



Works approval number	W6587/2021/1
Works approval holder	Holcim (Australia) Pty Ltd
ACN	099 732 297
Registered business address	Level 40 100 Miller Street NORTH SYDNEY NSW 2060
DWER file number	DER2021/000299
Duration	19/01/2022 to 18/01/2027
Date of last amendment	31 October 2024
Premises details	Holcim Welshpool Concrete Batching Plant 12 Cohn Street CARLISLE WA 6101 Legal description – Lot 310 on Deposited Plan 34532 As defined by the premises maps in Schedule 1

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	Assessed design capacity
Category 77: Concrete batching and cement products manufacturing: premises on which cement products or concrete are manufactured for use at places or premises other than those premises.	480,000 tonnes per annum

This amended works approval is granted to the works approval holder, subject to the attached conditions, on 31 October 2024 by:

AMINE FISHER

MANAGER, PROCESS INDUSTRIES

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

Date	Ref number	Summary of changes
19/01/2022	W6587/2021/1	Works approval granted
31/10/2024	W6587/2021/1	Works approval holder initiated amendment to extend the expiry date to 18 January 2027.

Interpretation

In this works approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean 'including but not limited to', and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline or code of practice in this works approval:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

Construction phase

Infrastructure and equipment

1. The works approval holder must construct the infrastructure listed in Table 1:
 - (a) in accordance with the corresponding design and construction requirements; and
 - (b) at the corresponding infrastructure location;
 as set out in that table.

Table 1: Infrastructure design and construction / installation requirements

	Infrastructure	Design and construction requirements	Infrastructure location
1	Aggregate tower with 6 live aggregate storage bins	Bins must be roofed	Item 7 in Schedule 1 Figure 2
2	2 x below ground aggregate dump bins	<ul style="list-style-type: none"> • must include water sprays to prevent dust emission unloading area 	Item 29 in Schedule 1 Figure 2
3	7 x 100 tonne special aggregate storage bins	Must have water sprays capable of wetting the whole of the area of the bin	Item 10 in Schedule 1 Figure 2
4	4 x 120 tonne silos	Each silo must be constructed with: <ul style="list-style-type: none"> • a relief valve which is piped to a weigh hopper or outlet within one metre of the ground to prevent overfilling; • a level indicator with an audible high level alarm which sounds if cement reaches 0.6 m below the inlet to the silo's air cleaning system; • a test circuit which indicates whether the level indicator and alarm are operating correctly; • a reverse pulse air cleaning system which is designed to reduce dust emissions to less than 50 milligrams of particulate matter per cubic metre; • a pressure differential devise to detect blockages and holes in filters; and • ducting which discharges air from the cement silo air cleaning system to within one metre of the ground. 	Item 13 in Schedule 1 Figure 2
5	Load tower	Must be roofed with and installed with at least 75 mm of acoustic absorption	Item 14 in Schedule 1 Figure 2
6	Cement tanker unloading bay	Must be enclosed on two sides and roofed with at least 75 mm of acoustic absorption	Item 17 Schedule 1 Figure 2
7	Conveyors	Conveyors and transfer points must be enclosed	Item 9 Schedule 1 Figure 2

	Infrastructure	Design and construction requirements	Infrastructure location
8	Noise barrier walls	<ul style="list-style-type: none"> • Must install an acoustic barrier at least 8.5 metres high in the location depicted in Schedule 1, Figure 3 (Item 4); • Barrier must be installed with at least 2.4 metres of acoustic absorbing material at the top on both sides • Gaps in the wall for agitator trucks to pass through will have roller doors to be closed during night time operations. <p>The existing wall on Cohn Street must be increased from 4 metres to at least 5 metres with a barrier over the gate starting at most 3 metres from the ground</p> <p>Must install an acoustic barrier at least 4.0 metres high in the location depicted in Schedule 1, Figure 3 (Item 5)</p> <p>Must conduct an 'as-built' survey of the constructed noise barrier walls to demonstrate the finished heights</p>	Items 4, 5 and 6 Schedule 1, Figure 3.
9	5 x Agitator truck washout bays (wedge pits)	Must be roofed with at least 75 mm of acoustic absorption	Item 16 Schedule 1 Figure 2.
10	6 x slumping stands		Item 11 Schedule 1 Figure 2.

Compliance reporting

2. The works approval holder must within 28 calendar days of the infrastructure and equipment required by condition 1 being constructed or installed:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
 - (a) certification whether the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
 - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
 - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.
4. Subject to condition 3(a), where an item of infrastructure or component of infrastructure has been certified as not being constructed, or does not comply with the corresponding requirements, or contains material defects, the works approval holder must:
 - (a) correct the non-compliant or defective works, prior to re-certifying in accordance with condition 3(a); or

- (b) provide to the CEO a description of, and explanation for, any departures from the requirements specified in Table 1 that do not require rectification and do not constitute a material defect along with the Environmental Compliance Report required by condition 3.

Environmental commissioning phase

Commencement and duration

5. The works approval holder may only commence environmental commissioning once the Environmental Compliance Report required by condition 3 has been submitted by the works approval holder.
6. The works approval holder must notify the CEO:
 - (a) at least 7 days prior to, the commencement date of environmental commissioning; and
 - (b) within 7 days after, the completion date of environmental commissioning.
7. The works approval holder must, within 14 calendar days of the completion of environmental commissioning, submit to the CEO an Environmental Commissioning Report.
8. The report required by condition 7 must include, but not be limited to:
 - (a) a summary of environmental commissioning activities undertaken, including timeframes and the amount of cement products and concrete produced;
 - (b) a summary of the environmental performance of all plant and equipment as installed, including air emissions monitoring conducted on the silo baghouse filter emission point (A1);
 - (c) a summary of the dust monitoring results required by condition 14 and an appraisal of the results against the current (2021) AAQ NEPM standards;
 - (d) a summary of the noise monitoring results required by condition 15 and an appraisal of compliance with conditions 11, 12, 13 and the Noise Regulations;
 - (e) copies of the original monitoring reports prepared by third parties for the commissioning period;
 - (f) a copy of the noise barrier construction height report required by condition 1;
 - (g) a review of the plant's performance against the design specifications; and
 - (h) where they have not been met, measures proposed to meet the design specification, together with timeframes for implementing the proposed measures.

Authorised emission points to air

9. During environmental commissioning, the works approval holder must ensure that the emission specified in Table 2, is discharged only from the corresponding emission point specified in that table.

Table 2: Authorised discharge points during commissioning

Emission point	Emission	Description	Emission point location
A1	Cement dust	Outlet for baghouse filter on silos	A1 on Schedule 1 Figure 3

Air quality monitoring – point source

10. The works approval holder must monitor point source emissions from the emission point listed in Table 3 during environmental commissioning, in accordance with the requirements set out in that table.

Table 3: Emissions monitoring during environmental commissioning

Emission point	Parameter	Frequency	Averaging Period	Unit	Method
A1	Particulate matter during cement delivery	At least twice during commissioning period	1 hour	mg/m ³	USEPA Method 5

Monitoring general

11. The works approval holder must ensure that all noise measurements are carried out in accordance with Part 3 of the Environmental Protection (Noise) Regulations 1997 (as applicable).
12. The works approval holder must ensure that monthly monitoring is conducted at least 3 weeks apart.
13. The works approval holder must ensure that all monitoring equipment used on the premises to comply with conditions 10, 14 and 15 is calibrated in accordance with the manufacturer's specifications.

Ambient dust monitoring

14. During environmental commissioning works, the works approval holder must conduct monitoring of ambient dust levels at the locations specified in Table 4 in accordance with the corresponding requirements set out in that table.

Table 4: Dust monitoring requirements during commissioning works

Monitoring point ref	Parameter	Unit	Frequency	Sampling duration	Method
AQ1 – western car park	PM ₁₀	µg/m ³	At least 2 samples, at least 4 weeks apart	Minimum 14 days continuous logging ¹ with 15 min sample averages	AS 3580.9.8 or AS 3580.9.11

Note 1: Availability >90% of the measurement interval on a monthly basis.

Ambient noise monitoring

15. During environmental commissioning works, the works approval holder must conduct monitoring of noise emissions at the locations specified in Table 5 in accordance with the corresponding requirements set out in that table.

Table 5: Noise monitoring requirements during commissioning works

Monitoring point ref	Parameter	Sound measuring equipment	Units	Frequency	Duration
N1 – western car park	L _{AS} 90,30min	Non-directional system	dB(A)	At commencement of commissioning works, monthly thereafter	Continuous for 7 days
	L _{AS} 10,30min				
	L _{Aeq} (20Hz-500Hz),30min				
	Audio recording				

16. During environmental commissioning works, where the ambient noise levels measured in accordance with condition 15 indicate an exceedance of an assigned level as determined in accordance with the Noise Regulations, the works approval holder must undertake an investigation of the exceedance, including but not limited to:
 - (a) the root cause analysis of the exceedance; and
 - (b) any common or contributory factors for the exceedance.

Records and reporting (general)

- 17.** The works approval holder must record the following information in relation to complaints received by the works approval holder (whether directly from a complainant or forwarded to them by the department or another party) about any alleged emissions from the premises:

 - (a) the name and contact details of the complainant (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or issues raised; and
 - (d) the complete details and dates of action(s) taken by the works approval holder to investigate or respond to any complaint.
- 18.** The works approval holder must maintain accurate and auditable books including the following records, information, reports and data required by this works approval:

 - (a) the works conducted in accordance with condition 1;
 - (b) monitoring of dust levels in accordance with conditions 10 and 14; and
 - (c) monitoring of noise levels in accordance with condition 15;
 - (d) investigations into exceedances of the Noise Regulations in accordance with condition 16; and
 - (e) complaints received under condition 17.
- 19.** The books specified under condition 18 must:

 - (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained by the works approval holder for the duration of the works approval; and
 - (d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 6 have the meanings defined.

Table 6: Definitions

Term	Definition
AAQ NEPM	means the <i>Variation to the National Environment Protection (Ambient Air Quality) Measure 2021</i>
AS 3580.9.8	means the most recent version and relevant parts of the Australian Standard AS 3580.9.8 <i>Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM₁₀ continuous direct mass method using a tapered element oscillating microbalance analyser</i>
AS 3580.9.11	means the most recent version and relevant parts of the Australian Standard AS 3580.9.11 <i>Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM₁₀ beta attenuation monitors</i>
averaging period	means the time over which a limit or target is measured or a monitoring result is obtained
books	has the same meaning given to that term under the EP Act
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
condition	means a condition to which this works approval is subject under s.62 of the EP Act
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act
environmental commissioning	means an activity or sequence of activities undertaken after pre-commissioning has demonstrated the integrity of the plant and equipment. The purpose of commissioning is to test equipment, infrastructure, and processes after the input of raw materials, to confirm design specifications, optimise process conditions, and to monitor/validate emissions or discharges in order to establish a steady-state operation
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
L _{AS 90,30min} and L _{AS 10,30min}	means the A-weighted level exceeded for more than 90% and 10%, respectively, of the time over 30 minutes with the sound level meter set to 'Slow' time weighting
L _{Aeq(20Hz-500Hz),30min}	means the A-weighted equivalent noise level between 20 Hz and 500 Hz (one-third octave bands inclusive), averaged over 30 minutes

Term	Definition
non-directional system	means single microphone sound measuring equipment compliant with Schedule 4 of the Noise Regulations and capable of recording overall and one-third octave band statistical noise levels based on the A-weighted sound pressure level with 'Slow' time weighting (L_{AS})
operations	mean operation of agitator trucks, raw material trucks, cement batching, slumping, or washout on the premises
PM	means total particulate matter including both solid fragments of material and miniscule droplets of liquid
PM ₁₀	means particles with an aerodynamic diameter of less or equal to 10 μm
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map Figure 1 in Schedule 1 to this works approval
prescribed premises	has the same meaning given to that term under the EP Act
USEPA Method 5	means the USEPA Method 5 <i>Determination of particulate matter emissions from stationary sources</i>
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval

END OF CONDITIONS

Schedule 1: Maps

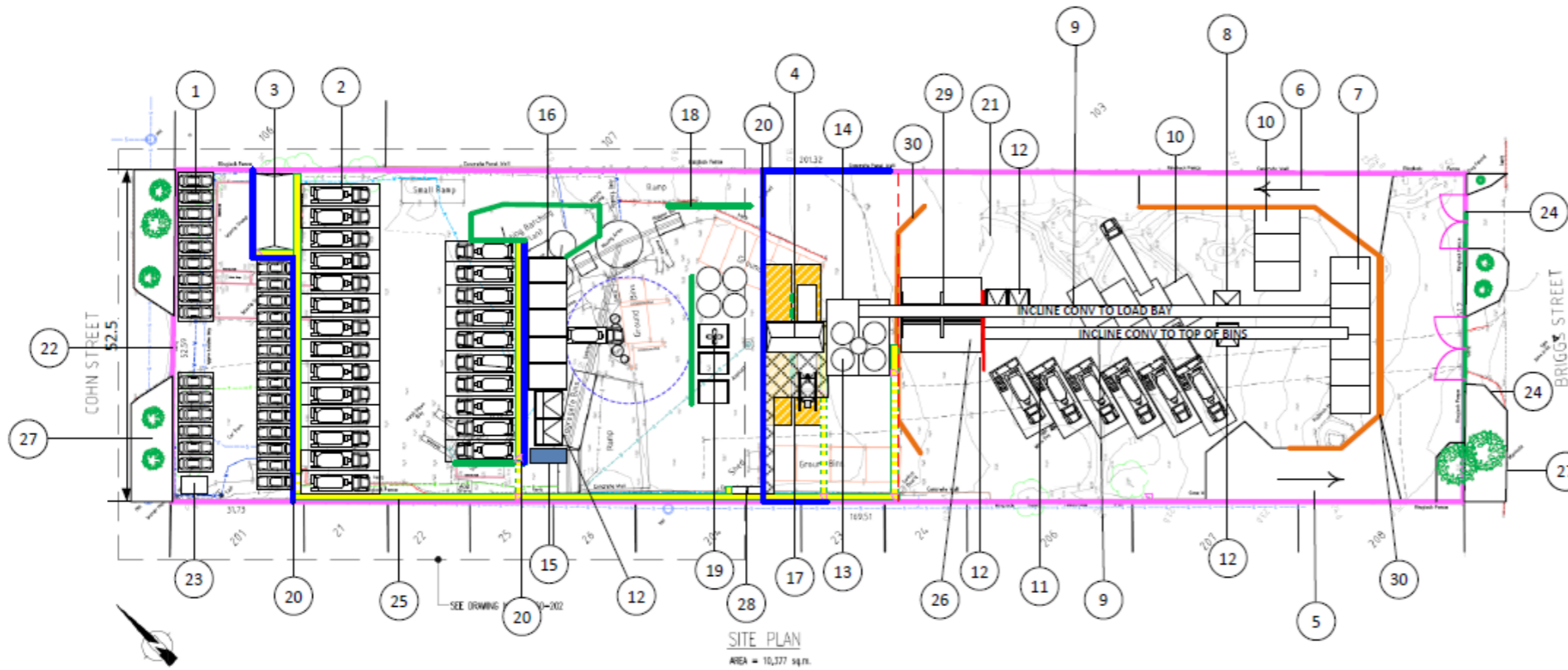
Premises map

The prescribed premises is shown in the map below (Figure 1). The red line depicts the premises boundary.



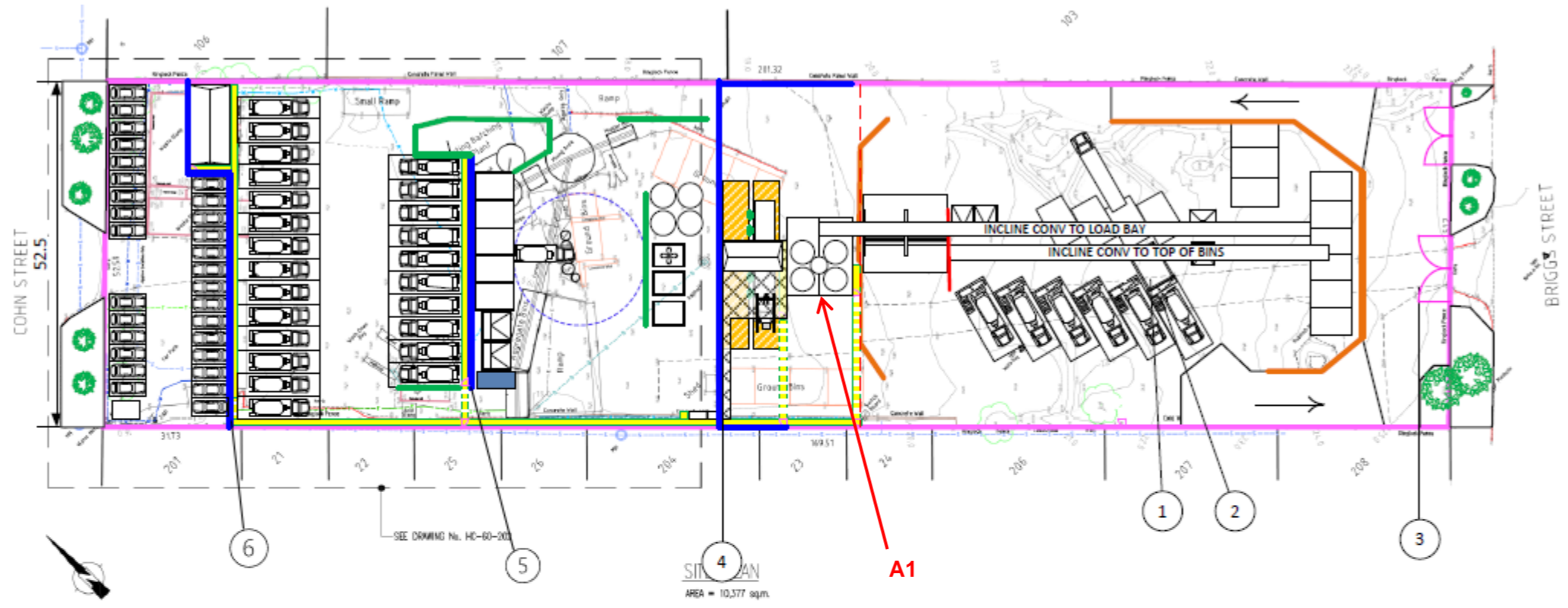
Figure 1: Map of the boundary of the prescribed premises

W6587/2021/1 (Date of latest amendment: 31 October 2024)



ITEM	DESCRIPTION
1	29x CAR PARKING
2	24x AGITATOR PARKING
3	AMENITIES & CRIB ROOM
4	BATCH OFFICE & SPECIAL PRODUCTS DOSING (MEZZANINE)
5	10% RAMP Up (3M OVER 30M)
6	10% RAMP DOWN (4M OVER 40M)
7	LIVE AGGREGATE STORAGE BINS
8	SPECIALS WEIGH BIN
9	AGGREGATE CONVEYOR
10	7x 80t SPECIALS BINS
11	6x REVERSE-ON SLUMP STANDS
12	WATER COLLECTION PIT
13	4x CEMENTITIOUS SILO
14	LOAD TOWER
15	CO2 DOSER
16	5X WASH OUT PITS
17	ADMIX / CEMENT TANKER UNLOADING
18	TRAFFIC SEPARATION DEVICE
19	WATER MANAGEMENT SYSTEM
20	NOISE WALL (HEIGHTS DETAILED IN ACOUSTIC REPORT)
21	LOADER PARKING
22	LV CARPARK ENTRY
23	POWER UPGRADE
24	HV ENTRY / EXIT
25	PEDESTRIAN WALKWAY
26	TRUCK ROLLOVER PROTECTION STRUCTURE
27	LANDSCAPING
28	STAIRS TO BATCH OFFICE MEZZANINE LEVEL
29	AGGREGATE DUMP BINS
30	RETAINING WALL

Figure 2: Layout of proposed batching plant



Item	Description
1	Night time washout pit
2	Raisable slump stand to allow use of washout pit
3	Truck staging area
4	8.5 metre noise barrier
5	4 metre noise barrier
6	6 metre noise barrier

Figure 3: Noise Barriers and night time operation