for the Bush Fire Environmental Assessment Code* or equivalent replacements. Current recommendations are: • Box-Gum Woodland CEEC should not be subjected to fires more frequently than once every five years. Slashing is permitted for hazard reduction, however	$5,000 per fire round **$10,000 total**

		no trittering or tree removal.	
Plant Tubestock in Conservation Area	Year 2-5	Some areas of existing native pasture will be revegetated using tube stock. The final target rate for box-gum grassy woodlands is 30/40 stems per hectare of canopy species with scattered shrubs (Rawlings et al 2010). In order to allow for seedling mortalities as revegetation areas mature, it is recommended that small trees (trees that have grown to less than 10cm diameter at breast height) have a density of at least 400 stems per hectare. As trees mature to dimensions greater than 10cm diameter and taller than breast height it is considered that 250 stems per hectare is a minimum target density. In order to account for mortality of seedlings a planting rate of 600 stems per hectare has been allowed.	**$33,000 total**
	Site preparation - Year 2 following propagation	Slashing / mowing of tubestock area prior to planting.	**$5,280**
Monitoring of revegetation / regeneration areas and Annual Reports for Monitoring Program	Years 2-10	Annual reports to be prepared according to specifications in Annexure D Monitoring Program. Annual monitoring will be conducted in order to determine the success or otherwise of revegetation works, weed control and the progress of natural regeneration. Permanent monitoring plots have been established within the Conservation Area.	**$10,500** per annum **$94,500** total
Aboriginal Places and Aboriginal Objects	Years 1-10	The Owner must preserve and protect Aboriginal Places and Aboriginal Objects and other sites of cultural heritage significance on or in the Conservation Area and in accordance with the relevant legislation. The Owner must ensure that these protective measures are undertaken in accordance with the management measures provided in the Lynwood Quarry Aboriginal Heritage Management Plan (AHMP) or other approved AHMP	**$11,932 per annum** **$119,320 total**

		This includes requirements to undertake an ongoing monitoring program	
Pest animal monitoring and control (local co-ordination with Local Land Services and DPIE)	Years 1-10	Feral animal control (bait, trapping and/or shooting). Years 3, 6 and 9. Management actions to be undertaken to be determined in consultation with contractor.	**$3,300 per round** **$9,900 total**
Managing visitor impacts (visitors include DPIE inspectors; weed control contractors; fire maintenance contractors; NSW Rural Fire Service; fencing and maintenance contractors and the Owner)	Years 1-10	The Owner must ensure that visitor disturbance to the Conservation Area is minimised by keeping visitors to tracks and trails except for management purposes and ensuring all visitor vehicles and equipment entering the Conservation Area are clean and free from weeds and/or seeds. Guidance specified in Annexure C Item 3 Visitation and research must be used.	N/A
Threatened species, populations and endangered ecological communities (EEC)	Years 1-10	The Owner must follow current best practice advice regarding the management of threatened species when carrying out any activities within the Conservation Area. This advice may be provided by Department of Planning, Industry and the Environment, Local Land Services, the Commonwealth Department of Agriculture, Water and the Environment or subsequent authorities.	N/A
Signage Installation	Years 1-10	Commitment of Aboriginal Heritage Management Plan (AHMP)	**$368 total**
Total indicative cost for 10 year period			**$336,689**

ANNEXURE C MANAGEMENT OF THE CONSERVATION AREA
ITEM 2: MANAGEMENT ACTIONS REQUIRED TO BE UNDERTAKEN FROM YEAR 11 ONWARDS.
ALL ACTIONS TO BE COMPLETED ACCORDING TO ANNEXURE C ITEM 3 PERMISSIONS AND GUIDELINES.

Issue	Management action
Exotic plants	The Owner must take reasonable measures in relation to the control of exotic plants. Techniques specified in Annexure C Item 3 must be used.
Pest animals	The Owner must take reasonable measures in relation to monitoring of pest animals. Techniques specified in Annexure C Item 3 must be used.
Threatened species, populations and endangered ecological communities (EEC)	The Owner must follow current best practice advice regarding the management of threatened species when carrying out any activities within the Conservation Area. This advice may be provided by DPIE, Local Land Services, the Commonwealth Department of Environment and Energy or subsequent authorities.
Managing visitor impacts (visitors include DPIE inspectors; weed control contractors; fire maintenance contractors; NSW Rural Fire Service; fencing and maintenance contractors and the Owner)	The Owner must take reasonable measures to ensure that visitor disturbance to the Conservation Area is minimised by keeping visitors to tracks and trails except for management purposes and ensuring all visitor vehicles and equipment entering the Conservation Area are clean and free from weeds and/or seeds. Guidance specified in Annexure C Item 3 Visitation and research must be used.
Maintain vehicle access to Conservation Area for visitor management, fire management, weed and fencing management	The Owner must take reasonable measures to ensure that vehicle access is maintained by maintaining and repairing access trails as required. Techniques specified in Annexure C Item 3 must be used.
Monitoring and Reporting	The Owner must complete a monitoring report at least every 3 years as described in Clause 8 of the Conservation Agreement.
Livestock	The Owner must remove any livestock which have entered the Conservation Area as soon as practical.
Aboriginal Places and Aboriginal Objects	The Owner must preserve and protect Aboriginal Places and Aboriginal Objects and other sites of cultural heritage significance on or in the Conservation Area and in accordance with the relevant legislation.
Fencing	The Owner must take reasonable measures to construct and maintain fences along the boundaries of the Conservation Area where adjacent land use cause or are likely to cause adverse impacts on or in the Conservation Area. Techniques specified in Annexure C Item 3 must be used.

ANNEXURE C ITEM 3: PERMISSIONS AND GUIDELINES

Control of pest animals and non-indigenous fauna (in addition to pest animal control management actions in Items 1 and 2 of Annexure C to the Conservation Agreement)

a) Participate in community pest animal control programs, and encourage neighbours to implement pest animal control programs. Contact your Local Land Services office or National Parks and Wildlife Service Area office to find out where community control programs are occurring.

b) Methods for pest animal control can include; shooting, trapping and use of poisonous baits consistent with advice from DPIE and Local Land Services. Use control methods identified as 'humane' as defined in the NSW Codes of Practice and Standard Operating Procedures for Humane Pest Vertebrate Control (Control Capture and Destruction of Feral Animals in Australia) as developed by the NSW Department of Primary Industries.

c) Pest animal control activities to be determined based on density and species of pest animals. Methods for monitoring pest animal activity should include:

    i) observations and/or hearing calls,

    ii) the use of standard "sand plots",

    iii) the use of non-poisoned "bait stations",

    iv) scat counts, and

    v) other quantitative techniques which can be designed in discussion with DPIE or Local Land Services.

Control of weeds and exotic plants (in addition to weed control management actions in Items 1 and 2 of Annexure C to the Conservation Agreement)

d) Apply a range of techniques including:

    i) Removal of weeds by hand ensuring that all plant parts which can reproduce are removed and that soils do not become prone to erosion.

    ii) Use of carefully selected herbicide according to label directions and/or current off label permit, ensuring minimal off target damage.

    iii) Use of appropriate control measures as recommended in the Department of Primary Industries Noxious and Environmental Weed Control Handbook 6th Edition 2014 or equivalent replacements for control of weeds, ensuring minimal off target damage.

    iv) Use of forestry mulching or slashing machinery only with prior written permission from DPIE.

    v) Ensure control programs are commenced when timing and extent of weed removal will minimise adverse effects on wildlife (weeds may provide protection or habitat for native fauna). Dense thickets of lantana should be removed gradually in mosaic patterns to minimise disturbance to the habitat of native animals.

    vi) Other weed control methods may only be undertaken with prior written permission of DPIE.

    vii) Contact DPIE if any uncertainty exists regarding weed control methods.

Cultural heritage

e) Recording and management of any newly identified Aboriginal Objects or artefacts, in consultation with DPIE (and the relevant local Aboriginal community where applicable).

Development

f) Carrying out any development as described in the Conservation Agreement and maintaining development (including existing fire trails, access trails and infrastructure), with the following conditions:

i) clear a corridor not greater than 3 metres wide during construction or for maintenance for the installation of fences or other agreed rural structures;

ii) move fallen timber and any other obstructions to maintain access trails, tracks and fences;

iii) where clearing is permitted under the Agreement and necessary, undertake all works in a manner that minimises disturbance to soil and hydrological characteristics.

Fencing, tracks and trails

g) Construction and maintenance of all fences using wildlife friendly materials including plain wire (non-barbed) on top and bottom strands.

h) Construction of any new internal fence, access track or trail only with prior written approval from DPIE.

i) Maintaining existing access walking tracks in the Conservation Area to a maximum width of 2m.

j) Maintaining existing access vehicular trails in the Conservation Area to a maximum width of 4m with 1m either side permissible for clearing.

k) Removal of old fences and closing of unwanted tracks within the Conservation Area and facilitate restoration of indigenous vegetation according to Annexure C Item 3 (points 'n' and 'o' over page).

Fire management (in addition to fire management actions in Item 1 of Annexure C to the Conservation Agreement)

l) Using fire hazard reduction burns and controlled burning which take into account the recommended fire intervals given in the *Bush Fire Environmental Assessment Code for New South Wales* (Rural Fire Service February 2006) and the guidelines contained in the *Threatened Species Hazard Reduction Lists for the Bush Fire Environmental Assessment Code* or equivalent replacements.

Current recommendations are:

PCT	Minimum Interval	Maximum Interval
1330 Yellow Box – Blakely's Red Gum Grassy Woodland on the Tablelands, South Eastern Highlands Bioregion	5	40
1093 Red Stringybark – Brittle Gum – Inland Scribbly Gum, dry open forest of the Tablelands, South Eastern Highlands Bioregion	7	30
Grasslands	2	10

i) Flowering of Hoary sunray (*Leucochrysum albicans* var. *tricolor*) occurs from spring to summer. It is recommended that burns do not occur during this period or within a

minimum of one month following completion of flowering so as not to interfere with seed set.

ii) Box-Gum Woodland CEEC should not be subjected to fires more frequently than once every five years. Slashing is permitted for hazard reduction, however no trittering or tree removal.

iii) wherever possible canopy or crown fires should be avoided.

iv) wherever possible no more than 50% of the Conservation Area should be burnt in any twelve month period.

v) both live and dead trees with hollows should be protected from burning as far as practicable in order to preserve nesting habitat for hollow dwelling animals.

vi) Regenerating/revegetation areas have been classed as grassy woodlands given their expected structural formation over the life of the project. Fire within regenerating/revegetated areas should be excluded for at least 15 years to allow the build up of a soil seed bank.

m) Lighting a fire, or causing a fire to be lit on the Conservation Area if it complies with the *Rural Fires Act 1997* (NSW), and:

i) the lighting of the fire is a necessary component of bush fire hazard reduction work carried out in accordance with a notice served on the Owner under the Rural Fires Act 1997 (NSW) or other applicable legislation; or

ii) life or property is in immediate threat by bush fire and the lighting of the fire is reasonably necessary to protect life or property; or

iii) the fire is a camp fire, subject to the compliance with the Rural Fires Act 1997 (NSW), or

iv) the Chief-Executive gives prior written consent to the lighting of the fire.

Restoration of indigenous vegetation

n) Restoration of native vegetation on the Conservation Area using a preferred method of encouraging and retaining natural regeneration. Preferred methods include:

i) bush regeneration

ii) brush mulching; and/or

iii) direct seeding.

o) Revegetation to establish indigenous plants to maintain the vegetation structure in keeping with the identified vegetation community, using species produced from material sourced locally and without fertilisers, where the ability to regenerate naturally within a reasonable time frame has been lost, or to prevent soil erosion.

Seed collection

p) Collection of seed on the Conservation Area for non-commercial use in accordance with Guidelines and Codes of Practice developed by Florabank (www.florabank.org.au), or subsequent equivalent and with the following limitations and permissions:

i) Collect seed in the Conservation Area only if seed of the particular species and genotype is not available elsewhere, or if the seed collected is intended for seedlings that will be planted within the Conservation Area or adjacent to the Conservation Area.

ii) Seeds may be collected from within endangered ecological communities.

iii) Seeds may not be collected from species individually listed in Schedules 1or 2 to the BC Act without prior written approval from the Chief-Executive, or under a licence granted under section 132C of the NPW Act or Division 3 of the BC Act.

iv) Seeds may be collected from any protected species listed in Schedule 13 to the NPW Act.

v) Seeds may be collected from any other native species.

Thinning of indigenous vegetation

q) Thinning of regenerating indigenous species which are altering the structure of the vegetation in the Conservation Area and/or reducing the Conservation Values only with prior written approval from the Chief-Executive DPIE.

Threatened species

r) Implementing any measures included in recovery plans for any threatened species, population or ecological communities which are or may be found in the Conservation Area.

s) Implementing other specific management advice from DPIE for any threatened species, populations or ecological communities which are or may be found in the Conservation Area.

Visitation and research (in addition to management actions in Items 1 and 2 of Annexure C to the Conservation Agreement)

t) Visitation, research and community use at a level that does not adversely impact on the Conservation Values or the amenity of the Owner. Research projects must be first discussed with DPIE before being carried out.

ANNEXURE D - MONITORING PROGRAM

(a) The Owner must engage a suitably qualified person (such as an ecologist) to undertake a monitoring event in each year, beginning in 2018 (Monitoring Event).

(b) Each Monitoring Event must include:

i) **photo monitoring** – 4 photos are required to be taken at each of the 7 monitoring photo points. Photos must be taken from the exact location and bearing to allow subsequent comparison and assessment. Photo point locations are provided in **Table 1** of Annexure D to the Conservation Agreement (**below**). Baseline photographs are provided in Annexure A to the Conservation Agreement;

ii) **quadrat monitoring** – quadrat data must be collected at each of the 5 floristic quadrat monitoring sites. Quadrat locations are provided in **Table 1** of Annexure D to the Conservation Agreement (**below**). Results must be compared to baseline and benchmark quadrat data which is provided in **Tables 1** and **2** of Annexure D to the Conservation Agreement **below**.

iii) a **walk through assessment** to record opportunistic sightings within the Conservation Area including:

i. fire events or impacts of fire management
ii. weeds (including compiling a list of exotic species and recording new weed infestations including location and extent)
iii. pest animals (species and location must be recorded, including evidence of pest animals such as burrows, scats or disturbance)
iv. visitor impact and vehicle access (including evidence of any recent usage, and the presence of any new access tracks)
v. rubbish dumping
vi. natural regeneration of previously disturbed areas; and
vii. sightings of threatened species.

(c) After each Monitoring Event, the Owner must produce a monitoring report on the Conservation Area by March of each year, beginning in 2018 (Monitoring Report).

The Monitoring Report must include:

i. a description of all completed management actions undertaken in the previous 12 month period;
ii. copies of all receipts from third party contractors engaged by the Owner to undertake management actions listed in items 1 and 2 of Annexure C to the Conservation Agreement;
iii. completed monitoring data sheets (including photographs) using the template provided in **Table 3** of Annexure D to the Conservation Agreement **(below)**;
iv. a discussion of the changes recorded at monitoring points and quadrats;
v. a discussion of the condition of Conservation Values;
vi. a discussion of effectiveness of any management actions implemented; and
vii. recommendations and proposed management actions to be performed in following year(s).

The Monitoring Report must be submitted to DPIE within **21 days** of it being received by the Owner.

(d) The Monitoring Event and the Monitoring Report comprise the monitoring program (Monitoring Program). The Owner must complete the Monitoring Program to the satisfaction of DPIE, for a minimum period of 10 years from the date of the Conservation Agreement.

ANNEXURE D TABLE 1 - MONITORING POINT LOCATIONS AND CORRESPONDING VEGETATION COMMUNITIES REPRESENTED AS AT JUNE 2017

Photo Point	Quadrat N0	Easting/Northing GDA 94 MGA 56		Photo bearing degrees	Vegetation Community Represented
Biometric Plots					
-	**Biometric Plot 1**	0771831	6153851	0º, 90 º, 180º, 270 º	PCT 1093 - Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion *Moderate to Good Condition*
-	**Biometric Plot 2**	0771682	6154105	0º, 90 º, 180º, 270 º	PCT 1093 - Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion *Low Condition Grassland*
-	**Biometric Plot 3**	0771710	6152950	0º, 90 º, 180º, 270 º	PCT 1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion *Moderate to Good Condition*
-	**Biometric Plot 4**	0771834	6152947	0º, 90 º, 180º, 270 º	PCT 1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion *Derived Native Grassland Condition (CEEC)*
-	**Biometric Plot 5**	0772257	6152963	0º, 90 º, 180º, 270 º	PCT 1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion *Low Condition Grassland*
Photo Points					
Photo Point 1	-	0769654	6153932	0º, 90 º, 180º, 270 º	PCT 1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion *Moderate to Good Condition (CEEC)*
Photo Point 2	-	0769738	6153980	0º, 90 º, 180º, 270 º	PCT 1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion *Low Condition Grassland*

ANNEXURE D TABLE 2 – BIOMETRIC VEGETATION TYPE BENCHMARKS AND BASELINE QUADRAT SCORES AS AT JUNE 2017

Photo Point	Quadrat No	Native species richness	Overstorey cover %pfc	Mid-storey cover %pfc	Ground cover – grasses %pfc	Ground cover – shrubs %pfc	Ground cover – other %pfc	Proportion oversotrey regen	Exotic cover	Number of Trees with Hollows	Total length of fallen logs
1093 - Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion											
Benchmark values^		17	28.5-33.5	0-15	1-10	8-12.5	14.5-18.5	NA	NA	1	50
Biometric Plot 1		13	8.9	3.5	8	0	10	0.8	0	7	85
Biometric Plot 2		8	0	0	6	0	4	0.8	100	0	0
1330 - Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion											
Benchmark values^		20	17-27	7.5-12.5	24-30	0-5	12.75-18.75	NA	NA	0	0
Biometric Plot 3		17	4	4.5	76	16	10	0.75	20	1	93
Biometric Plot 4		15	0	0	78	12	16	0.75	4	0	0
Biometric Plot 5		10	0	0	52	0	2	0.75	60	0	1

^Data for the Hawkesbury Nepean CMA as per the Vegetation Information System (VIS) at June 2017.

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number		**Date**	
Vegetation Community			
1. Site Photo(s)Taken			
2. Floristic BioMetric attributes			
Native cover			
Overstorey:			
Midstorey:			
Groundcover(grass):			
Groundcover (shrub):			
Groundcover (other):			
Native species richness:			
Proportion of canopy species regenerating			
Exotic cover			
Number of trees with hollows			
Total length of fallen logs			
3. Opportunistic observations	**GPS coordinates**	**Photo number**	**Observations**
Natural regeneration of disturbed areas			
Threatened species sightings			
Fire event/fuel			
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

_____
Director: Holcim (Australia) Pty Ltd

_____
Secretary: Holcim (Australia) Pty Ltd

_____
Chief Executive

<<End of Agreement to be signed by all parties to the Agreement>>

Appendix D Site maps

PLAN OF CONSERVATION AREA WITHIN LOT 2 DP 1116876 & LOT 3 DP 1140546

PARISH OF MARULAN COUNTY OF ARGYLE

MGA S C C S

MAIN SOUTHERN RAILWAY

CONSERVATION AREA (HATCHED) Abt 73.48 ha

CONSERVATION AREA (HATCHED) Abt 72.21 ha WITHIN LOT 2 DP 1116876
EXCLUSION AREA - Abt 185.49 ha WITHIN LOT 2 DP 1116876
CONSERVATION AREA (HATCHED) Abt 1.27 ha WITHIN LOT 3 DP 1140546
EXCLUSION AREA Abt 0.42 ha WITHIN LOT 3 DP 1140546

3 DP 111640

4 DP 1140546

2 DP 1116876

3 DP 1140546

EASEMENTS FOR ACCESS & ELECTRICITY

1 DP 1116876

3 DP 1074107

73.48 ha

94°50' 55.9
630.6
191°24' 323.88
11°24'
100°20' 336.34
73°42'
765.7
112°23' 196.42
60.21 194°10'
120°59' 206.91
157.02 199°57'
131°00' 176.33
168°52' 185.39
95.98 191°35'
281°35'30"
1599.86
281°24' 20.115

1 DP 818813

I, Andrew A Nesbitt of Southern Cross Consulting Surveyors (Ph 4822 1366) a surveyor registered under the Surveying & Spatial Information Act 2002, hereby certify that the survey represented on this plan was made in accordance with Cl 9 of the Surveying & Spatial InformationRegulation 2012.

REF - 23722-2019 Registered Surveyor 6/3/20

Plans used in preparation of survey / ~~compilation~~
DP 1208430 DP 758653 DP 1111583

METHOD OF SURVEY

Static & RTK GNSS Obs
Accuracy +/- 0.2m

0 250 500
METRES

PLAN OF CONSERVATION AREA WITHIN LOT 3 DP 1107232

PARISH OF BILLYRAMBIJA COUNTY OF ARGYLE

CONSERVATION AREA (HATCHED) Abt 47.32ha
EXCLUSION AREA Abt 300.88ha

3
DP 1107232

55
DP 1141136

55
DP 1141136

3
DP 1140546

2
DP 1116876

1
DP 818813

54
DP 1141136

3
DP 1095572

109°45'
18.07

165°03'
216.49

677.5

63.06
191°24'

144°43'
292.59

102°39'
155.59

104°36'
164.12

39°33'
92.73

67°24'
120.5

57°36'
98.15

34°12'
156.21

59°06'
88.59

52°41'
179.04

33°20'
124.59

94°50'
55.9

849.1

191°24'

279°53'

1156

7°03'

47.32 ha

R

R

R

R - DENOTES ROAD 20·115 WIDE

0 250 500 METRES

I, Andrew A Nesbitt of Southern Cross Consulting Surveyors (Ph 4822 1366) a surveyor registered under the Surveying & Spatial Information Act 2002, hereby certify that the survey represented on this plan was made in accordance with Cl 9 of the Surveying & Spatial Information Regulation 2017.

Registered Surveyor 6/3/20

REF - 23722

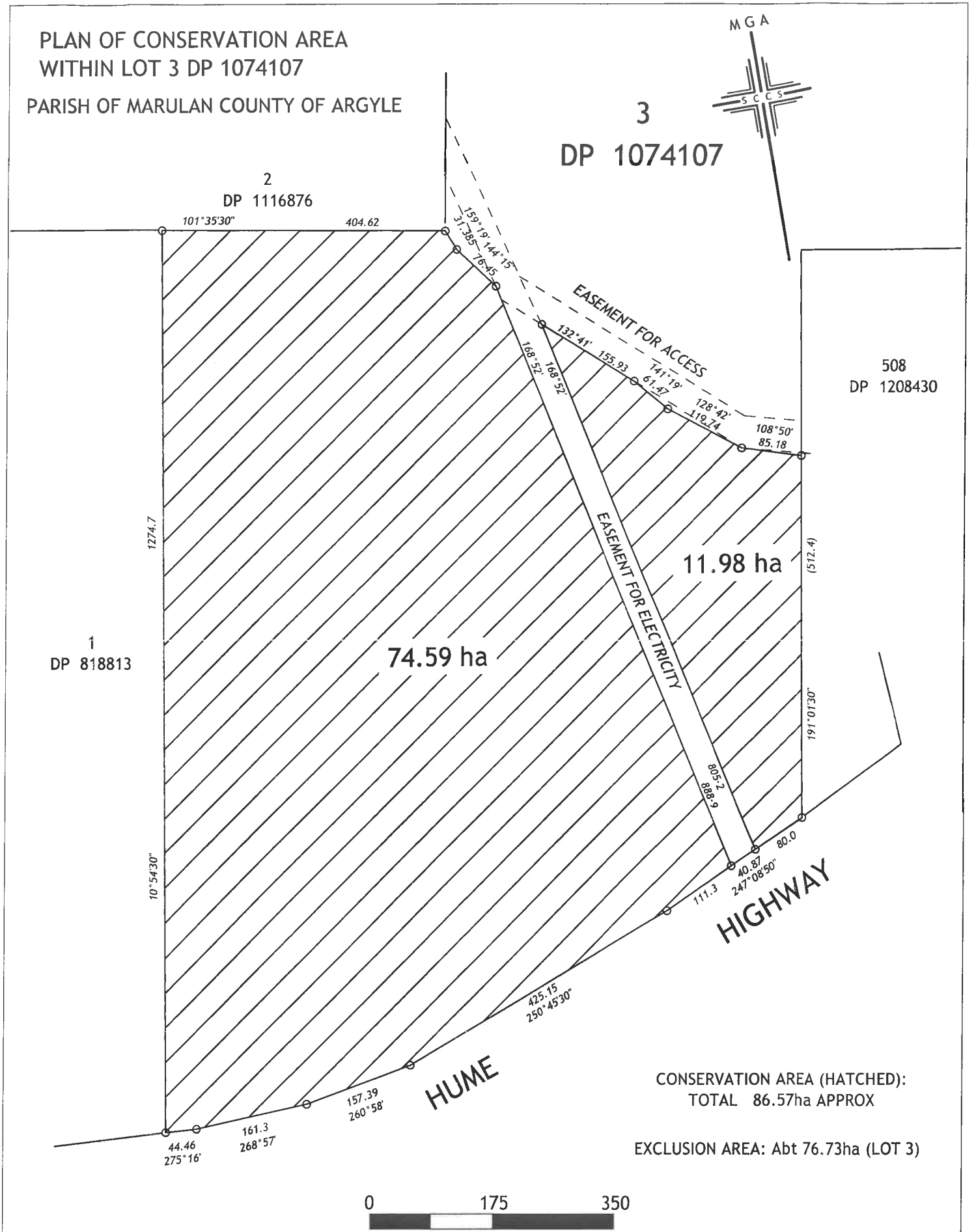
Plans used in preparation of survey
DP 1107232

METHOD OF SURVEY

Static & RTK GNSS Obs
Accuracy +/- 0.2m

PLAN OF CONSERVATION AREA WITHIN LOT 3 DP 1074107

PARISH OF MARULAN COUNTY OF ARGYLE



CONSERVATION AREA (HATCHED):
TOTAL 86.57ha APPROX

EXCLUSION AREA: Abt 76.73ha (LOT 3)

0 175 350

I, Andrew A Nesbitt of Southern Cross Consulting Surveyors (Ph 4822 1366) a surveyor registered under the Surveying & Spatial Information Act 2002, hereby certify that the survey represented on this plan was made in accordance with Cl 9 of the Surveying & Spatial InformationRegulation 2012.

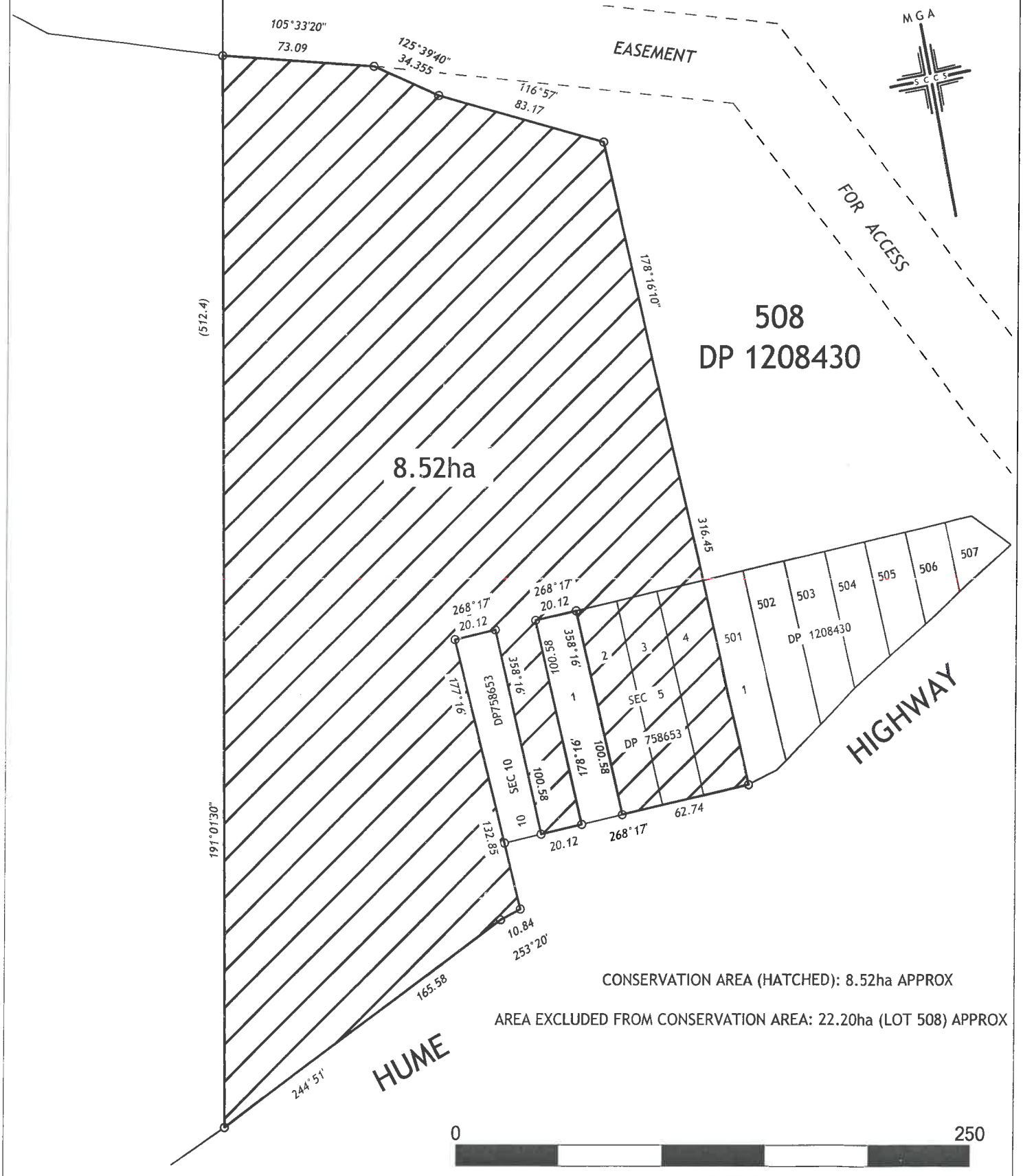
REF - 23722-2019 Registered Surveyor 6/3/20

Plans used in preparation of survey / ~~compilation~~
DP 1074107

METHOD OF SURVEY

Static & RK GNSS Obs
Accuracy +/- 0.2m

PLAN OF CONSERVATION AREA
OVER LOTS 2-4 SEC5 DP 758653 & PART LOT 508 DP 1208430
PARISH OF MARULAN COUNTY OF ARGYLE



CONSERVATION AREA (HATCHED): 8.52ha APPROX

AREA EXCLUDED FROM CONSERVATION AREA: 22.20ha (LOT 508) APPROX

I, Andrew A Nesbitt of Southern Cross Consulting Surveyors (Ph 4822 1366) a surveyor registered under the Surveying & Spatial Information Act 2002, hereby certify that the survey represented on this plan was made in accordance with Cl 9 of the Surveying & Spatial InformationRegulation 2012.	*Plans used in preparation of survey / ~~compliation~~* *DP 1208430 DP 758653 DP 1111583*	
	METHOD OF SURVEY *Static & RK GNSS Obs* *Accuracy +/- 0.2m*	
REF - 23722-2020 *Registered Surveyor 6/3/20*		

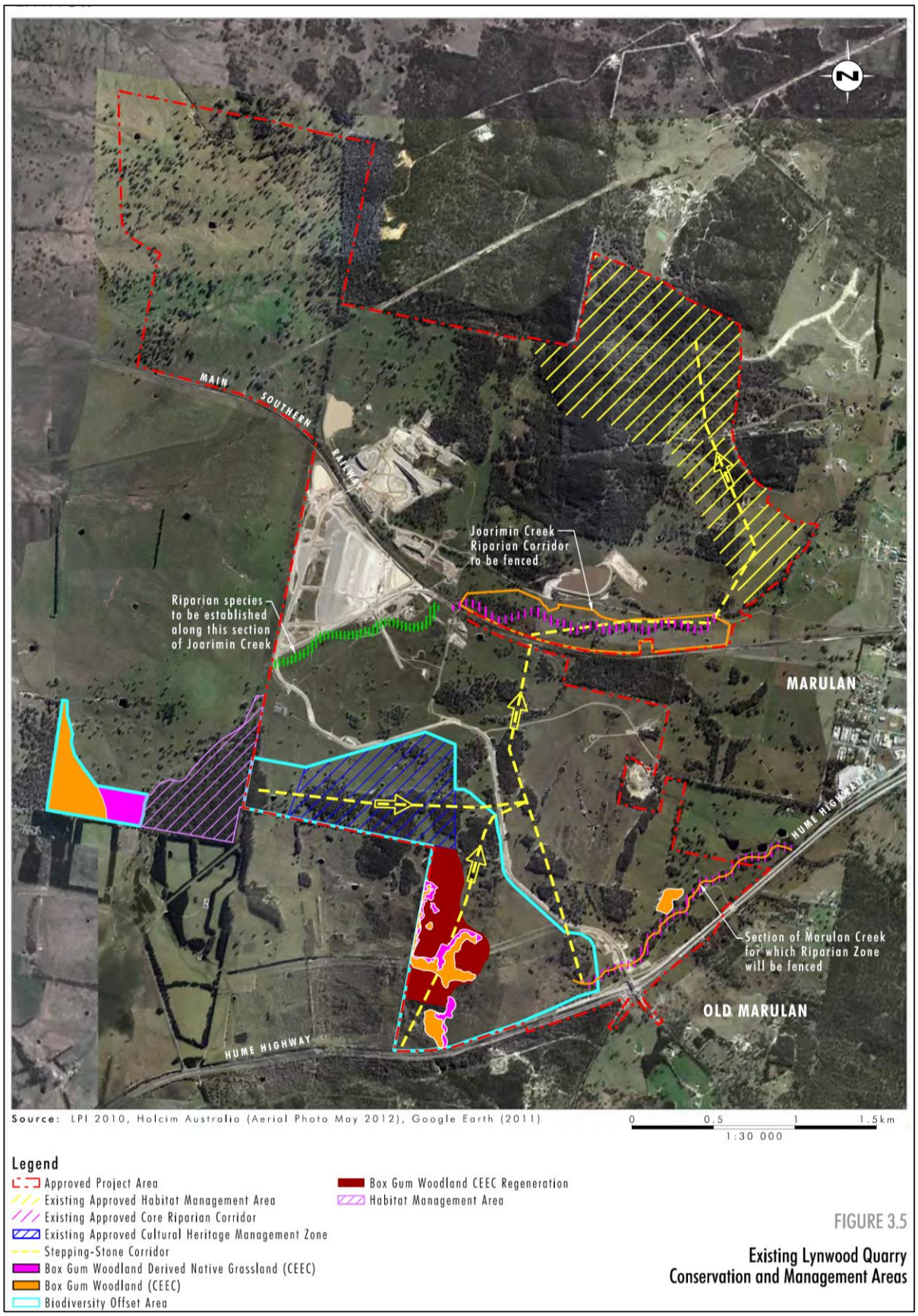
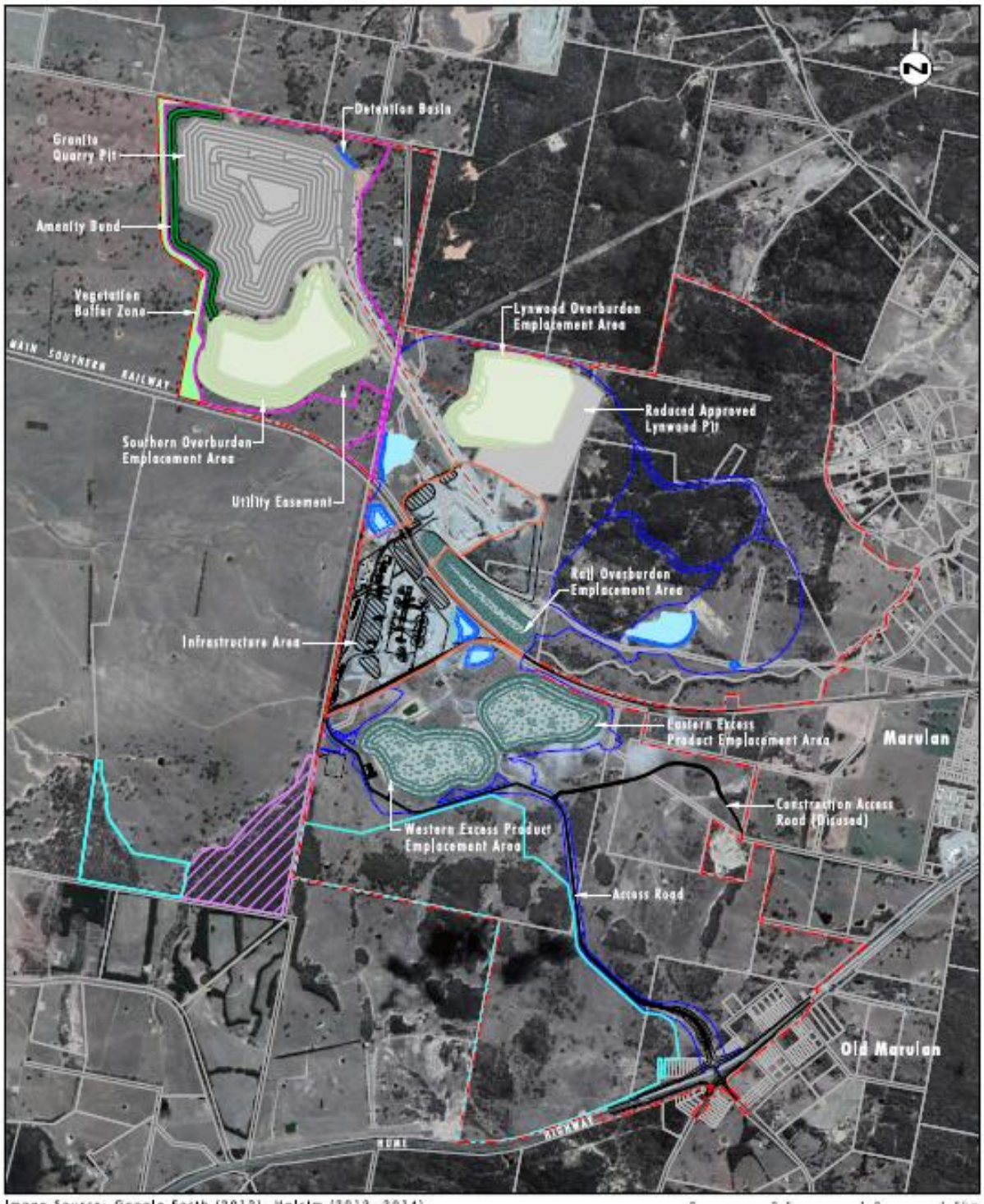


FIGURE 3.5

Existing Lynwood Quarry Conservation and Management Areas



File Name (A4): 801/4572_001.dgn
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FIGURE 1

Overview of Operations

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