Government of Western Australia
Department of Water and Environmental Regulation

Decision Report

Application for Works Approval

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

Works Approval Number	W6849/2023/1
Applicant	B&J Catalano
ACN	008961975
File number	DER2023/000584
Premises	B&J Catalano, Yornup South Western Highway, Yornup Legal description Lot 1910 on Deposited Plan Volume 1097 Folio 9494 As defined by the premises maps attached to the issued works approval.
Date of report	20 March 2024
Decision	Works approval 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 construction and operation of the premises. As a result of this assessment, works approval W6849/2023/1 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 7 September 2023, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works relating to Category 12 (screening etc. of materials) at the premises. The premises is approximately 8 km south of Bridgetown Western Australia.

The premises relates to the category and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6849/2023/1. 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 works approval W6849/2023/1.

The proposal involves gravel extraction from 19.7 ha to occur in four approximately equal stages of approximately 4.925ha. Up to 45,000 tonnes of gravel will be crushed and screened per year, with a lifespan of the premises to be up to 5 years.

Extractive operations within the stages will include topsoil removal, ripping blading, gravel, truck loading of gravel and rehabilitation of the extraction area. Stripped topsoil from each stage will be placed in windrows along the edges for noise, stormwater and visual barriers.

A bulldozer will rip the laterite and then blade it into the crusher sites until a large accumulated. It is anticipated that the ripping and blading phase of the operation approximately one week per each stage.

Once all the raw material has been stockpiled, a crusher, screener and stacker unit will be deployed for a period of approximately four weeks per year. At the end of this period all material will be processed and ready for use. Trucks, as required will enter and cart material out of the site. After extraction, the land surface will be approximately 1m lower than the original which will be at a maximum gradient of 1:6.

The first stage of rehabilitation is topsoil replacement and contour ripping. This will be after completion of extraction in each stage. The final land surface will be approximately 1m below ground level.

Rehabilitation will be done in progressive stages over the life of the extraction. The site will be returned to its former land use of agriculture.

The applicant applied for and received development approval from the Shire of Bridgetown-Greenbushes, on 26 July 2023. Conditions relate mostly to excavation setbacks, transportation and road use and is valid for five years.

3. 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.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction / 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
Construction			
Dust	Installation of mobile crushing and screening plant. Site establishment works. Construction of water detention ponds. Vehicle movements.	Air / windborne pathway	Implementation of a dust management plan. Controls listed in the plan include the following: • A water cart will be on site during periods when the internal access road is being constructed, material is being moved or crushing is being conducted. • Activities will cease during high winds. • A speed limit of 25km / hour will be applied on all internal roads. • Visual dust monitoring will be undertaken to confirm dust management measures are effectively managing dust emissions at an acceptable level.
Noise	Crushing and screening of material	Air / windborne pathway	• Hours of operation to be restricted to 6:30am and 6:00pm on weekdays, excluding public holidays, and between 6am and 12pm on Saturdays. • Late model equipment will be utilised with reduced noise level outputs. • The crushing and screening plant in each extraction stage will be positioned such that the product stockpiles will provide noise attenuation and be situation as far as practical from noise sensitive premises. • Machine reverse alarms will be lower

Emission	Sources	Potential pathways	Proposed controls
			frequency output units.
Operation			
Dust	Screening, crushing, unloading, loading and storage of material Vehicle movements	Air / windborne pathway	Implementation of a Dust Management Plan. Controls listed in the plan include the following: • A water cart will be on site during periods when the internal access road is being constructed, material is being moved or crushing is being conducted. • Activities will cease during high winds. • Stockpiles will be located where lift-off from prevailing wind is minimised. If necessary, stockpiles will be treated with sprays or polymer binders. • A speed limit of 25km / hour will be applied on all internal roads. • Truck loads will be covered to prevent dust generation in transit. • Visual dust monitoring will be undertaken to confirm dust management measures are effectively managing dust emissions at an acceptable level.
Noise	Operation of the crushing and screening plant, unloading, loading and storage of material Vehicle movements.	Air / windborne pathway	• Hours of operation to be restricted to 6:30am and 6:00pm on weekdays, excluding public holidays, and between 6am and 12pm on Saturdays. • Late model equipment will be utilised with reduced noise level outputs. • The crushing and screening plant in each extraction stage will be positioned such that the product stockpiles will provide noise attenuation and be situation as far as practical from noise sensitive premises. • Machine reverse alarms will be lower frequency output units.
Discharge of contaminants to land (e.g. hydrocarbon spills).	Operation of the crushing and screening plant, unloading, loading and storage of material Vehicle movements.	Overland and stockpile runoff during high rainfall events.	• No fuel or lubricant to be stored on site. • No major servicing to occur on site. • B&J Catalano have a safety practice document for Hydrocarbon Spill Management Plan for any spill response. This includes: o Action required where a spill is

Emission	Sources	Potential pathways	Proposed controls
			identified (isolate spill, identify spill, identify hazards etc). ○ Techniques to restrict the extent of the contamination. ○ Techniques to collect spilled hydrocarbon. ○ Techniques to treat soils contaminated by hydrocarbon. ○ Reporting requirements in regard to hydrocarbon spills.
Sediment laden stormwater	Operation of the crushing and screening plant. Stockpiling of material.	Overland and stockpile runoff during high rainfall events.	Implementation of a Water Management Plan. Controls include: • Stormwater detention ponds with the capacity to hold at least 2hr 10% Annual Exceedance Probability (AEP) storm event. • Diversion (cut-off) bunds will be formed along parts of the northern and southern boundaries of each stage to prevent runoff entering into mined areas. Diversion bunds will also be formed along the east edges of all stages to help direct surface water flow towards detention ponds and prevent uncontrolled flow of surface water from mined areas to nearby streams. • As each extraction stage is opened, stormwater detention ponds will be excavated below the workings with the capacity to hold at least 2hr 10% AEP storm event. Each sub-catchment will have one pond each. The ponds are shown in Figure 1: Stormwater Management. • Regular monitoring of the erosion control measures will be undertaken, and repairs implemented where necessary through the licence period.

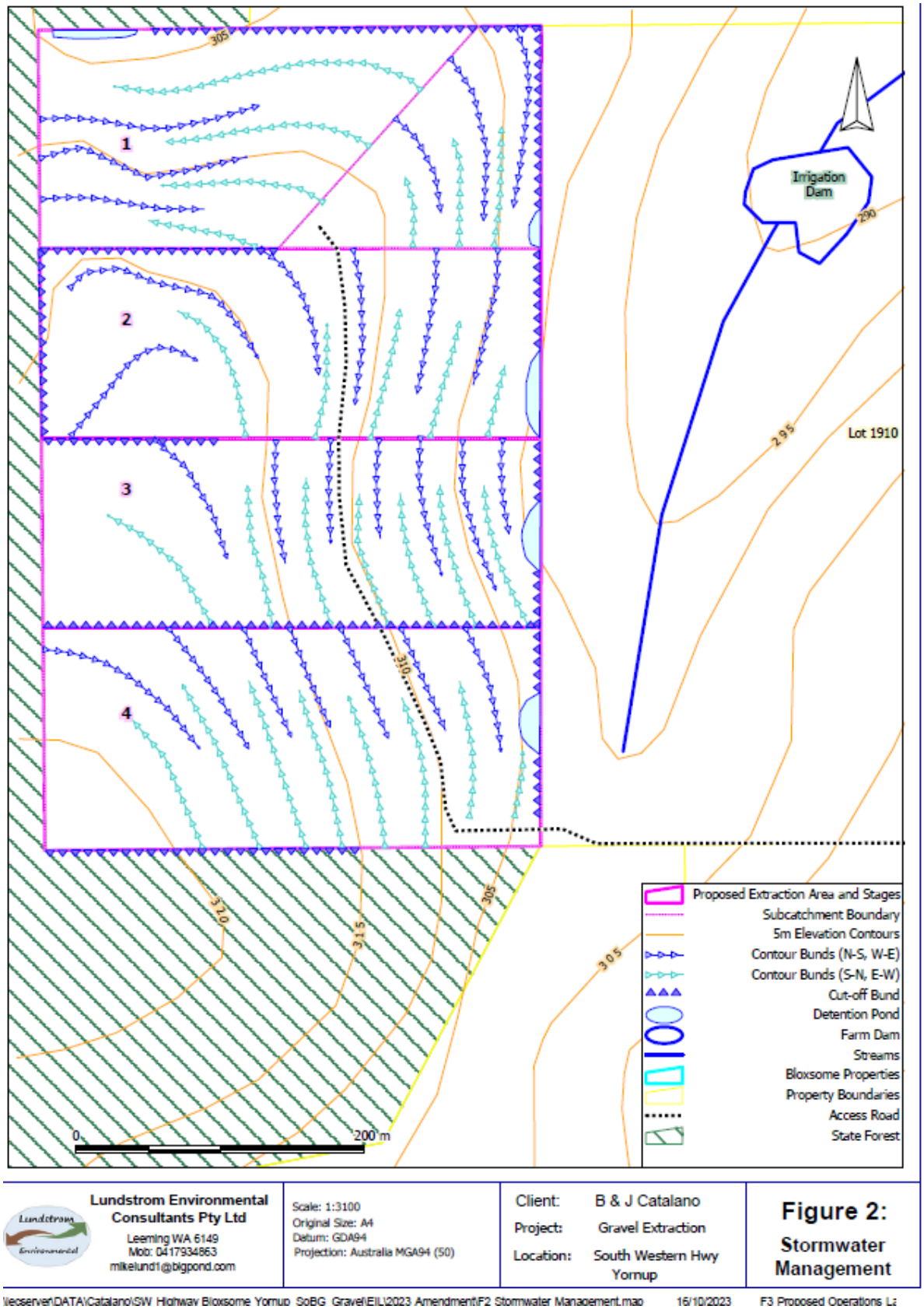

Figure 1: Stormwater Management

3.1.2 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 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**
3 residential premises Residential premises: • 25330 South Western Highway, Yornup 6256 (1.6 km east of PP boundary) • 25328 South Western Highway, Yornup, 6256 (1.5 km easth of PP boundary) • 25328 South Western Highway Yournup, 6256	Between 1.5 and 2 km from the premises boundary
Native Title: South West Settlement South West Boojarah #2 Indigenous Land Use Agreement	Within premises boundary
Environmental receptors	**Distance from prescribed activity**
DBCA legislated tenure: Yornup State Forest	The premises boundary is immediately adjacent to the State Forest.
Phascogale tapoatafa wambenger	1.2 km south west of the premises boundary
Designated Area: Drinking water source area	1.39 km south of the premises boundary
RIWI Act Donnelly River System	1.39 km south of the premises boundary
Clearing Regulations Schedule One Areas	Within premises boundary
WRIMS – Aquifers	Within premises boundary

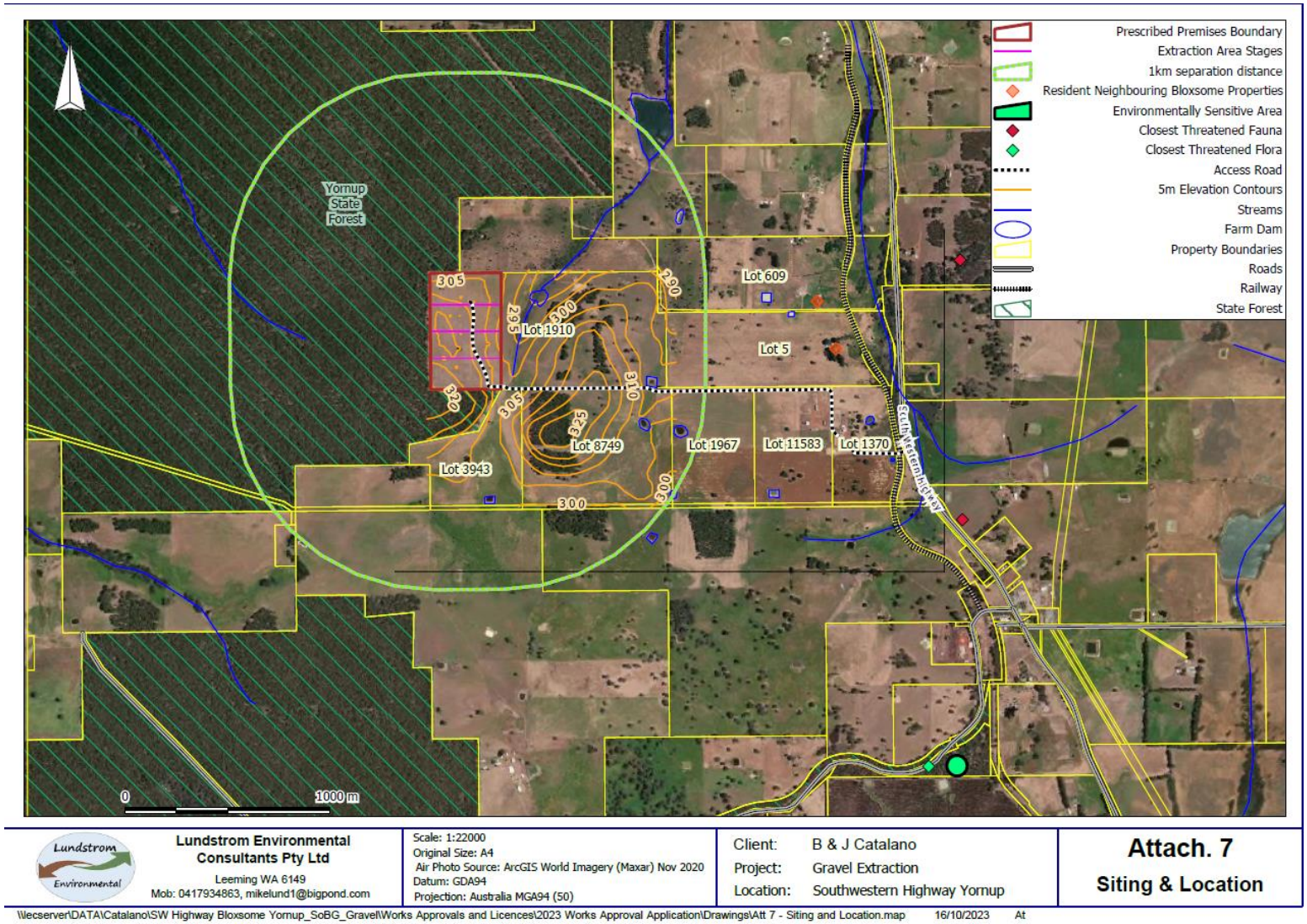

Figure 2: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. 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 3.1), 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 works approval 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.

Works approval W6849/2023/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises i.e. crushing and screening activities. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3: Risk assessment of potential emissions and discharges from the premises during construction, commissioning and operation

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Placement of crusher/screen units and associated equipment including vehicle movements (reversing beepers). Construction of diversion bunds and detention ponds	Dust	Air / windborne pathway causing impacts to health and amenity	Nearest residence 1.5 km east Yornup state forest immediately east of the premises boundary.	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	*Y*	Condition 1 – Infrastructure construction requirements	The Delegated Officer considers the proposed controls by the applicant to be sufficient to manage dust emissions from impacting nearby sensitive receptors. Additional regulatory controls are not required.
	Noise			Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	Condition 1 – Infrastructure construction requirements	The Delegated Officer considers the proposed controls by the applicant to be sufficient to manage noise emissions impacting nearby sensitive receptors. Minimal noise impacts are expected due to the short-term construction phase.
Operation (including time-limited-operations operations)								
Screening, crushing, unloading, loading and storage of material Vehicle movements	Dust	Air / windborne pathway causing impacts to health and amenity	Nearest residence 1.5 km east Yornup state forest immediately east of the premises boundary.	Refer to Section 3.1	C = Minor L = Possible **Medium Risk**	Y	Condition 5 dust operational management controls	The Delegated Officer considers the proposed controls by the applicant to be sufficient to manage dust emissions from impacting nearby sensitive receptors. Additional regulatory controls are not required.
	Noise	Air / windborne pathway causing impacts to health	Nearest residence 1.5 km east	*Refer to Section 3.1*	C = Moderate L = Unlikely	N	Condition 1 – Infrastructure construction	The Delegated Officer has determined that operational times will be

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
		and amenity			**Medium Risk**		requirements **Condition 5 – restricted crushing and screening operating times**	restricted to between 0700 and 1800 Monday to Friday (as opposed to the proposed 6:30am to 6pm) and between 0700 and 1200 on Saturdays (as opposed to 0600 and 1200), in line with the *Environmental Protection (Noise) Regulations 1997.*
	Sediment laden stormwater	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Yornup state forest immediately east of the premises boundary.	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 5 - Infrastructure operational requirements	The Delegated Officer considers the controls proposed by the applicant and the Environmental Protection (Unauthorised Discharge) Regulations 2004 are sufficient to regulate the sediment emissions during operation.

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.

4. 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	None received	N/A
Local Government Authority advised of proposal on 21 November 2023	The Shire of Bridgetown-Greenbushes replied on 22 November 2023 stating that they had no objections to the proposed works. Development approval P152/2022 for an extractive industry proposal at this location was issued by the Shire of 22 July 2023.	The Departments notes this response.
Nearby residential receptors were notified of the application on 21 November 2023	No comments received	N/A
Department of Biodiversity Conservation and Attractions (DBCA) were advised of the application on 27 November 2023	DBCA provided the following comments on 7 December 2023: DBCA has undertaken a review of the relevant documentation and noting the capacity for the Department of Water and Environmental Regulation to apply appropriate regulatory measures for environmental management of the proposed prescribed premises under Part V of the EP Act, DBCA has no comment on the application.	The Departments notes this response.
South West Aboriginal Land & Sea Council Aboriginal Corporation was advised of the application on 27 November 2023	No comments received	N/A
Applicant was provided with draft documents on 1 February 2024.	The Applicant responded on 5 February 2024 and provided the following comments: Remove reference in the Decision Report to the 20 metre gravel extraction setback the forest given removal of this setback has been supported by DBCA and the LGA. The removal of this set back results in the area of extraction now being 19.7 ha and stages are 4.925 ha in size.	The Department has checked correspondence between the Applicant, DBCA and the LGA and recognises that the setback is no longer required by either authority. DBCA advised that removal of the setback is acceptable on the grounds that they Applicant can demonstrate there will be no adverse impacts to the adjacent Yornup State Forest. DBCA further noted that the Bridgetown-Greenbushes LUP 11 - Extractive Industries Policy requires a weed and pathogen (Dieback) Management Plan. The Delegated Officer notes that a 50 m buffer to the premises boundary will remain in place for the mobile crushing

		and screening plant and associated equipment.

5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that works approval W6849/2023/1 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.