Government of Western Australia
Department of Water and Environmental Regulation

# Decision Report

## Application for Licence

**Part V Division 3 of the *Environmental Protection Act 1986***

| | |
|---|---|
| **Licence Number** | L9427/2024/1 |
| **Applicant** | B & J Catalano Pty Ltd |
| **ACN** | 008 961 975 |
| **File number** | DWER2024/000039 |
| **Premises** | Lot 32 Burnett Road,<br>YARAWINDAH WA 6509<br>A part of Lot 32 on Deposited Plan 419500<br>Certificate of Title Volume 4009 Folio 938<br>As defined by the Premises Boundary Map in Schedule 1 of the licence |
| **Date of report** | 19 June 2024 |
| **Decision** | Licence granted |

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# 1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the operation of the premises. As a result of this assessment, licence L9427/2024/1 has been granted.

# 2. Scope of assessment

## 2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

## 2.2 Application summary and overview of premises

On 23 January 2024, the applicant submitted an application for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application is to seek a licence relating to Category 12 crushing and screening activities authorised under works approval W6784/2023/1. The premises is located approximately 13 km west of the township Mogumber, about 100 km north of Perth.

The premises relates to the Category 12 and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L9427/2024/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in licence L9427/2024/1.

The proposal involves extracting gravel from a 38 hectare area which has previously been mined, with 3.7 ha left unmined to avoid any clearing of native vegetation. The premises is situated within a farm in the wheatbelt region, surrounded by agricultural land and patches of remnant vegetation. The applicant has estimated that 250,000 tonnes of gravel will be crushed per year, with a total of approximately 1.4 million tonnes of the resource crushed over the estimated 10-year lifespan of the pit.

The applicant holds an Extractive Industry Licence (EIL) for Lot 32 on Deposited Plan 419500, granted by the Shire of Victoria Plains on 30 November 2022. Operations will include the removal and stockpiling of topsoil and overburden, and the extraction, crushing, and screening of material.

The applicant has also obtained development approval from the Shire of Victoria Plains on 30 November 2022. Conditions relate mostly to transportation and road use and is valid for two years.

Excavation activities will result in the lowering of ground level by approximately 3 m. Topsoil and overburden will be removed from the extraction area in a staged manner and stockpiled separately along the edges of the extraction area. These piles will be no higher than 2 m and strategically placed to aid in reducing noise and additionally serve as stormwater and visual barriers.

Rehabilitation and stormwater management measures will be implemented and post operation, the premises will be returned to agricultural use.

# 3. Review of Black Cockatoo Habitat Assessment

Conditions 9 and 10 of works approval W6784/2023/1 requested the applicant conduct a black cockatoo habitat assessment during Time-Limited Operations (TLO). This black cockatoo habitat assessment (Harewood 2023) aimed to determine the use of remnant vegetation by black cockatoos within a 50 m radius of the proposed operations. The 50 m buffer area primarily comprises grassland

with small fragments of wandoo woodland and slightly higher densities of marri trees.

The assessment identified a small number of ‘habitat trees within the 38 hectare EIL area, none of which were observed to contain hollows of a size considered suitable for black cockatoos to use for nesting purposes. A total of 14 marri trees with a diameter at breast height of ≥50cm were identified within the 50 m buffer. Two of the larger marri trees were found to have hollows suitable for black cockatoo nesting and both showed evidence of use (Figure 1). However, it was uncertain whether these observations (chew/wear marks around the hollow entrance) were a result of actual black cockatoo nesting activity.

Observations indicating the presence and foraging of black cockatoos was also evident due to a number of chewed marri fruit, found at a couple of locations across the site. Overall, the extent of quality foraging habitat present within the EIL area was limited to the relatively small number of marri trees present. The 50 m buffer area also contains some foraging habitat, however the report concluded that it was generally low quality given the dominance of wandoo. No evidence of black cockatoo roosting within or near the EIL was observed.


**Figure 1 Location of 50 m buffer and habitat trees for Black Cockatoos**

# 4. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

## 4.1 Source-pathways and receptors

### 4.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

**Table 1: Proposed applicant controls**

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| **Operation** | | | |
| Dust | Operation of mobile screening plant<br>Crushed material stockpiles | Air / windborne pathway | Implementation of a dust management plan. Controls listed in the plan include:<br>• Water cart will be located on site during periods when material is being moved or crushed.<br>• Loads will be dampened prior to loading/unloading<br>• If high winds and conditions are dusty, operations will cease until such time as adequate wetting down has occurred or conditions have changed.<br>• Stockpiles to be located where lift-off from prevailing wind is minimised. If necessary, stockpiles will be sprayed or treated with polymer binders.<br>• A 20 kmph speed limit will be imposed on internal roads.<br>• Truck loads will be covered.<br>• Employee and contractor education around dust management.<br>• Visual monitoring will be undertaken to confirm dust management measures are effectively maintain dust emissions at acceptable levels |
| Noise | Operation of mobile screening plant | Air / windborne pathway | • Hours of operations to be restricted between 6:30am and 6pm on weekdays, excluding public holidays and between 6am and 12pm on Saturdays.<br>• Late model equipment will be utilised with reduced noise level outputs<br>• The crushing and screening plant in each extraction stage will be positioned such |

| Emission | Sources | Potential pathways | Proposed controls |
|---|---|---|---|
| | | | that the product stockpiles will provide noise attenuation and be situated as far as practical from noise sensitive premises.<br>• Machine reverse alarms will be lower frequency output units |
| Discharge of contaminants to land (e.g. hydrocarbon spills) | Hydrocarbon storage, spills and leaks from plant | Spills/leaks of hydrocarbons | • No fuel or lubricant storage will occur on site.<br>• No major servicing to occur on site.<br>• B&J Catalano have a safety practice document for Hydrocarbon Spill Response which outlines procedures for employees in the event of any hydrocarbon spills. This includes:<br>○ Action required when a spill is identified (isolate spill, identify spill, identify hazards etc)<br>○ Techniques to restrict the extent of the contamination<br>○ Techniques to collect spilled hydrocarbon<br>○ Techniques to treat soils contaminated by hydrocarbon |
| Sediment laden stormwater | Stormwater runoff from stockpiles during high rainfall events | Overland runoff | Implementation of a water management plan which includes the following controls:<br>• Nine surface water management areas (sub-catchments) have been defined around the extraction areas. These areas largely follow the extraction stage boundaries.<br>• Stormwater detention ponds and contour bunds will have capacity to hold at least a 2hr 10% Annual Exceedance Probability (AEP) storm event.<br>• Runoff from areas outside the defined sub-catchments will be diverted using diversion (cut-off) bunds. Diversion bunds will be used in addition to contour bunds to prevent runoff entering into mined areas and to help direct surface water flow towards detention ponds.<br>• As each extraction stage is opened, stormwater detention ponds will be excavated below the workings (but within the extraction area) with the capacity to hold at least the 2hr 10% AEP storm event. Each sub-catchment will have one pond each. |

### 4.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors from its assessment. Protection of these

parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 2 and

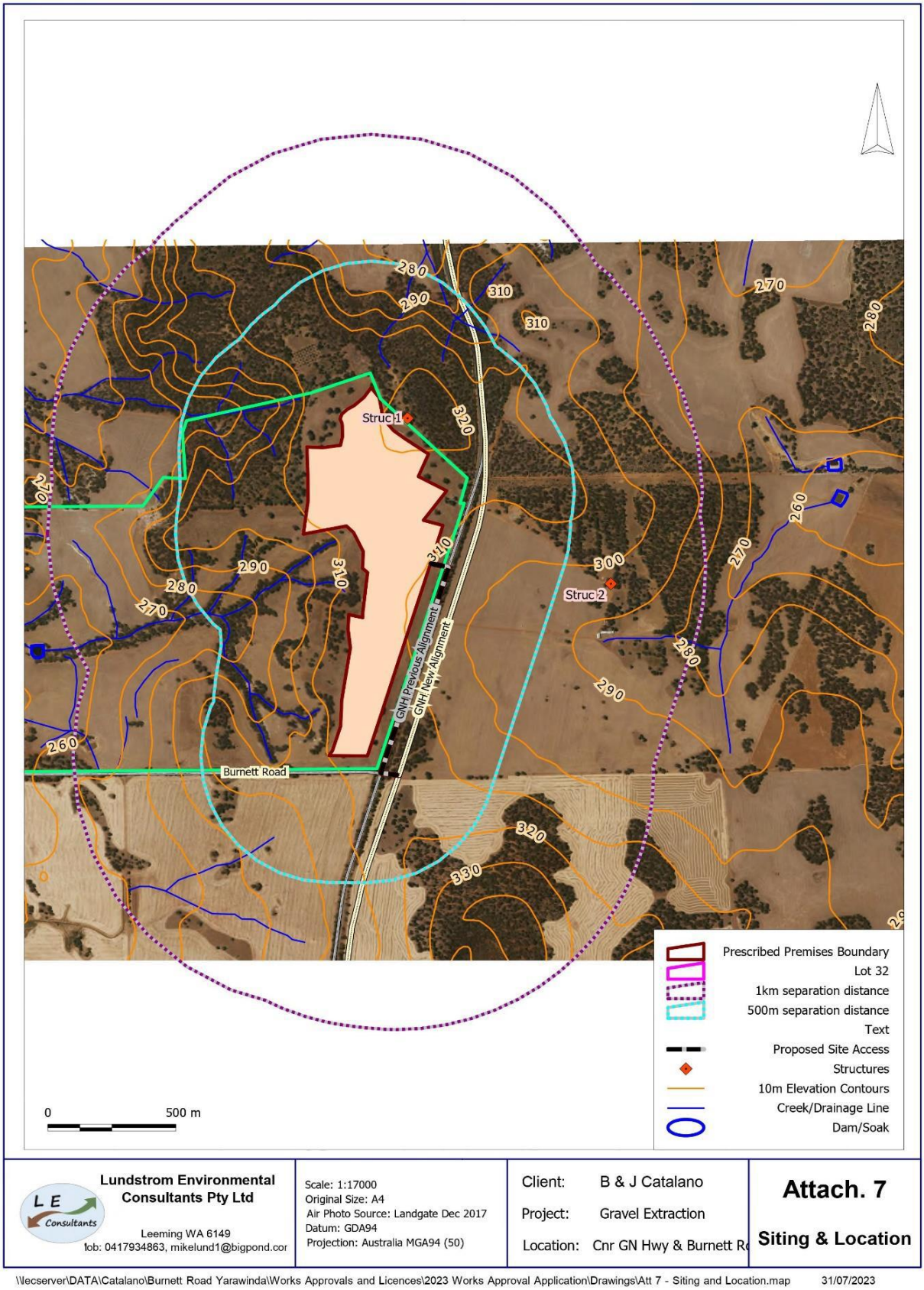

Figure 2 Distance to sensitive receptors below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental Siting* (DWER 2020)).

**Table 2: Sensitive human and environmental receptors and distance from prescribed activity**

| **Human receptors** | **Distance from prescribed activity** |
|---|---|
| Closest residential receptor | No residential receptors withing 1 km of the premises boundary and therefore no residential receptors have been identified.<br>Notes on the structures marked on Figure 2:<br>• Structure 2 located 730 m to the east of the premises boundary – confirmed during works approval W6784/2023/1 assessment to be an unoccupied old donga<br>• Structure 3 located 1,250 m to the west of the premises boundary (confirmed during works approval W6784/2023/1 assessment as not occupied)<br>• Structure 1 is a derelict building |
| **Environmental receptors** | **Distance from prescribed activity** |
| Surface waters | Drainage lines about 300 m west of the premises appear to discharge into Yarawindah Brook, which is about 2.8 km west of premises |
| Threatened fauna – Carnaby Cockatoo | Potential foraging and habitat trees with hollows located within 50 m buffer around premises boundary<br>Potential foraging trees within premises boundary |
| Threatened and/or priority flora – priority 3 and 4 flora | Within 375 m of the premises |

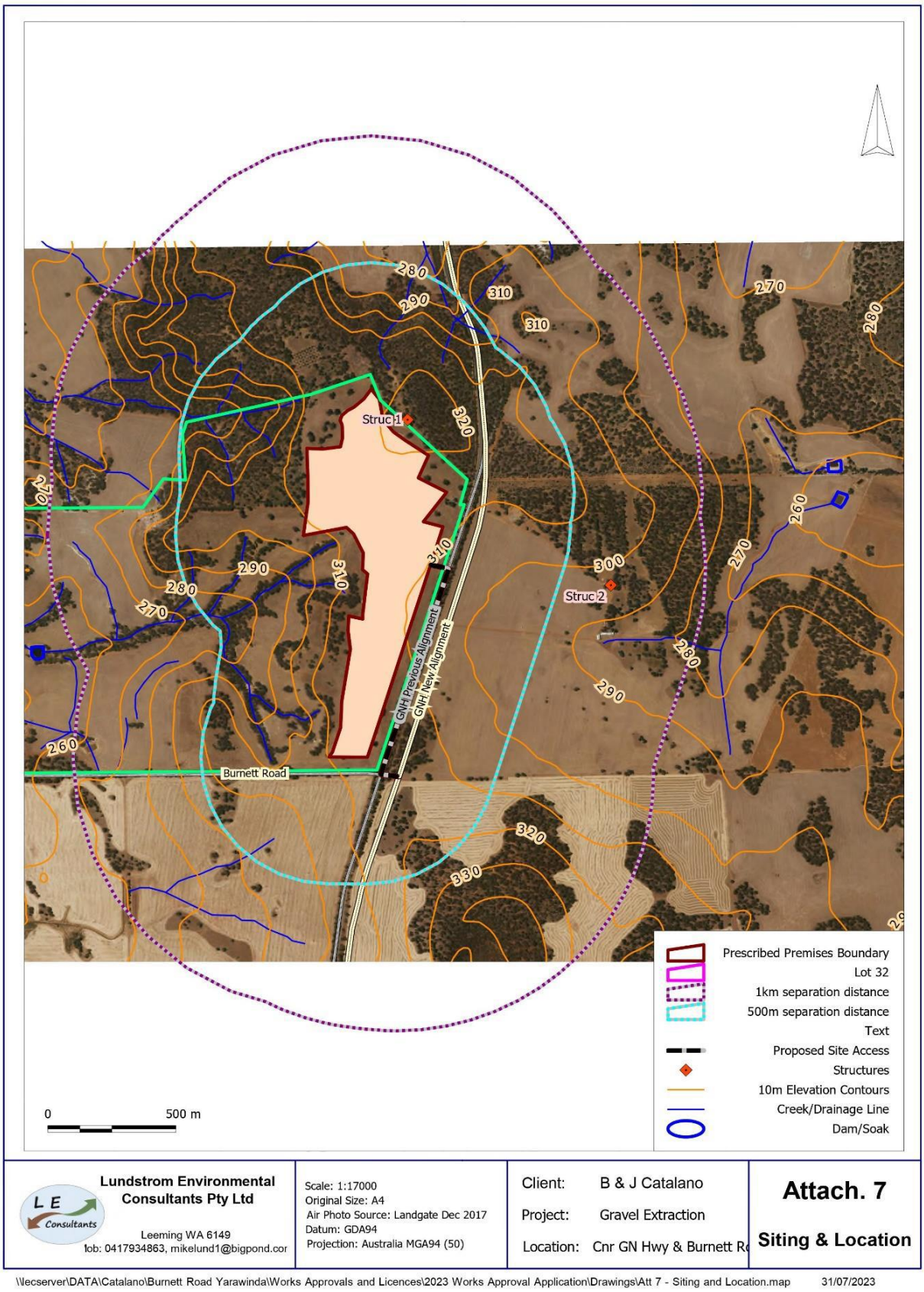


**Figure 2 Distance to sensitive receptors**

Note: Structure 1 is a derelict building

## 4.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and considers potential source-pathway and receptor linkages as identified in Section 4.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 4.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Licence L9427/2024/1 that accompanies this decision report authorises emissions associated with the operation of the premises i.e. Category 12 crushing and screening activities.

The conditions in the issued licence, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

## Table 3: Risk assessment of potential emissions and discharges from the premises during operation

| Risk events | | | | | Risk rating [1] C = consequence L = likelihood | Applicant controls sufficient? | Conditions [2] of licence | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| **Sources / activities** | **Potential emission** | **Potential pathways and impact** | **Receptors** | **Applicant controls** | | | | |
| ***Operation*** | | | | | | | | |
| Operation of crushing and screening plant<br>Stockpiling of material | Dust | Air / windborne pathway causing impacts to health and amenity | Carnaby cockatoos (potential foraging and nesting habitat within and surrounding premises boundary)<br><br>Conservation significant flora about 375 m from premises boundary | Refer to Section 3.1 | C = Minor<br>L = Possible<br>**Medium Risk** | Y | **Condition 1 – Infrastructure operational requirements (50 m buffer around trees with hollows suitable for cockatoos)** | Given the proximity to potential cockatoo breeding habitat, the Delegated Officer has determined to set a 50 m exclusion buffer around trees identified as having hollows suitable for cockatoo breeding has been specified in the licence. No crushing and screening is to take place within this buffer to mitigate potential impacts of dust on the identified receptors. |
| | Noise | Air / windborne pathway causing impacts to health and amenity | Carnaby cockatoos (potential foraging and nesting habitat within and surrounding premises boundary) | Refer to Section 3.1 | C = Moderate<br>L = Possible<br>**Medium Risk** | Y | Condition 2 – Noise emissions requirements<br>**Condition 1 – Infrastructure operational requirements (50 m buffer around tree's with hollows suitable for cockatoos)** | The Delegated Officer has determined operation times will be restricted to between 0700 and 1800 Monday to Friday (as opposed to the proposed 0630 to 1800) and between 0700 and 1200 on Saturdays, in line with the *Environmental Protection Noise Regulations 1987*.<br>The Delegated Officer is satisfied with the Cockatoo Habitat Assessment compiled on behalf of the applicant to adhere to conditions 9 and 10 of the works approval W6784/2023/1. To ensure the risk of noise from the crusher impacting cockatoos is reduced to an acceptable level, a buffer of 50 m is to be maintained between location of crushing and screening plant and any tree containing a potential black cockatoo nest hollow.<br>The Delegated Officer notes that where avoidance of threatened fauna is not possible, the applicant should be advised that Ministerial Authorisation provided under delegation by DBCA to 'take or disturb' specially protected species under Section 40 of the BC Act is required. |
| | Sediment laden stormwater | Overland runoff potentially causing ecosystem disturbance or impacting | Surface water drainage channels about 300 m west of premises boundary that drain to Yarawindah Brook | Refer to Section 3.1 | C = Minor<br>L = Unlikely<br>**Medium Risk** | Y | Condition 1 – Infrastructure operational requirements | The Delegated Officer is satisfied the applicant controls are sufficient to prevent contaminated stormwater from entering the environment.<br>No additional regulatory controls are required.<br>The Delegated Officer notes that the detention ponds are likely to be used by black cockatoos |

| Risk events | | | | | Risk rating [1] C = consequence L = likelihood | Applicant controls sufficient? | Conditions [2] of licence | Justification for additional regulatory controls |
|---|---|---|---|---|---|---|---|---|
| **Sources / activities** | **Potential emission** | **Potential pathways and impact** | **Receptors** | **Applicant controls** | | | | |
| | | surface water quality | 2.8 km west of premises | | | | | should they hold water at any time. It is therefore recommended that appropriate mitigation measures should be considered by the licence holder, including but not limited to, mitigation of bird strikes, and the appropriate containment and management of hydrocarbons and other potential contaminants on site.<br>The Delegated Officer considers the licence holder proposed controls, general provisions of the EP Act and *Unauthorised Discharge Regulations* are sufficient to mitigate the potential contamination of detention pond water. |

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2020).

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

# 5. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

**Table 4: Consultation**

| Consultation method | Comments received | Department response |
|---|---|---|
| Application advertised on the department's website on 28 March 2024 | No comments received | N/A |
| Local Government Authority advised of proposal on 28 March 2024 | Response received 4 April 2024 – no objections | N/A |
| Resident was advised of proposal on 28 March 2024 | No comments received | N/A |
| Applicant was provided with draft documents on 30 May 2024 | The applicant provided the following comments on 6 June 2024.<br><br>"We would like the condition for the installation for the detention ponds to be removed from the licence as explained in the accepted Works Approval Compliance report and also the licence application.<br><br>The natural features of the site, combined with our strategic planning, ensure effective stormwater containment and infiltration within our working area without the need for construction of detention ponds." | The proposed changes have been accepted by the Delegated Officer based on the justification provided.<br><br>The works approval W6784/2023/1 compliance assessment determined that the detention ponds had not been constructed but that no further action was required, given the works approval holder has demonstrated stormwater runoff could be managed adequately and the exclusion of the detention ponds will not change the risk rating. |

# 6. Conclusion

Based on the assessment in this decision report, the Delegated Officer has determined that a licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

# References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. Harewood, G. 2023, *Black Cockatoo Habitat Assessment,* Bunbury, Western Australia.