



CITY OF VINCENT

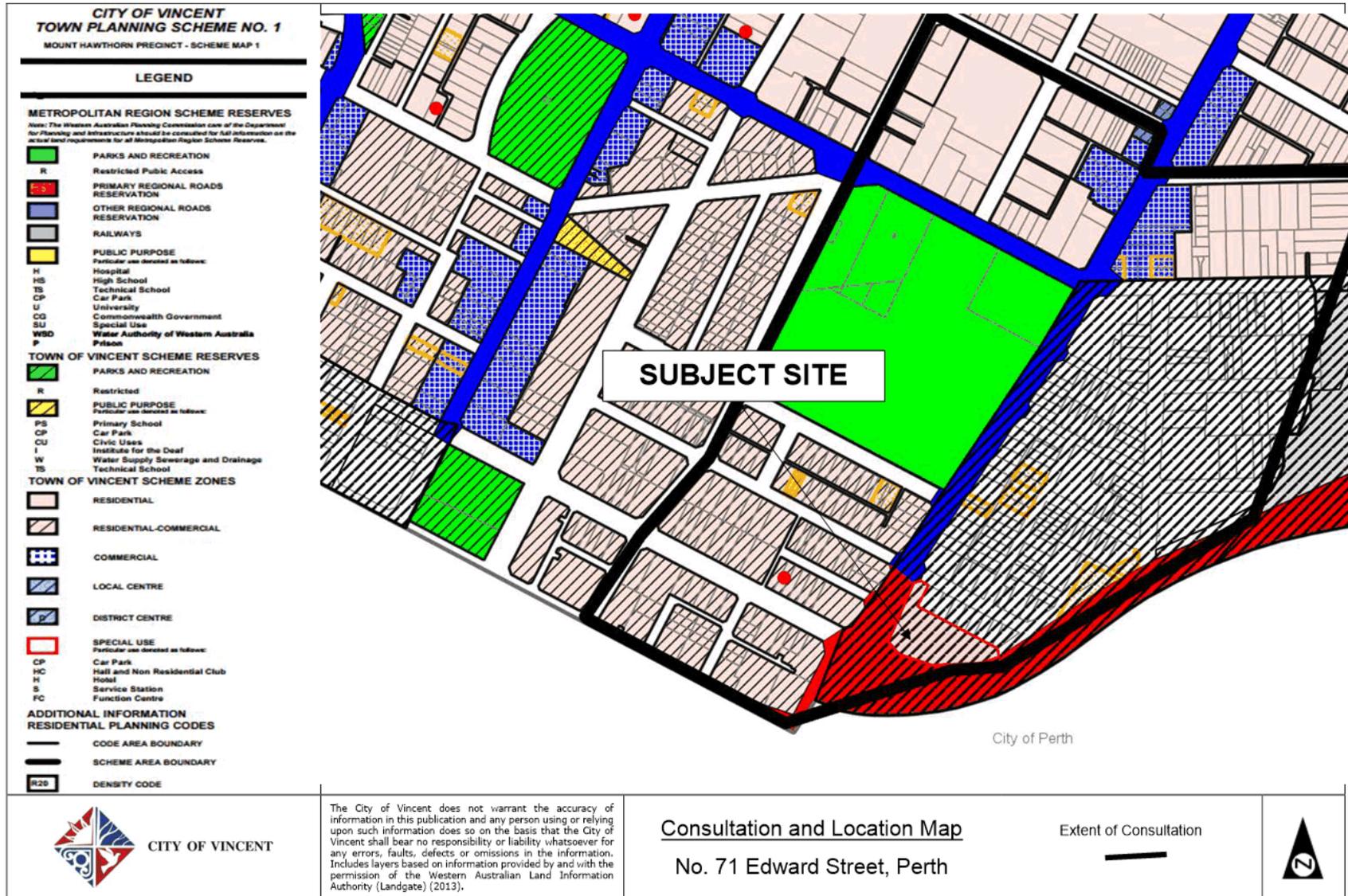
ATTACHMENTS

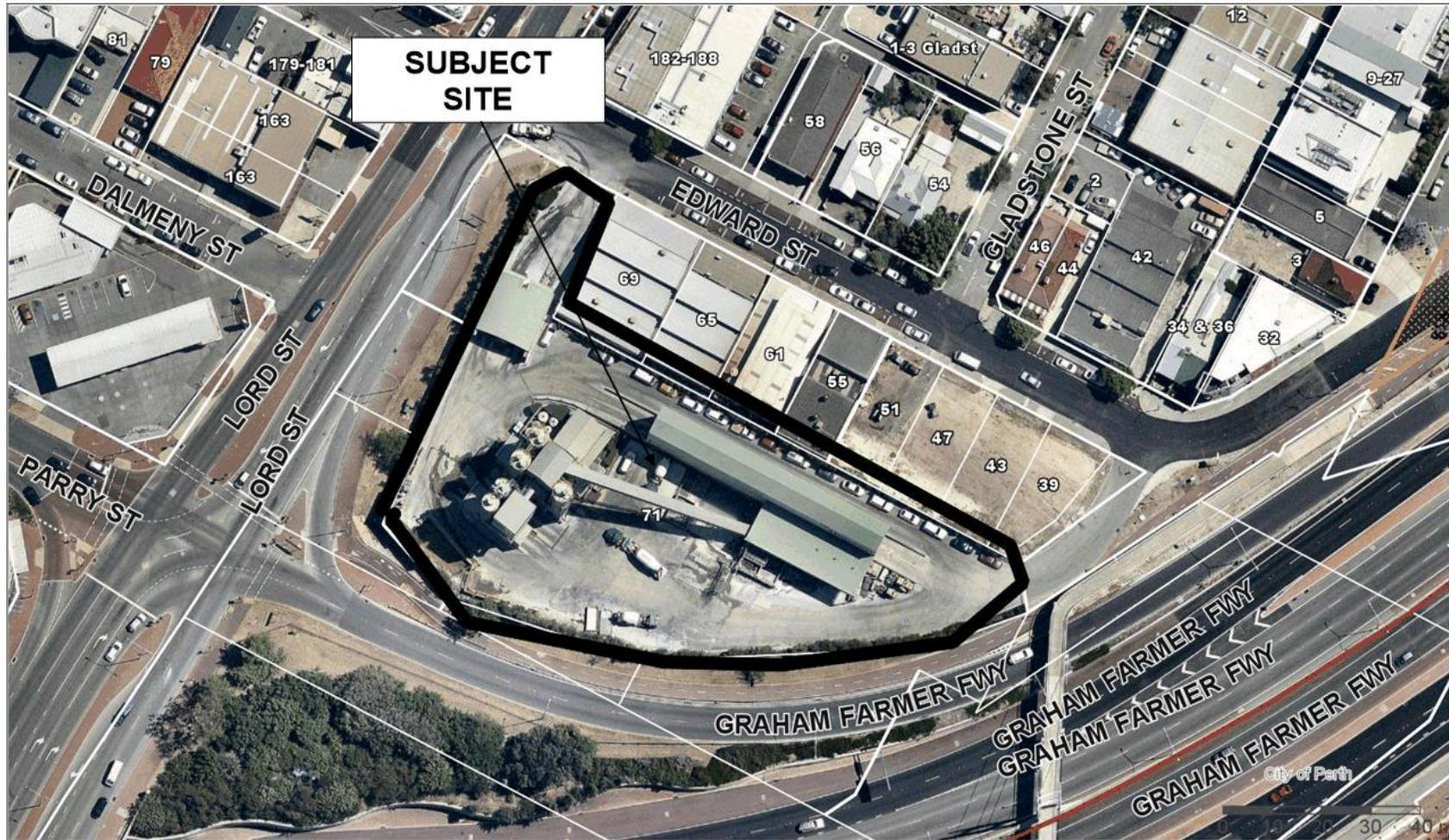
Special Council Meeting

12 July 2017

Table of Contents

8.1	No. 71 (Lot: 200; D/P: 92012) Edward Street, Perth - Concrete Batching Plant (Unlisted Use)	
	Attachment 1	Attachment 1 - Consultation and Location Map4
	Attachment 2	Attachment 2 - Copy of Minister's Planning Approval 20126
	Attachment 3	Attachment 3 - Timetable of Events12
	Attachment 4	Attachment 4 - Development Plans16
	Attachment 5	Attachment 5 - Application Letter19
	Attachment 6	Attachment 6 - Summary of Submissions34
	Attachment 7	Attachment 7 - Applicant's Response to the Submissions38
	Attachment 8	Attachment 8 - Current Environmental Management Plan.....42
	Attachment 9	Attachment 9 - Current Environmental Noise Plan.....72
	Attachment 10	Attachment 10 - Advice Notes91
8.2	No. 120 (Lot: 1001; D/P: 29129) Claisebrook Road, Perth - Concrete Batching Pland (Use Not Listed)	
	Attachment 1	Attachment 1 - Consultation and Location Map92
	Attachment 2	Attachment 2 - Copy of Minister's Planning Approval 201294
	Attachment 3	Attachment 3 - Timetable of Events99
	Attachment 4	Attachment 4 - Development Plans103
	Attachment 5	Attachment 5 - Application Letter110
	Attachment 6	Attachment 6 - Summary of Submissions129
	Attachment 7	Attachment 7 - Applicant's Response to the Submissions133
	Attachment 8	Attachment 8 - Environmental Management Plan137
	Attachment 9	Attachment 9 - Noise Management Plan.....180
	Attachment 10	Attachment 10 - Advice Notes204





 <p>CITY OF VINCENT</p>	<p>The City of Vincent does not warrant the accuracy of information in this publication and any person using or relying upon such information does so on the basis that the City of Vincent shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Includes layers based on information provided by and with the permission of the Western Australian Land Information Authority (Landgate) (2013).</p>	<p>No. 71 Edward Street, Perth</p>	
--	--	------------------------------------	---



**Minister for Planning; Culture & the Arts; Science & Innovation
Government of Western Australia**

Our ref: 33-16340

Mr John Symonds
Hanson Construction Materials Pty Ltd
123 Burswood Road
BURSWOOD WA 6100

Dear Mr Symonds

**HANSON CONSTRUCTION MATERIALS PTY LTD AND CITY OF VINCENT: DR
264/2011**

I have considered the State Administrative Tribunal's recommendations as provided in DR 264/2011 and I agree with the Tribunal's recommendations. I have determined that the application for review is allowed, and the deemed refusal of the respondent is set aside and conditional approval is granted. I attach a notice which gives effect to my decision.

Pursuant to the requirements of s247(4)(a) of the Planning and Development Act 2005, you are advised that the reasons for my determination on the application are those set down in DR 264/2011.

In summary, I determined that Hanson Construction Materials Pty Ltd be given conditional approval to operate for a further five years, during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land. I have written to the Western Australian Planning Commission to request that this planning be commenced and carried out as a priority, in liaison with the City of Vincent, in order to provide certainty to all parties with an interest in the future of the area.

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Day'.

**JOHN DAY MLA
MINISTER FOR PLANNING;
CULTURE AND THE ARTS**

Att 22 MAY 2012

cc Mr Brad Wylynko, Partner, Clayton Utz

11th Floor, 2 Havelock Street, West Perth, Western Australia 6005
Telephone: +61 8 6552 6200 Facsimile: +61 8 6552 6201 Email: Minister.Day@dpc.wa.gov.au

NOTICE OF DETERMINATION OF APPLICATION BY MINISTER**Pursuant to section 246 of the *Planning and Development Act***

The Minister for Planning has pursuant to the provisions of Section 246(2)(b) of the *Planning and Development Act 2005* in the matter of Hanson Construction Materials Pty Ltd and the City of Vincent determined the application for review as follows:

Planning approval be given for the development of the applicant's East Perth concrete batching plant, subject to the following conditions:

- 1) This approval is granted for a term expiring on 16 October 2017.
- 2) This approval limits concrete batching operations and access to the site by trucks and semi-trailers to any time between Monday and Saturday inclusive.
- 3) There is to be no access to the site by trucks and semi-trailers on Sundays or public holidays.
- 4) Within three calendar months of the issue of the approval, the Applicant shall update the Environmental Management Plan dated April 2010 or submit a management plan to the City of Vincent which addresses the following matters:
 - a. The identification of the noise attenuation measures contained in the development application;
 - b. Dust and cement waste management including regular washing down of trucks before exiting the site, dust control on-site and the contribution of half of the cost of the City sweeping dust from Edward Street once a week;
 - c. A traffic management plan for all vehicles entering and exiting the site, including driver education in regard to truck routes, vehicle speeds, and operations to minimise disturbance and public safety concerns;
 - d. Permanent and fixed dust monitoring equipment shall be installed on the perimeter of the site and independently audited to the satisfaction of the City of Vincent;
 - e. The implementation of a complaint handling system which provides:

- i. A manned 24 hour telephone number and email address to log complaints and enquiries; and
 - ii. A record of complaints and enquiries logged, and the applicant's response, shall be provided on a bi-annual basis to the City for its monitoring information; and
 - f. A review of the management plan after the first 12 months from the date of submission;
 - g. The use of Iveco trucks during the night/early morning operations;
 - h. The provision to the City of an updated training register;
 - i. No water spray from sprinklers in vegetated areas being permitted beyond the boundary of the site; and
 - j. Engaging in any discussions with the City regarding repairs to roads which have been potentially damaged by Hanson's trucks.
- 5) The development must be carried out in accordance with the recommendations of the SVT Engineering Consultants Environmental Noise Assessment for the East Perth Concrete Batching Plant dated 21 April 2011, or other Noise Management Plan endorsed by the City, including in particular, but without limitation:
- a. Control/reduction of noise emitted from the site and activities associated with the site;
 - b. Maintenance of plant/mechanical equipment and application of inspection schedules to ensure optimal, quiet working order;
 - c. Selection of equipment for onsite operations, including both prospective equipment, and retrofitting of existing equipment, to minimise individual and accumulative noise impacts from the site;
 - d. Induction and training of workforce to promote compliant operation, in accordance with the noise management plan;

- e. Detail the methods of on-going self-monitoring, including testing equipment, locations, frequency, technical parameters, interpretation of results, and periodic evaluation of the monitoring method (to account for further encroachment of residential development and changes to surrounding built environment over time);
 - f. Complaint response methods, including short and long term abatement measures and record keeping; and
 - g. Details of staff member(s) accountable for overseeing compliance with the noise management plan.
- 6) Prior to the issue of a building licence for this development, the following shall be submitted to and approved by the City:
- a. An amended plan detailing a minimum of two significant design features being incorporated in the proposed façade of building fronting Lord Street to reduce the visual impact on the streetscape;
 - b. A construction management plan addressing the following issues:
 - i. Public safety, amenity and site security;
 - ii. Contact details of essential site personnel;
 - iii. Construction operating hours;
 - iv. Noise control and vibration management;
 - v. Waste management and materials re-use; and
 - vi. Parking arrangements for contractors and subcontractors; and
 - c. A detailed landscape and reticulation plan for the development site and adjoining road verge shall be submitted to the City's Parks and Property Services for assessment and approval.

For the purpose of this condition, a detailed landscape and reticulation plan shall be drawn to a scale of 1:100 and show the following:

- i. The location and type of existing and proposed trees and plants;

- ii. All vegetation including lawns;
 - iii. Areas to be irrigated or reticulated and such method;
 - iv. Proposed watering system to ensure the establishment of species and their survival during the hot and dry months; and
 - v. Separate soft and hard landscaping plans (indicating details of materials to be used).
- 7) The following plans, as approved by the City, shall be implemented:
- a. The updated or new environmental management plan referred to in condition 4;
 - b. The amended plan referred to in condition 6(a);
 - c. The construction management plan referred to in condition 6(b);
 - d. The landscape and reticulation plan referred to in condition 6(c).
- 8) Compliance with the requirements of the *Environmental Protection (Noise) Regulations 1997 (WA)* by ensuring that during the period:
- a. 0700 hours to 2200 hours Monday to Saturday two trucks are not simultaneously idling or moving between the filling and slumping stations for a period exceeding 24 minutes in any four hour period; and
 - b. 2200 hours and 0700 hours Monday to Saturday only one truck is ever idling or moving between the filling and slumping stations at any one time and that such idling or movement does not exceed 24 minutes in any four hour period.



**JOHN DAY
MINISTER FOR PLANNING;
CULTURE AND THE ARTS**

21.5.2012.

Reasons for decision:

Hanson Construction Materials Pty Ltd applied for development approval to allow the continuing operation of an existing concrete batching plant in East Perth. Hanson Construction Materials Pty Ltd then sought review of the City of Vincent's deemed refusal of that decision by the State Administrative Tribunal. The Minister for Planning considered that the application to the Tribunal raised issues of such regional importance that it was appropriate for the application to be determined by the Minister. The Minister directed the Tribunal to hear the application but, without determining it, to refer it with recommendations to the Minister for determination.

The matter was heard before the Tribunal on 28-29 February and 1 March 2012 and the result and the reasons for the recommendations of the Tribunal are provided in DR 264 2011, which result and reasons are accepted by the Minister for Planning.

In summary, the Minister has determined that Hanson Construction Materials Pty Ltd be given conditional approval to operate for a further five years, during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land.

Timeline of Events – History

Date	Description
1987	The Readymix Concrete Batching Plant relocated to current location from its previous site on Trafalgar Road, East Perth. Approval expires in October 2012.
1996	The Readymix Concrete Batching Plant was rebuilt as a result of land acquired for the Graham Farmer Freeway.
1998	East Perth Redevelopment Authority (EPRA) refused an application for extended hours of operation.
25 March 1999	The Minister for Planning conditionally upheld an appeal against EPRA's refusal for an extension of 12 months of unlimited operating hours.
13 April 2000 and 13 March 2001	EPRA granted approval for Readymix for an extension of unlimited hours for a 12 month period.
29 August 2006	The City of Perth granted Readymix Concrete Batching Plant a 12 month period of unlimited hours of operation.
13 March 2007	The Council considered the extension of time for the operating time of the Readymix Concrete Batching Plant at the above site as part of the advertising process, which at that point in time was under the jurisdiction of the City of Perth and resolved to advise City of Perth strongly objects to the proposal.
1 July 2007	Land bounded by Lord Street, Summers Street and the Freeway including the subject site was transferred to the then Town of Vincent as part of the Local Government boundary changes.
5 and 6 November 2007	The Town's administration did not object to the temporary removal of the restriction on the hours of operation on 5 and 6 November 2007.
6 November 2007	The Council refused an application for the temporary removal of the restriction on the hours of operation.
20 November 2007	The Council deferred an application for extension of operating hours to existing general industry premises (Ready Concrete Batching Plant).
18 December 2007	The Council refused an application for extension of operating hours to existing general industry premises (Ready Concrete Batching Plant).
11 March 2008	The Council considered a confidential report for extension of operating hours to existing general industry (Readymix Concrete Batching Plant)- State Administrative Tribunal.
11 March 2009	The Minister for Planning, Culture and Arts granted conditional approval to Readymix Concrete Batching Plant for extension of hours.
26 July 2011	The Council considered an application for alterations and additions to existing concrete batching plant and the lifting of Time Limited Condition requiring the concrete batching plant to cease operating after 16 October 2012 and extended hours of operation (Holcim Batching Plant) and resolved to seek an urgent deputation to the Minister.
9 August 2011	The Council considered a confidential report for an application for alterations and additions to existing concrete batching plant and the lifting of Time Limited Condition requiring the concrete batching plant to cease operating after 16 October 2012 and extended hours of operation (Holcim Batching Plant) and resolved to approve the Town Planning Consultant's Recommendations.
11 October 2011	The Council considered a confidential report for an application for alterations and additions to existing concrete batching plant and the lifting of Time Limited Condition and extended hours of operation (Holcim Batching Plant)- State Administrative Tribunal.
13 March 2012	The Council considered the State Administrative Tribunal Decision relating to Concrete Batching Plants at No.71 Edward Street, Perth (Hanson) and 120 Claisebrook Road, Perth (Holcim.)
22 May 2012	The Minister for Planning granted approval to the batching plant for a term expiring on 16 October 2017.
12 June 2012	The Council considered a report on Minister for Planning; Culture and the Arts; Science and Innovation Decision relating to Concrete Batching Plants at No.71 Edward Street Perth (Hanson) and No.120 Claisebrook Road, Perth (Holcim).
24 December 2013	The City issued a Building Permit for Alterations and Additions to the Concrete Batching Plant.
2 May 2017	The Council conditionally approved the Concrete Batching Plant for a term expiring on 16 October 2018

Timeline – Concrete Batching Plants & Town Planning Scheme No. 2

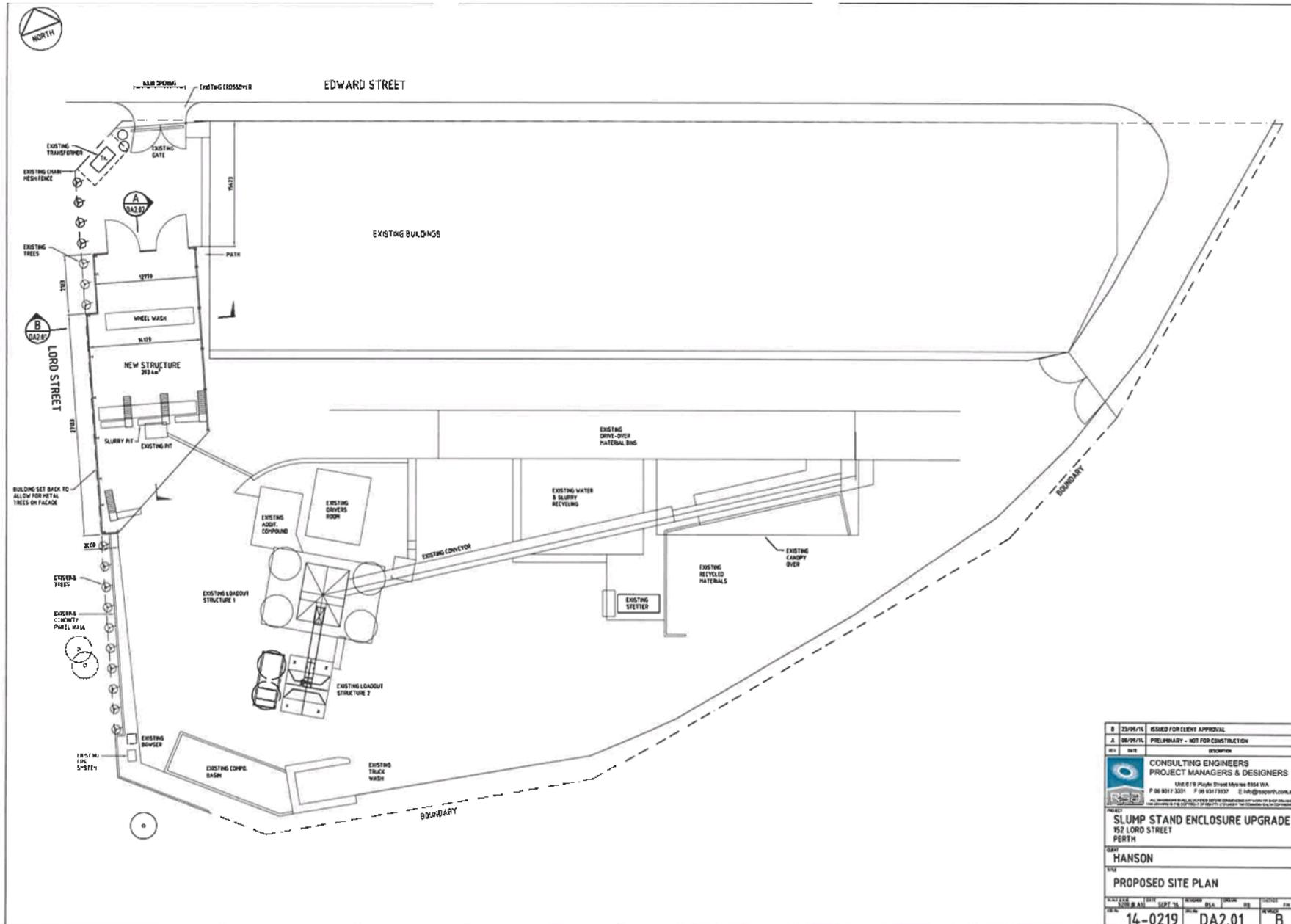
Date	Description
11 October 2011	Draft TPS 2 adopted by Council to be forwarded to the Commission for consent to advertise. It is unclear exactly what was adopted as the Council report that went up was confidential and was not in the usual report format (Item 14.2).
14 April 2012	A community visioning workshop was facilitated by the City with business and land owners to obtain their views and aspiration for the strategic direction of the area.
21 May 2013	The Minister called in the application on the basis that the application gave rise to issues of state and regional significant. The Minister granted Hanson and Holcim (the batching plant operators) conditional approval to operate for a further five years, "during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land".
3 September 2013 (Date according to the Council Report for Item 9.1.5 from 8 October 2013)	Minister granted consent to advertise draft TPS 2 subject to the following modifications being made by the City: <ol style="list-style-type: none"> 1. The zoning of the batching plants be amended to 'Special Use – Concrete Batching Plant'; 2. The zoning of the greater Claisebrook locality be amended from 'Residential/Commercial' to 'Commercial'; and 3. A new clause 4.16 be included in the text as follows: <p style="margin-left: 40px;">"4.16 Residential Developments and Uses</p> <p style="margin-left: 40px;">'Aged of dependent persons dwelling', 'grouped dwelling', 'single house', 'residential building', 'multiple dwelling', 'short term accommodation' are not permitted on lots with direct frontage to Edward Street east of Lord Street, Caversham Street and Claisebrook Road between Chelsea Street and Murchison Terrace."</p>
8 October 2013	Council considered a report outlining the modifications that the City was required to make and provided a response to these modifications. The scheme was advertised in its modified form. See Council Report from 8 October 2013 (Item 9.1.5).
16 October 2013	Public meeting with the land owners was held.
3 December 2013	Council considered a report on the outcome of the public meeting for the Claisebrook North Precinct in draft TPS 2.
11 March 2014 – 27 June 2014	Draft TPS 2 advertised for public comment in accordance with formal advertising requirements of the <i>Town Planning Regulations 1967</i> (that were in place at the time).
27 August 2014 – 12 September 2014	Additional advertising for public comments. The additional advertising period was undertaken to specifically consult surrounding land owners on changes requested by land owners during the initial consultation period. For example the Charles Hotel requested during the initial advertising that their zone/code be changed so surrounding land owners were consulted in the additional advertising period. Note that there were other modifications that Council made (not from landowner requests during the initial consultation) that were not consulted on further.
18 November 2014	Draft TPS 2 considered by Council, following advertising, for final adoption. Council endorsed the draft TPS2 for forwarding to the WAPC for determination. Council recommended the concrete batching plant sites be zoned Residential/Commercial R160 with "Special Use" for Concrete Batching Plant with a sunset clause (coinciding with the existing terms of approval – October 2017) and the surrounding area being zoned Residential/Commercial R100. See Council Report from 18 November 2014.

Date	Description
Following Council Meeting in November 2014	Draft TPS 2 as adopted by Council on 18 November 2014 was forwarded to the WAPC for final consideration.
19 October 2015	New Regulations came into effect.
10 August 2016	Meeting with the Minister for Planning.
8 November 2016	TPS 2 was considered at a Statutory Planning Committee meeting and the City made a deputation.
22 November 2016	Applications for Holcim and Hansen concrete batching sites were received by the City. The applications seek to amend conditions of the existing approval. Specifically they are seeking to: <ol style="list-style-type: none"> 1. Remove the time restriction (i.e. to allow the concrete batching plants to operate indefinitely); and 2. Amend conditions relating to the environmental assessment and noise that accord with the current plan rather than require new plans to be submitted.
22 February 2017	The applicants for the Holcim and Hansen concrete batching plants submitted an application for a review by the SAT for deemed refusal.
17 March 2017	SAT issued orders inviting the City to consider the applications and set dates for hearings
23 May 2017	SAT determined the Minister's decision granting approval to the Concrete Batching Plant on 21 May 2012 cannot be reviewed under Clause 77 for the application dated 22 November 2016 and the appeal was dismissed.

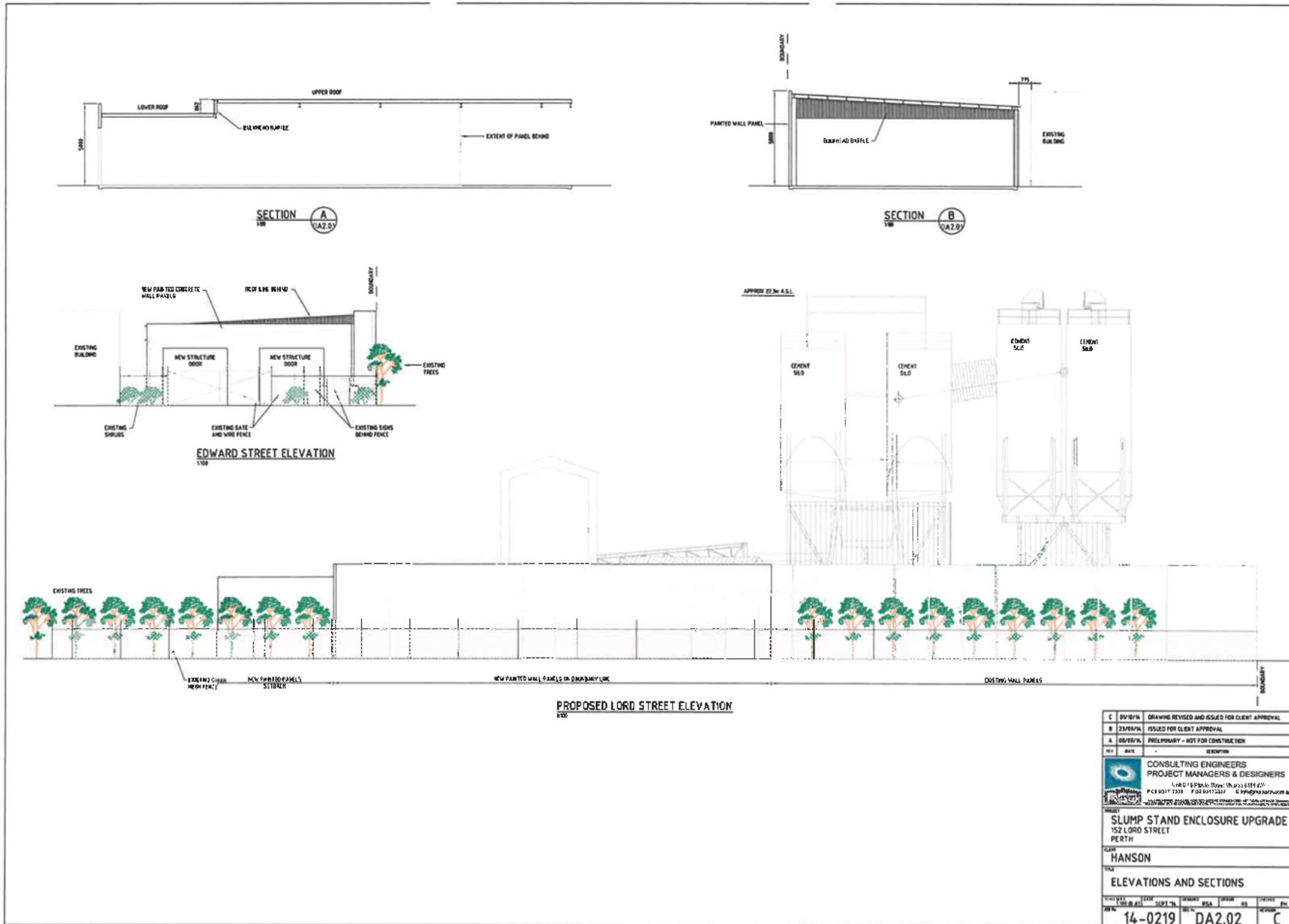
Development Approvals within the Locality

Address	Application Type	For	Determination
187 Claisebrook Road	Development Application	Change of use from Warehouse and Office to Recreational Facility	Not yet determined.
123 Claisebrook Road	Development Application	Construction of Four Storey Mixed Use Development Comprising of 15 Multiple Dwellings and Commercial Studio	Not yet determined.
179 Claisebrook Road	Development Application	Change of use from Warehouse to Recreational Facility	Approved by Delegated Authority 22 July 2016
	Building Application	Internal Fit Out: Commercial	Approved by Delegated Authority 2 September 2016
159 Claisebrook Road	Building Application	Demolition: Commercial	Approved by Delegated Authority 2 July 2015
	Development Application	Construction of Four Storey Multiple Dwelling Comprising of 15 Multiple Dwellings	Determined 14 September 2015
	Amendment to Development Approval	Change of Use of Shop to Restaurant	Not yet determined.
	Building Application	Mixed Use Development	Approved by Delegated Authority 9 May 2016

Address	Application Type	For	Determination
155 Claisebrook Road	Development Application	Change of use from Cinema to Lodging House and Eating House	Approved by Delegated Authority 6 October 2016
1/2 Edward Street	Development Application	Signage Addition to Existing Mixed Use Development	Approved by Delegated Authority 16 March 2016
	Development Application	Reconsideration of Condition of Planning Approval	Refusal by Council 26 July 2016
	Building Application	Occupancy Permit	Approved by Delegated Authority 19 April 2016
	Building Application	Occupancy Permit Strata	Approved by Delegated Authority 19 April 2016
152, 158 & 150 Claisebrook Road	Development Application	Demolition of Existing Hostel and Construction of 9 Storey Mixed Use Development	Approved by JDAP 18 August 2016
120 Claisebrook Road (Batching Plant)	Development Application	Proposed Reconsideration of Conditions to Existing Concrete Batching Plant	Not yet determined.
71 Edward Street (Batching Plant)	Development Application	Proposed Reconsideration of Conditions to Existing Slumping Building	Not yet determined.
51, 47, 43 & 39 Edward Street	Development Application	Change of Use from Vacant Site to Storage and Shed Addition	Approved by Delegated Authority 16 February 2016



B	25/05/16	ISSUED FOR CLIENT APPROVAL
A	06/04/16	PRELIMINARY - NOT FOR CONSTRUCTION
REV		DESCRIPTION
 CONSULTING ENGINEERS PROJECT MANAGERS & DESIGNERS Unit 6/18 Ploidy Street Mowlem 6154 WA P 08 9517 3251 F 08 9317 3337 E info@cepd.com.au		
PROJECT SLUMP STAND ENCLOSURE UPGRADE 152 LORD STREET PERTH		
CLIENT HANSON		
TITLE PROPOSED SITE PLAN		
DATE	DATE	BY
14-02-19	DA2.01	B



C	09/10/16	DRAWING REVISED AND ISSUED FOR CLIENT APPROVAL
B	23/06/16	ISSUED FOR CLIENT APPROVAL
A	08/05/16	PRELIMINARY - NOT FOR CONSTRUCTION
REV	DATE	DESCRIPTION
<p>CONSULTING ENGINEERS & DESIGNERS PROJECT MANAGERS & DESIGNERS 10/157 Fifth St, Perth WA 6150 P.O. BOX 3338, F20 5017/2017, 6150 PERTH WA www.ced.com.au</p>		
PROJECT SLUMP STAND ENCLOSURE UPGRADE 152 LORD STREET PERTH		
CLIENT HANSON		
TITLE ELEVATIONS AND SECTIONS		
SCALE	DATE	BY
1:100 @ A1	14-02-19	DA2.02
DATE	SCALE	BY
14-02-19	DA2.02	C



13 April 2017

Our Ref: HAN EAS GE

Chief Executive Officer
City of Vincent
PO Box 82
LEEDERVILLE WA 6902

**Allerding
& Associates**

Town Planners, Advocates
and Subdivision Designers

ABN 24 044 036 646

Attention: Paola Di Perna

Dear Paola,

**RE: APPLICATION FOR DEVELOPMENT APPROVAL
HANSON CONCRETE BATCHING PLANT –
No. 71 (Lot 200) Edward Street, Perth**

This Application is prepared pursuant to the East Perth Redevelopment Authority (EPRA) Scheme and seeks development approval in perpetuity for the existing Hanson Concrete Batching Plant (**the Plant**) located at No. 71 (Lot 200) Edward Street, Perth.

Planning approval for the abovementioned development was granted by the Minister for Planning on 22 May 2012 for a term expiring on 16 October 2017. This application does not involve any changes to the existing land use or physical development and seeks development approval for the continuation of the concrete batching plant use beyond 16 October 2017. Copies of the development plans and associated Management Plans are provided as **Attachments 1 and 2**. The previous conditional approval issued by the Hon Minister for Planning is provided as **Attachment 3** and a set of Draft Proposed Conditions as **Attachment 4**.

The continued operations of the Plant under the adaptive management provisions reflects the strategic significance for which the Plant has been recognised to facilitate building and infrastructure development in the Perth CBD and inner city locations.

Background

The Plant has been operating from its Perth site since the early 1960's. The Plant has been regularly monitored to ensure compliance with State environmental legislation and operates within the framework of an approved Environmental Management Plan. The Environmental Management Plan established an adaptive management regime (which will respond to the amenity of the surrounding locality as it evolves over time).

Historically the Plant has operated under a series of planning approvals granted by the City of Perth, the East Perth Redevelopment Authority and the Minister for Planning, respectively.

125 Hamersley Road Subiaco Western Australia 6008
Telephone (08) 9382 3000 Facsimile (08) 9382 3005

The most recent of these approvals, that of the Minister, was granted in May 2012 pursuant to s246 (2)(b) of the Planning and Development Act 2005 (WA). That determination was made after the Minister determined the Plant to be of state or regional significance and directed the State Administrative Tribunal to consider and make recommendations (to him) in respect of the ongoing operation of Hanson from its current location.

The development before the Minister was for an ongoing use without a time limit.

The Minister granted approval subject to a term expiring on 16 October 2017. This was to allow time for the resolution of the planning framework, including the City of Vincent's Draft Town Planning Scheme No. 2 (**Draft TPS2**), which was under preparation at the time. Since the Tribunal's recommendation to the Hon. Minister inclusive of the time limit, two key strategic considerations have been implemented:

1. The State Government's Economic and Employment Land Strategy (**EELS**) has been adopted which recognises the strategic importance of the Plant; and
2. The Hon Minister, on advice from the Western Australian Planning Commission (**WAPC**), directed the City of Vincent to amend its Draft TPS2 prior to advertising to:
 - a. incorporate the Plant within its own 'Special Use' zone for concrete batching purposes; and,
 - b. include the provision of a transition zone between the Graham Farmer Freeway, the Plant and residential development.

With the strategic recognition of the plant under EELS, and the implementation of the statutory framework under Draft TPS2 as directed by the Hon Minister for advertising, this application now seeks approval in perpetuity and to formalise adaptive environmental management (i.e. through management conditions to ensure the plant's ongoing compatibility with its surroundings into the future).

Modifications to City of Vincent Draft Town Planning Scheme No. 2

On 20th December 2011, the Council of the City of Vincent resolved to endorse Draft TPS2 and forward it to the WAPC for consent to advertise.

On 3rd September 2013, on advice from the WAPC, the Minister for Planning gave formal consent to advertise Draft TPS2 and Local Planning Strategy subject to modifications.

Among the changes was the Ministers instruction that the draft Scheme maps be modified to show Lot 200 as 'Special Use – Concrete Batching Plant', in lieu of 'Residential Commercial (R160)' as initially sought by the City of Vincent.

These changes are outlined in the following Table:

No.	Description of land	Special Use	Conditions
4	No.71 (Lot 200) Edward Street, Perth	Concrete Batching Plant	Subject to the conditions in the determination issued by the Minister for Planning dated 21 May 2012 pursuant to section 246 of the <i>Planning and Development Act 2005</i>

In addition, the Hon Minister also recognised the need to accommodate a land use transition between sensitive residential development and the Graham Farmer Freeway through the inclusion of the following Clause which prevented residential development from being approved in the following terms:

4.16.1 "aged or dependant persons dwelling", "grouped dwelling", "single house", "residential building", "multiple dwelling" and "short term accommodation" are not permitted on lots with direct frontage to Edward Street or Lord Street, Caversham Street and Claisebrook Road between Chelsea Street and Murchison Terrace.

In its final adoption of Draft TPS2 on 18th November 2014 (by changing the special use zone to an additional use right) the Council has departed from the Minister's requested modifications. The direction by the Hon. Minister to require a special use zoning for the site reflects the level of State significance attributed to the Plant, as identified under EELS. This significance ought to be afforded greater weight, in making appropriate planning determinations, over the local planning scheme.

The Proposal

This proposal seeks development approval for the continuation of the concrete batching plant use beyond 16 October 2017. The development plans and associated adaptive management plans are included as **Attachments 1 and 2**.

With respect to the plans, we provide the following:

1. Copies of plans submitted as part of the application for planning approval for additions and alterations to the existing concrete batching plant lodged with the City of Vincent dated 18 May 2011 and subsequently approved by the Hon. Minister for Planning on 21 May 2012;
2. Copies of the plans submitted as part of the application for planning approval for the demolition of the existing slumping building and construction of new slumping building dated 11 December 2014 and subsequently approved by the City on 5 May 2015; and
3. Copies of the plans submitted as part of the application for planning approval for the proposed Light Industry (Organic Recycling Equipment and Sheds) and Associated Car Parking Use at Lots 301, 4, 3 and 2 (Nos. 39-51) Edward Street, Perth dated 8 October 2015 and subsequently approved by the City on 16 February 2016.

Three (3) scaled copies of the plans are provided, as well as one (1) A4 copy.

The proposed draft conditions of approval are included as **Attachment 4**. The conditions can be summarised as follows;

1. Approval to the proposal in perpetuity, which reflects the strategic and long term importance of the Plant within the Planning Framework;
2. Insert conditions that formalise an adaptive management regime. Specifically, providing for the current adopted Environmental Management Plans being subject to ongoing review to provide compatibility for the use of the land for concrete batching purposes in recognition of changes that may occur in the Claisebrook Precinct;

3. Additional condition to facilitate the re-routing of trucks away from Claisebrook Road north of Caversham Street. This condition is to minimise conflicts between residential uses (in the north of the precinct) and truck movements into the future. The condition will facilitate that trucks will only access and egress the Claisebrook Precinct via Edwards Street to Lord Street (within the area identified by the Hon. Minister as being the transition area between the Graham Farmer Freeway and residential development).

Relevant planning scheme

Until Draft TPS2 is approved by the Hon. Minister, this application is to be determined under the former EPRA Scheme (which is deemed to be a local planning scheme in respect of the precinct), as amended by the deemed provisions for local planning schemes in the *Planning and Development (Local Planning Schemes) Regulations 2015* (Schedule 2).

Draft TPS2 is accepted as a relevant planning consideration.

Importance of the Plant

The Plant is a well-established historical use in the Claisebrook North Precinct that is now one of two recognised state and regionally significant suppliers of concrete to Perth's construction industry. The Site's proximity to inner city developments is strategically located and ideally suited to supplying premixed concrete to the inner metropolitan area, in particular the Perth CBD.

Growth in the Perth CBD is set to continue with significant infrastructure and building projects such as the Perth Waterfront and Perth City Link. In addition, the following projects are notable and likely to extend well beyond the current approval period:

- The newly elected Government's Metronet;
- Perth City Link;
- Perth Waterfront and Elizabeth Quay;
- Metropolitan Redevelopment Authority's River Bank project;
- New WA Museum;
- Perth Stadium and Stadium Park;
- Mitchell Freeway Extension;
- East West City Link; and
- Forrestfield Airport Link.

Additionally, there are a number of lots likely to be redeveloped within the Perth CBD, such as the Former East Perth Power Station.

There are also areas that are proximate to the Perth CBD and in need of redevelopment, such as:

- Leederville secondary centre, over which the City has prepared the Leederville Masterplan;
- Belmont race-course site;
- Victoria Park secondary centre (including the gateway precinct);
- Stirling (Innaloo) strategic regional centre;
- Scarborough Foreshore Redevelopment;
- Beaufort Towers – 30 Beaufort Street (Old Megamart Site);
- New Northbridge;
- East Perth Rail Terminus TOD; and
- South Perth Peninsula Apartment Developments (multiple).

Allerding
Associates

The location of concrete batching facilities in close proximity to service the construction of these types of projects, as Perth continues to grow, will become even more important in the future as access into the Perth CBD is likely to become increasingly challenging.

The planning framework relevant to this proposal supports the ongoing operation of the plant in line with the Government's strategic documents, which recognise the importance of concrete batching plants to service the planned growth projected for Perth to 2050.

For the abovementioned reasons, the City's approval to the proposed development application are respectfully sought.

Yours sincerely

ALLERDING AND ASSOCIATES



STEVE ALLERDING
DIRECTOR

Encl.



**Minister for Planning; Culture & the Arts; Science & Innovation
Government of Western Australia**

Our ref: 33-16340

Mr John Symonds
Hanson Construction Materials Pty Ltd
123 Burswood Road
BURSWOOD WA 6100

Dear Mr Symonds

**HANSON CONSTRUCTION MATERIALS PTY LTD AND CITY OF VINCENT: DR
264/2011**

I have considered the State Administrative Tribunal's recommendations as provided in DR 264/2011 and I agree with the Tribunal's recommendations. I have determined that the application for review is allowed, and the deemed refusal of the respondent is set aside and conditional approval is granted. I attach a notice which gives effect to my decision.

Pursuant to the requirements of s247(4)(a) of the Planning and Development Act 2005, you are advised that the reasons for my determination on the application are those set down in DR 264/2011.

In summary, I determined that Hanson Construction Materials Pty Ltd be given conditional approval to operate for a further five years, during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land. I have written to the Western Australian Planning Commission to request that this planning be commenced and carried out as a priority, in liaison with the City of Vincent, in order to provide certainty to all parties with an interest in the future of the area.

Yours sincerely

A handwritten signature in cursive script that reads "John Day".

**JOHN DAY MLA
MINISTER FOR PLANNING;
CULTURE AND THE ARTS**

Att 2 2 MAY 2012

cc Mr Brad Wylynko, Partner, Clayton Utz

11th Floor, 2 Havelock Street, West Perth, Western Australia 6005
Telephone: +61 8 6552 6200 Facsimile: +61 8 6552 6201 Email: Minister.Day@dpc.wa.gov.au

NOTICE OF DETERMINATION OF APPLICATION BY MINISTER**Pursuant to section 246 of the *Planning and Development Act***

The Minister for Planning has pursuant to the provisions of Section 246(2)(b) of the *Planning and Development Act 2005* in the matter of Hanson Construction Materials Pty Ltd and the City of Vincent determined the application for review as follows:

Planning approval be given for the development of the applicant's East Perth concrete batching plant, subject to the following conditions:

- 1) This approval is granted for a term expiring on 16 October 2017.
- 2) This approval limits concrete batching operations and access to the site by trucks and semi-trailers to any time between Monday and Saturday inclusive.
- 3) There is to be no access to the site by trucks and semi-trailers on Sundays or public holidays.
- 4) Within three calendar months of the issue of the approval, the Applicant shall update the Environmental Management Plan dated April 2010 or submit a management plan to the City of Vincent which addresses the following matters:
 - a. The identification of the noise attenuation measures contained in the development application;
 - b. Dust and cement waste management including regular washing down of trucks before exiting the site, dust control on-site and the contribution of half of the cost of the City sweeping dust from Edward Street once a week;
 - c. A traffic management plan for all vehicles entering and exiting the site, including driver education in regard to truck routes, vehicle speeds, and operations to minimise disturbance and public safety concerns;
 - d. Permanent and fixed dust monitoring equipment shall be installed on the perimeter of the site and independently audited to the satisfaction of the City of Vincent;
 - e. The implementation of a complaint handling system which provides:

- i. A manned 24 hour telephone number and email address to log complaints and enquiries; and
 - ii. A record of complaints and enquiries logged, and the applicant's response, shall be provided on a bi-annual basis to the City for its monitoring information; and
 - f. A review of the management plan after the first 12 months from the date of submission;
 - g. The use of Iveco trucks during the night/early morning operations;
 - h. The provision to the City of an updated training register;
 - i. No water spray from sprinklers in vegetated areas being permitted beyond the boundary of the site; and
 - j. Engaging in any discussions with the City regarding repairs to roads which have been potentially damaged by Hanson's trucks.
- 5) The development must be carried out in accordance with the recommendations of the SVT Engineering Consultants Environmental Noise Assessment for the East Perth Concrete Batching Plant dated 21 April 2011, or other Noise Management Plan endorsed by the City, including in particular, but without limitation:
 - a. Control/reduction of noise emitted from the site and activities associated with the site;
 - b. Maintenance of plant/mechanical equipment and application of inspection schedules to ensure optimal, quiet working order;
 - c. Selection of equipment for onsite operations, including both prospective equipment, and retrofitting of existing equipment, to minimise individual and accumulative noise impacts from the site;
 - d. Induction and training of workforce to promote compliant operation, in accordance with the noise management plan;

- e. Detail the methods of on-going self-monitoring, including testing equipment, locations, frequency, technical parameters, interpretation of results, and periodic evaluation of the monitoring method (to account for further encroachment of residential development and changes to surrounding built environment over time);
 - f. Complaint response methods, including short and long term abatement measures and record keeping; and
 - g. Details of staff member(s) accountable for overseeing compliance with the noise management plan.
- 6) Prior to the issue of a building licence for this development, the following shall be submitted to and approved by the City:
- a. An amended plan detailing a minimum of two significant design features being incorporated in the proposed façade of building fronting Lord Street to reduce the visual impact on the streetscape;
 - b. A construction management plan addressing the following issues:
 - i. Public safety, amenity and site security;
 - ii. Contact details of essential site personnel;
 - iii. Construction operating hours;
 - iv. Noise control and vibration management;
 - v. Waste management and materials re-use; and
 - vi. Parking arrangements for contractors and subcontractors; and
 - c. A detailed landscape and reticulation plan for the development site and adjoining road verge shall be submitted to the City's Parks and Property Services for assessment and approval.

For the purpose of this condition, a detailed landscape and reticulation plan shall be drawn to a scale of 1:100 and show the following:

- i. The location and type of existing and proposed trees and plants;

- ii. All vegetation including lawns;
 - iii. Areas to be irrigated or reticulated and such method;
 - iv. Proposed watering system to ensure the establishment of species and their survival during the hot and dry months; and
 - v. Separate soft and hard landscaping plans (indicating details of materials to be used).
- 7) The following plans, as approved by the City, shall be implemented:
- a. The updated or new environmental management plan referred to in condition 4;
 - b. The amended plan referred to in condition 6(a);
 - c. The construction management plan referred to in condition 6(b);
 - d. The landscape and reticulation plan referred to in condition 6(c).
- 8) Compliance with the requirements of the *Environmental Protection (Noise) Regulations 1997 (WA)* by ensuring that during the period:
- a. 0700 hours to 2200 hours Monday to Saturday two trucks are not simultaneously idling or moving between the filling and slumping stations for a period exceeding 24 minutes in any four hour period; and
 - b. 2200 hours and 0700 hours Monday to Saturday only one truck is ever idling or moving between the filling and slumping stations at any one time and that such idling or movement does not exceed 24 minutes in any four hour period.



**JOHN DAY
MINISTER FOR PLANNING;
CULTURE AND THE ARTS**

21.5.2012.

Reasons for decision:

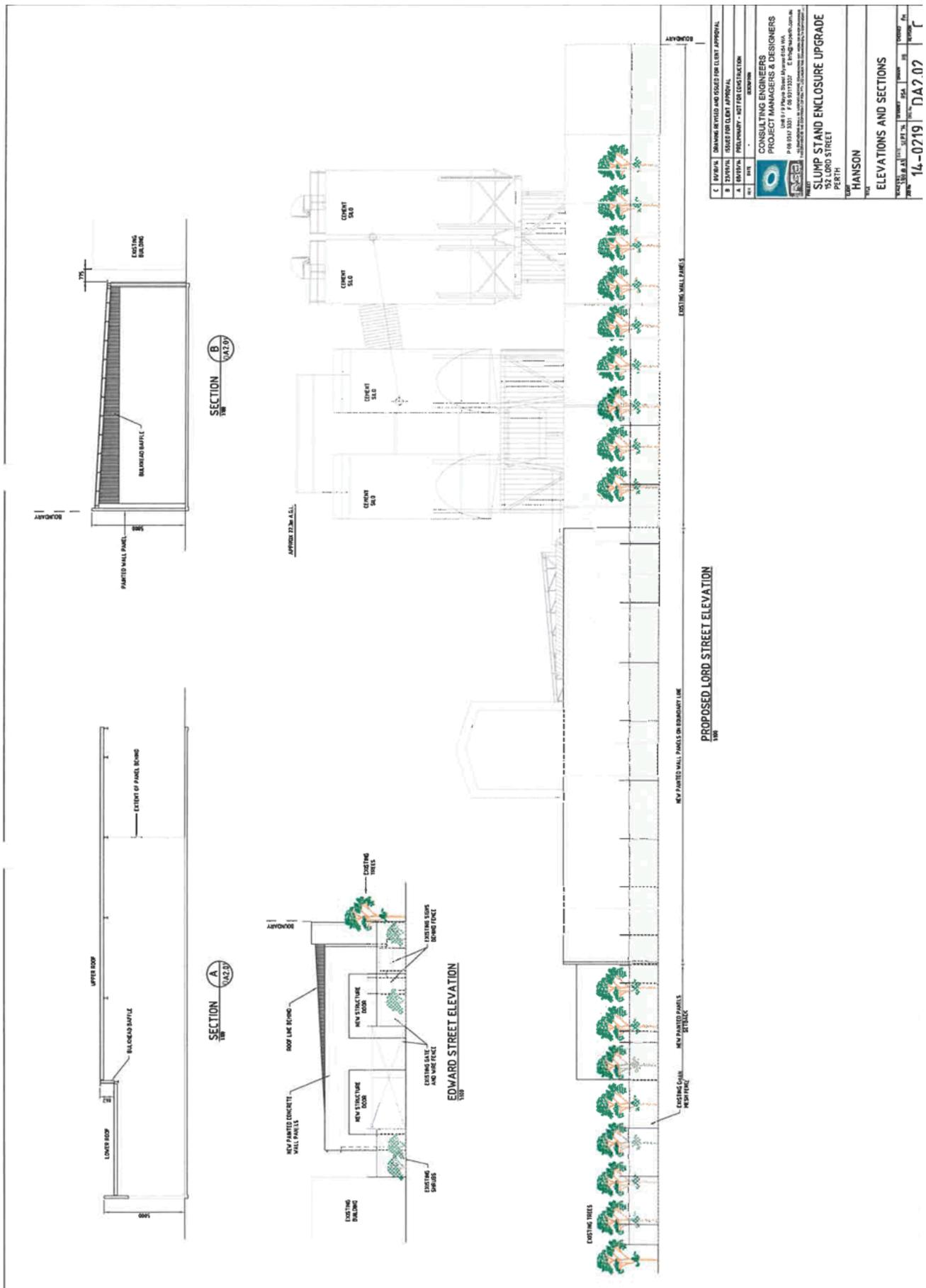
Hanson Construction Materials Pty Ltd applied for development approval to allow the continuing operation of an existing concrete batching plant in East Perth. Hanson Construction Materials Pty Ltd then sought review of the City of Vincent's deemed refusal of that decision by the State Administrative Tribunal. The Minister for Planning considered that the application to the Tribunal raised issues of such regional importance that it was appropriate for the application to be determined by the Minister. The Minister directed the Tribunal to hear the application but, without determining it, to refer it with recommendations to the Minister for determination.

The matter was heard before the Tribunal on 28-29 February and 1 March 2012 and the result and the reasons for the recommendations of the Tribunal are provided in DR 264 2011, which result and reasons are accepted by the Minister for Planning.

In summary, the Minister has determined that Hanson Construction Materials Pty Ltd be given conditional approval to operate for a further five years, during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land.

SCHEDULE OF MODIFIED CONDITIONS

#	CONDITIONS
1.	This approval authorises concrete batching operations and access to the site by trucks and semi-trailers at any time between Monday and Saturday inclusive.
2.	There is to be no access to the site by trucks and semi-trailers on Sundays or public holidays.
3.	The plant is to operate in accordance with the Environmental Management Plan prepared by Strategen Environmental Consultants dated August 2014 and approved by the City on 4 November 2014, or other Environmental Management Plan approved by the City, subject to the following: <ul style="list-style-type: none"> a) annual review of the environmental management plan after each year following the grant of approval; and b) the inclusion in the environmental management plan of any addenda necessary to address any specific matter identified by either the Operator or the City between annual reviews, which addenda are to form part of the environmental management plan.
4.	The development must be carried out in accordance with the recommendations made in the SVT Engineering Consultants Environmental Noise Assessment dated 21 April 2011, or other Noise Management Plan approved by the City, including in particular, but without limitation: <ul style="list-style-type: none"> a) Control/reduction of noise emitted from the site and activities associated with the site; b) Maintenance of plant/mechanical equipment and application of inspection schedules to ensure optimal, quiet working order; c) Selection of equipment for onsite operations, including both prospective equipment and retrofitting of existing equipment, to minimise individual and accumulative noise impacts from the site; d) Induction and training of workforce to promote compliant operation, in accordance with the noise management plan; e) Detail the methods of on-going self-monitoring, including testing equipment, locations, frequency, technical parameters, interpretation of results, and periodic evaluation of the monitoring method (to account for further encroachment of residential development and changes to surrounding built environment over time); f) Complaint response methods, including short and long term abatement measures and record keeping; and g) Details of staff member(s) accountable for overseeing compliance with the noise management plan.
5.	Landscaping to be maintained in accordance with the Landscape Management Plan dated 26 June 2012, or other Landscape Management Plan approved by the City.
6.	All truck traffic is not to utilise Claisebrook Road north of Caversham Street unless such truck movements are to provide local supplies of concrete within the Claisebrook Precinct. All truck traffic is to access and egress the Claisebrook Precinct via Edwards Street to Lord Street.



Summary of Submissions:**Concrete Batching Plant (Use Not Listed) – Extension of the Term of Approval and Modification to Conditions – No.71 Edward Street Perth**

Issue	Comment
Approval	
The batching plants should not be given planning approval as they have turned the area into an industrial zone.	Noted. On 12 May 2012 the Minister for Planning granted planning approval to the existing batching plant subject to the approval expiring on 16 October 2017 and other conditions. The reason for the Minister's decision was that a five year period would provide sufficient time to enable the necessary strategic planning framework for the subject site to be finalised to indicate clearly the ultimate development intent for the subject land. The strategic planning framework for the area is yet to be formalised and so it is considered premature for the batching plant to be approved in perpetuity and instead it is recommended that any approval be limited to 16 October 2018 to enable the strategic planning framework to be finalised to indicate clearly the ultimate development intent for the subject site.
Noise	
The noise generated by the Batching Plant and its trucks is impacting on the amenity of the area.	As part of the condition of approval issued on 12 May 2012, the proponent submitted a Noise Management Plan that demonstrate how the batching plant would comply with the requirements of the State Government's Noise Regulations. This Noise management Plan was approved by the City and the operation of the batching plant is required to be undertaken in accordance with this approved plan. Any complaints received by the City are fully investigated to ensure compliance with both the approved Noise Management Plan and the Noise Regulations.
Dust	
The dust generated by the Batching Plant and its trucks is a health risk to the surrounding residents and causing damages to the existing surrounding buildings and vehicles.	As part of the condition of approval issued on 12 May 2012, the proponent submitted a Dust Management Plan that demonstrate how the batching plant would minimise dust levels. This Dust Management Plan was approved by the City and the operation of the batching plant is required to be undertaken in accordance with this approved plan. The plant operator is also required to provide annual audits of dust levels to ensure compliance with the standards. These audit are assessed by the City and have been considered acceptable. Any complaints received by the City are fully investigated to ensure compliance with the approved Dust Management Plan.
Devaluation of Properties	
These batching plants contribute to the devaluation of the properties in the area.	Devaluation of properties is not a relevant planning consideration.
Traffic	
<p>The traffic generated by the batching plant is a constant hazard to the residents of the area as there have been some nearly miss accidents between passenger vehicles and the trucks for the batching plants.</p> <p>The proponent is proposing not to use Claisebrook to access/egress the batching plant which will have a traffic impact on the area Edward Street/Gladstone Street/Chelsea Street/ Sommerville Street and Lord Street.</p>	<p>Noted. The traffic impact assessment submitted as part of the previous application demonstrated the existing road network could safely accommodate the volume of traffic generated by the batching plant.</p> <p>Edward Street, Claisebrook Road and Summers Street between Lord Street and Claisebrook Road, are classified as Local Distributor Roads under the Metropolitan Functional Road Hierarchy and can carry up to 6,000 vehicles per day (vpd). Edward</p>

Summary of Submissions:

Issue	Comment
	Street carries approx. 1250 vpd of which 16% is classified as heavy vehicles (trucks). Claisebrook Road currently carries approx. 1,500 vpd of which 7.3% are trucks. This data suggests that the majority of the concrete batching plant traffic already is using Edward Street as their primary access. It is considered that Edward Street can accommodate the additional heavy vehicle traffic and that restricting access to Edward Street will assist in minimising impacts to local residents and is supported.
Land Use	
<p>There have been new residential/mixed use/commercial development in the area during the last 5 years. The batching plants are incompatible with these uses.</p> <p>If the batching plant is removed from the area, there will be a huge increase in activity with new businesses and residential development. The batching plant is to be relocated in an industrial area which is appropriate for such type of use.</p> <p>Claisebrook is a prime location within the City and now with the advent of the new stadium, it is expected that there will be more people interested to settle in the area, however, the batching plant will prevent this regeneration of the area.</p>	<p>The draft City's Town Planning Scheme No.2 (TPS2) was advertised in 2014 with comments being received from the community regarding the discontinued operation of the concrete batching plants and support for Councils proposal of a mixed use area. Following advertising, Council endorsed the draft TPS2 to be forwarded to the Western Australian Planning Commission for determination. At this time Council recommended the concrete batching plant sites to be zoned Residential/Commercial R160 with an additional use of concrete batching plants with a sunset clause ending in October 2017, and the surrounding area to be zoned Residential/Commercial R100.</p> <p>No determination has been made by the Minister for Planning regarding the City's draft TPS2 since lodgement in December 2014. As the strategic planning framework for the locality is yet to be finalised it is considered premature for the permanency of the batching plant use to be determined at this point in time and instead it is recommended that any approval be limited to 16 October 2018 to enable the strategic planning framework to be finalised to indicate clearly the ultimate development intent for the subject site</p>
State Planning Framework	
<p>The subject site is zoned Urban under the Metropolitan Region Scheme (MRS). Concrete Batching Plant is considered as "General Industry" land use under the Model Provisions for Local Planning Schemes contained within the Planning and Development (Local Planning Schemes) Regulations 2015. Therefore Concrete Batching Plant is considered to be incompatible with the Urban zoning under MRS.</p> <p>The batching plants contradict the long term vision for the Metro area as outlined State document Directions 2031 (Perth and Peel @ 3.5 Million/Central Sub-Regional Planning Framework)</p>	<p>Noted. In accordance with the State Planning Framework, the Council has recommended that the concrete batching plants be zoned Residential/Commercial R160 in the draft TPS2.</p>
Local Planning Framework	
<p>The Claisebrook Road North Precinct states that "<i>within this Precinct, commercial, retail, service and light industrial uses compatible with residential use will be supported, including uses providing services to the businesses and residents of the central and inner city</i>". The Concrete Batching Plants are therefore considered to be incompatible with the desired character for the locality as stated in the Claisebrook Road North Precinct.</p>	<p>Noted. The Concrete Batching Plants were previously granted planning approvals by the Minister for Planning and not the by Council. It is considered that the Concrete Batching Plants uses are incompatible with the existing surrounding uses and the future character of the area under TPS2. However, no determination has been made by the Minister for Planning regarding the City's draft TPS2 since lodgement in December 2014. As the strategic planning framework for the locality is yet to be</p>

Summary of Submissions:

Issue	Comment
<p>The Development Application is not permissible from a planning perspective. Concrete batching plant operations are not compatible both the current and future planning frameworks at all levels including but not limited to the State Planning Framework and the Local Town Planning Framework – <i>Town Planning Scheme 2</i> (as a Seriously Entertained Town Planning Scheme).</p>	<p>finalised it is considered premature for the permanency of the batching plant use to be determined at this point in time and instead it is recommended that any approval be limited to 16 October 2018 to enable the strategic planning framework to be finalised to indicate clearly the ultimate development intent for the subject site.</p>
<p>This is further emphasised in the EPRA Design Guidelines for the Claisebrook Road North Precinct, which state that preferred land uses include a range of retail, service and commercial land uses that are compatible with residential uses, and that residential development is particularly encouraged within the Precinct.</p> <p>The Draft Local Planning Scheme and Draft Town Planning Scheme No.2 seek to revitalise the area as a mixed residential/commercial precinct in accordance with the principles of Transit Oriented Development. Therefore the continued operation of the concrete batching plant is inconsistent with the desired future character for the locality.</p>	
EPRA Scheme	
<p>Under the EPRA Scheme, the batching plant use is neither 'Preferred' nor 'Contemplated' in the Claisebrook Precinct. However, the EPRS does not contain any provisions dealing with a 'Use Not Listed'. Clause 5.2.4 of the EPRS does allow for approval of a <u>Category of Use</u> that is neither Preferred nor Contemplated in a Precinct, but it does <u>not</u> allow for the approval of a Use Not Listed. The only Category of Use under the Scheme that is not Preferred or Contemplated in the Claisebrook Precinct is Research and Development. This is the only Category of Use that can be approved in the Precinct under Clause 5.2.4, and it does not include concrete batching.</p> <p>The Deemed Provisions introduced to all Local Planning Schemes in October 2015, do not provide any provisions that allow for the proposed use to be approved</p> <p>Whilst the 'Service and Light Industry' land use category is identified as a preferred use for the Claisebrook Road North Precinct, the concrete batching plant cannot reasonably be considered a Service Industry or a Light Industry as defined under the EPRS by virtue of the resultant amenity impact on surrounding properties, and therefore should be classified as a 'General Industry' land use.</p>	<p>Under the EPRA Scheme, the concrete batching plant use is neither 'preferred' nor 'contemplated' in the Claisebrook Precinct and there is no prohibition of this use. As a result the concrete batching plant has been assessed as an unlisted use. It has historically been accepted by EPRA, the City of Perth, the Minister, the City and the SAT, in its determination of Hanson Construction Materials Pty Ltd and Town of Vincent [2008] WASAT 71, that the concrete batching plants are an unlisted use.</p> <p>As the EPRA Scheme has remained unchanged since the earlier decisions of the City of Perth and the SAT, and applying the principles of proper and orderly planning as identified in SAT decisions of Hanson Construction Materials Pty Ltd and Town of Vincent and Humphries and City of Stirling, the City cannot refuse the application simply because it is not a 'contemplated' or 'preferred' use. As is set out in the SAT decision of Hanson Construction Materials Pty Ltd and Town of Vincent and Humphries and City of Stirling decisions are required to be made consistently and reasonably based on the merits of the application. Having regard to these previous decision the City considers the use 'concrete batching plant' to be an 'unlisted use' under the EPRA Scheme.</p>
Economic Impact	
<p>An Economic Assessment of the Claisebrook Concrete Batching Plants have shown the Concrete Batching Plants sites could accommodate an additional 500 residents,</p>	<p>One of the submitters provided an Economic Assessment of the Claisebrook Concrete Batching Plants as part of their submission, outlining that the land parcels that currently</p>

Summary of Submissions:

Issue	Comment
650 jobs created and attracting an investment in the order of \$154.5 million. If the concrete batching plants are relocated approximately 105 jobs and \$12 million in value added would be relocated elsewhere. Therefore the economic benefits from not approving the Concrete Batching Plants outweigh the continuation of the operation of the Concrete Batching Plants.	accommodate the Concrete Batching Plants could accommodate an additional 500 residents, support 650 jobs and attract investment in the order of \$154.5 million. The submission also states that if the concrete batching plants are relocated approximately 105 jobs and \$12 million in value would be added to the local economy. The submission concludes by outlining there are economic benefits for not approving the Concrete Batching Plants which outweigh the continuation of the operation of the concrete batching plants. The economic impact of a development application is not a relevant planning consideration and cannot be given regard by Council when determining the application.
Economic and Employment Lands Strategy (EELS)	
The Western Australian Planning Commission adopted the Economic and Employment Lands Strategy (EELS) in 2012. The document mentions batching plants as an example only of an industry that requires good access to Perth. The applicant is justifying the continuation of the batching plant based on this document. However, EELS identifies the vacant land to the rear of the former East Perth Power Station as Industrial Centre where the existing batching plant can be relocated.	There are clear inconsistencies between the state's strategic planning documents and no clarification is afforded as to which document would prevail to the extent of any inconsistency. Whilst reference to the concrete batching plants is noted in the EELS it is considered that this reference alone does not provide unequivocal strategic recognition of the importance of these concrete batching plants. Given the EELS references the former East Perth Power Station and the Capital City Planning Framework identifies the subject site as a mixed use area with commercial, retail and residential uses, it is not considered that the State's strategic planning framework supports the permanent operation of the concrete batching plant in this location.
Anti-social behaviour	
There is an increase in vandalism, graffiti, break-ins and vagrancy in the adjacent under developed areas of the batching plants.	Anti-social behaviour is a police matter.
Visual Impact	
The batching plants have a visual impact given they are visible from the main entrances to the City via Freeway, Lord Street and adjacent residential areas.	Noted.
Support	
Support the proposed	Noted.
Water Corporation and Main Road have no objections to the extension of the time of approval and the modified conditions.	Noted.

Applicant's Response to Submissions
Applications for Development Approval pursuant to the East Perth Redevelopment Authority Scheme
Hanson Concrete Batching Plant – No. 71 (Lot 200) Edward Street, Perth
Holcim Concrete Batching Plant – No. 21 (Lot 1001) Claisebrook Road, Perth

Submission	Applicant Response
<p><u>Approval</u></p> <p>The Batching Plants should not be given planning approval as they have turned the area into an industrial zone.</p>	<p>The Hanson Concrete Batching Plant (the Hanson Plant) has operated in the area since the 1960's and from the present site when the Graham Farmer Freeway was constructed in the 1990's. The Holcim Concrete Batching Plant (the Holcim Plant) has operated from the site since 1987, and previously from Trafalgar Road, East Perth. Precinct 15 has long functioned as a commercial/industrial precinct and that remains the predominant function today. This land use prominence is reflective of the applicable zoning under the East Perth Redevelopment Authority (EPRA) Scheme which lists 'Commercial', 'Service' and 'Light Industry' uses as "Preferred Uses" within Precinct 15. The Plants have therefore coexisted within a predominantly commercial/industrial area with limited residential development.</p>
<p><u>Noise</u></p> <p>The noise generated by the Batching Plant and its trucks is impacting on the amenity of the area.</p>	<p>The Plants have been regularly monitored to ensure compliance with State environmental legislation and operate within the framework of an approved Environmental Management Plan. This includes operating within the assigned noise levels under the <i>Environmental Protection (Noise) Regulations 1997</i>. This is also noting the location of the sites adjacent to the Graham Farmer Freeway which is a significant source of noise.</p>
<p><u>Dust</u></p> <p>The dust generated by the Batching Plant and its trucks is a health risk to the surrounding residents and causing damage to the existing surrounding buildings and vehicles.</p>	<p>The Plants have been regularly monitored to ensure compliance with State environmental legislation and operate within the framework of an approved Environmental Management Plan. This includes containing dust within the site pursuant to the requirements of the <i>Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998</i>.</p>
<p><u>Devaluation of properties</u></p> <p>These batching plants contribute to the devaluation of the properties in the area.</p>	<p>No comment as this is not a planning consideration.</p>

Submission	Applicant Response
<p><u>Traffic</u></p> <p>The traffic generated by the batching plant is a constant hazard to the residents of the area as there have been some nearly miss accidents between passenger vehicles and the trucks for the batching plants.</p> <p>The proponent is proposing not to use Claisebrook to access/egress the batching plant which will have a traffic impact on the area Edward Street/Gladstone Street/Chelsea Street/ Sommerville Street and Lord Street.</p>	<p>In recognition that increased residential development may occur within the northern portion of Precinct 15, the proposal is to re-route all truck movements to Lord Street via Edward Street. Traffic safety, volume and functionality for the proposed access arrangement is adequate and appropriate.</p>
<p><u>Land Use</u></p> <p>There have been new residential/mixed use/commercial development in the area during the last 5 years. The batching plants are incompatible with these uses.</p> <p>If the batching plant is removed from the area, there will be a huge increase in activity with new businesses and residential development. The batching plant is to be relocated in an industrial area which is appropriate for such type of use.</p> <p>Claisebrook is a prime location within the City and now with the advent of the new stadium, it is expected that there will be more people interested to settle in the area, however, the batching plant will prevent this regeneration of the area.</p>	<p>The Plants have coexisted with residential development within Precinct 15 for many years, albeit residential development is not the predominant land use. The Plants will not affect the capacity of the City to meet residential targets to 2031 and 2050. The Plants are also located within the portion of Precinct 15 which is the least compatible to accommodate residential development. There are significant other residential redevelopment opportunities within the City of Vincent. Further, the Plants do not prevent the capacity for commercial development to occur.</p>
<p><u>State Planning Framework</u></p> <p>The subject site is zoned Urban under the Metropolitan Region Scheme (MRS). Concrete Batching Plant is considered as "General Industry" land use under the Model Provisions for Local Planning Schemes contained within the Planning and Development (Local Planning Schemes) Regulations 2015. Therefore Concrete Batching Plant is considered to be incompatible with the Urban zoning under MRS.</p> <p>The batching plants contradict the long term vision for the Metro area as outlined State document Directions 2031 (Perth and Peel @ 3.5 Million/Central Sub-Regional Planning Framework).</p>	<p>The Plants have previously been deemed a use that is capable of approval under the provisions of the EPRA Scheme which sits under the Urban zone of the MRS.</p> <p>The Plants are entirely consistent with State Government policies, including the Economic and Employment Lands Strategy (EELS), Directions 2031 and Perth and Peel @ 3.5 Million. With respect to the latter policies, the Plants facilitate the significant residential, infrastructure and CBD development planned to occur under Directions 2031 and Perth and Peel @ 3.5 Million to 2050.</p>
<p><u>Local Planning Framework</u></p> <p>The Claisebrook Road North Precinct states that "within this Precinct, commercial, retail, service and light industrial uses compatible with residential use will be supported, including uses providing services to the businesses and residents of the central and inner city". The Concrete Batching Plants are therefore considered to be incompatible with the desired character for the locality as stated in the Claisebrook Road North Precinct.</p>	<p>The compatibility of the Plants in this location has been demonstrated by the long history of operation with very limited recorded complaints. It is also clearly noted that the Plants provide a vital service to the central and inner city locations through the provision of batched concrete for the construction industry, significant infrastructure development and to accommodate planned residential targets.</p>

Submission	Applicant Response
<p>The Development Application is not permissible from a planning perspective. Concrete batching plant operations violate both the current and future planning frameworks at ALL levels including but not limited to the State Planning Framework and the Local Town Planning Framework – Town Planning Scheme 2 (as a Seriously Entertained Town Planning Scheme).</p> <p>This is further emphasised in the EPRA Design Guidelines for the Claisebrook Road North Precinct, which state that preferred land uses include a range of retail, service and commercial land uses that are compatible with residential uses, and that residential development is particularly encouraged within the Precinct.</p> <p>The Draft Local Planning Scheme and Draft Town Planning Scheme No.2 seek to revitalise the area as a mixed residential/commercial precinct in accordance with the principles of Transit Oriented Development. Therefore the continued operation of the concrete batching plant is inconsistent with the desired future character for the locality.</p>	<p>Refer to the previous responses for comment in relation to the suitability of the retention of the Plants having regard to the statutory and strategic planning framework.</p>
<p><u>EPRA Scheme</u></p> <p>Under the EPRS, the batching plant use is neither 'Preferred' nor 'Contemplated' in the Claisebrook Precinct. However, the EPRS does not contain any provisions dealing with a 'Use Not Listed'. Clause 5.2.4 of the EPRS does allow for approval of a Category of Use that is neither Preferred nor Contemplated in a Precinct, but it does not allow for the approval of a Use Not Listed. The only Category of Use under the Scheme that is not Preferred or Contemplated in the Claisebrook Precinct is Research and Development. This is the only Category of Use that can be approved in the Precinct under Clause 5.2.4, and it does not include concrete batching.</p> <p>The Deemed Provisions introduced to all Local Planning Schemes in October 2015, do not provide any provisions that allow for the proposed use to be approved.</p> <p>Whilst the 'Service and Light Industry' land use category is identified as a preferred use for the Claisebrook Road North Precinct, the concrete batching plant cannot reasonably be considered a Service Industry or a Light Industry as defined under the EPRS by virtue of the resultant amenity impact on surrounding properties, and therefore should be classified as a 'General Industry' land use.</p>	<p>The Plants have previously been deemed a use that is capable of approval under the provisions of the EPRA Scheme.</p>

Submission	Applicant Response
<p><u>Economic Impact</u></p> <p>An Economic Assessment of the Claisebrook Concrete Batching Plants have shown the Concrete Batching Plants sites could accommodate an additional 500 residents, 650 jobs created and attracting an investment in the order of \$154.5 million. If the concrete batching plants are relocated approximately 105 jobs and \$12 million in value added would be relocated elsewhere. Therefore the economic benefits from not approving the Concrete Batching Plants outweigh the continuation of the operation of the Concrete Batching Plants.</p>	<p>A copy of the "Economic Assessment" referred to has not been provided and as such it is not possible to determine the basis on which those figures have been calculated. The Plants have been recognised for the sustainable role they play in supplying concrete to the Perth CBD. Separate assessments undertaken by the Plants have shown that if the Plants were to discontinue it would result in additional trucks travelling longer distances at increased cost with less efficiency in the delivery of concrete and with increased CO₂ emissions.</p>
<p><u>Economic and Employment Lands Strategy (EELS)</u></p> <p>The Western Australian Planning Commission adopted the Economic and Employment Lands Strategy (EELS) in 2012. The document mentions batching plants as an example only of an industry that requires good access to Perth. The applicant is justifying the continuation of the batching plant based on this document. However, EELS identifies the vacant land to the rear of the former East Perth Power Station as Industrial Centre where the existing batching plant can be relocated.</p>	<p>Within the Central sub-region, EELS specifically recognises the Plants as strategically located industrial facilities that need to be protected. This is in recognition that the plants are well serviced by primary arterial routes in and out of the city and to efficiently service CBD and inner city developments and associated infrastructure.</p>
<p><u>Anti-social behaviour</u></p> <p>There is an increase in vandalism, graffiti, break-ins and vagrancy in the adjacent under developed areas of the batching plants.</p>	<p>There is no valid basis in this submission that the Plants have contributed in any way to increased vandalism, graffiti, break-ins and vagrancy in the area. If antisocial activities were to occur in relation to the Plant sites themselves, it is acted upon immediately in conjunction with the relevant authorities.</p>
<p><u>Visual Impact</u></p> <p>The batching plants have an adverse visual impact given they are visible from the main entrances to the City via Freeway, Lord Street and adjacent residential areas.</p>	<p>The Plants are grouped with transport related infrastructure and operations including the Graham Farmer Freeway, the Claisebrook Railway Depot and the East Perth Train Station, all of which represent significant physical land areas in the immediate locality. The proximity of the Plants adjacent to these uses does not detract from the visual presentation of the locality. The Plant operators are happy to work with Council and the community to consider the provision of additional landscaping or development features to improve the visual presentation of the Plants.</p>



East Perth Concrete Plant

Environmental Management Plan

Prepared for
Hanson Construction Materials Pty Ltd
by Strategen

August 2014



STRATEGEN
environmental consultants

East Perth Concrete Plant

Environmental Management Plan

Strategen is a trading name of
Strategen Environmental Consultants Pty Ltd
Level 2, 322 Hay Street Subiaco WA
ACN: 056 190 419

August 2014

Limitations**Scope of services**

This report ("the report") has been prepared by Strategen Environmental Consulting Pty Ltd (Strategen) in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Strategen. In some circumstances, a range of factors such as time, budget, access and/or site disturbance constraints may have limited the scope of services. This report is strictly limited to the matters stated in it and is not to be read as extending, by implication, to any other matter in connection with the matters addressed in it.

Reliance on data

In preparing the report, Strategen has relied upon data and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise expressly stated in the report, Strategen has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. Strategen has also not attempted to determine whether any material matter has been omitted from the data. Strategen will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to Strategen. The making of any assumption does not imply that Strategen has made any enquiry to verify the correctness of that assumption.

The report is based on conditions encountered and information received at the time of preparation of this report or the time that site investigations were carried out. Strategen disclaims responsibility for any changes that may have occurred after this time. This report and any legal issues arising from it are governed by and construed in accordance with the law of Western Australia as at the date of this report.

Environmental conclusions

Within the limitations imposed by the scope of services, the preparation of this report has been undertaken and performed in a professional manner, in accordance with generally accepted environmental consulting practices. No other warranty, whether express or implied, is made.

Client: Hanson Construction Materials Pty Ltd

Report Version	Revision No.	Purpose	Strategen author/reviewer	Submitted to Client	
				Form	Date
Draft Report	Rev A	For client review	K Britza / J Mitchell	Electronic	25/06/2014
Final Draft Report	Rev B	For client review	K Britza / J Mitchell	Electronic	28/07/2014
Final Report	Rev 0	For provision to the City of Vincent	K Britza / J Mitchell	Electronic	14/08/2014

Filename: HAN14149_01 R001 Rev 0.docx - 14 August 2014

Table of Contents

Table of contents

1. Introduction	1
1.1 Background	1
1.2 Purpose and scope	1
1.3 Related plans	3
2. Roles and responsibilities	5
3. Environmental Management System	8
3.1 Training	8
3.2 Internal Quality and Environment Hazard Identification	8
3.3 Integrated Risk Management System (IRMS)	8
3.4 Site meetings	8
3.5 Inspections and audits	8
3.5.1 Independent audit of dust monitoring equipment	8
3.6 Review and reporting	9
3.6.1 Review	9
3.6.2 Reporting	9
4. Incident management	10
4.1 Incident management and reporting	10
4.2 Incident investigation	10
5. Community relations procedure	11
5.1 Objectives, targets and indicators for community relations	11
5.2 Management measures for community relations	11
6. Dust management plan	13
6.1 Air quality guidelines	13
6.2 Potential impacts from dust	13
6.3 Objectives, targets and indicators for dust management	13
6.4 Management actions for dust control	13
6.5 Monitoring actions for dust	15
6.6 Contingency actions for dust management	16
7. Noise management plan	17
7.1 Potential impact from noise emissions	17
7.2 Objectives, targets and indicators for noise management	17
7.3 Management actions for noise control	17
7.4 Monitoring actions for noise	18
7.5 Contingency actions for noise management	19
8. Traffic management plan	20
8.1 Potential impacts of traffic	20
8.2 Requirements of DR264/2011	20
8.3 Road use agreement with the City of Vincent	20
8.4 Vehicle flow system	20
8.5 Objectives, targets and indicators for traffic management	21
8.6 Management actions for traffic control	21
8.7 Monitoring actions for traffic	22
8.8 Contingency actions for traffic management	23
9. References	25

List of tables

Table 1: Requirements addressed within the EMP	1
Table 2: Roles and responsibilities	5
Table 3: Environmental incident level	10

Table of Contents

Table 4: Objectives, targets and performance indicators for community relations	11
Table 5: Management measures for community relations	11
Table 6: Air quality guidelines for PM ₁₀	13
Table 7: Objectives, targets and indicators for dust management	13
Table 8: Management actions for dust control	13
Table 9: Monitoring actions for dust	15
Table 10: Contingency actions for dust management	16
Table 11: Objectives, targets and indicators for noise management	17
Table 12: Management actions for noise control	17
Table 13: Monitoring actions for noise	18
Table 14: Contingency actions for noise management	19
Table 15: Objectives, targets and indicators for traffic management	21
Table 16: Management actions for traffic control	21
Table 17: Monitoring actions for traffic	22
Table 18: Contingency actions for traffic management	23

List of figures

Figure 1: East Perth Concrete Plant site layout	4
Figure 2: Hanson metro concrete operations organisational structure	7

1. Introduction

1.1 Background

The Hanson East Perth concrete batching plant is located in Edward Street, East Perth. Pre-mixed concrete is batched on the premises, loaded into purpose built agitator trucks and delivered to various construction sites across the Metropolitan area. Incoming raw materials are delivered from local quarries in tipper trucks and cement powder is delivered in purpose built cement tankers. Additives in powder or liquid form are delivered packaged or in bulk and stacked or stored in tanks on-site.

1.2 Purpose and scope

This Environmental Management Plan (EMP) documents the initiatives that will be used on-site at the East Perth Concrete Plant (the Plant) to manage the potential environmental impacts of operations. This EMP supersedes previous versions, which have been updated in response to correspondence (Notice of Determination of Application by Minister) from the Minister for Planning, Culture and the Arts dated 22 May 2012. Previous versions have been provided to the City of Vincent (CoV) as required by condition 4 (Table 1), this version of the EMP is also intended to be submitted to CoV. The current approval term expires on 16 October 2017.

The EMP includes a description of:

- the environmental management system
- the organisational structure of Hanson metropolitan concrete operations
- applicable legislative and licensing requirements
- procedures developed to manage the environmental aspects of the site
- reporting processes
- environmental incident management processes
- complaints handling system
- processes to monitor and evaluate environmental performance.

The EMP will provide a platform for implementation of continual improvement with respect to management of dust, noise and traffic movements on-site.

The EMP has been prepared in accordance with the Notice of Determination of Application by Minister, 22 May 2012 and State Administrative Tribunal Orders DR264/2011 (Table 1).

Management actions included in the EMP have been updated to include changing regulatory and community expectations. Stakeholder and community feedback on the requirements for improved communication and improvements in induction and communication with employees have been included in the EMP.

Table 1: Requirements addressed within the EMP

Item #	Requirement	EMP section
DR 264/2011		
1)	This approval is granted for a term expiring on 16 October 2017.	Section 1.2
2)	This approval limits concrete batching operations and access to the site by trucks and semi-trailers to any time between Monday and Saturday inclusive.	Section 8.2
3)	There is to be no access to the site by trucks and semi-trailers on Sundays or public holidays.	Section 7.2
4)	Within three calendar months of the issue of the approval, the Applicant shall update the Environmental Management Plan dated April 2010 or submit a management plan to the City of Vincent which addresses the following matters:	Section 1.2 and Section 3.6.1

East Perth Concrete Plant

1.3 Related plans

This EMP should be implemented in conjunction with the Hanson Integrated Risk Management System (IRMS); Environmental Risk Reporting Process; Crisis Management Plan; Preventative Maintenance Checklist and the Landscaping and Reticulation Plan.

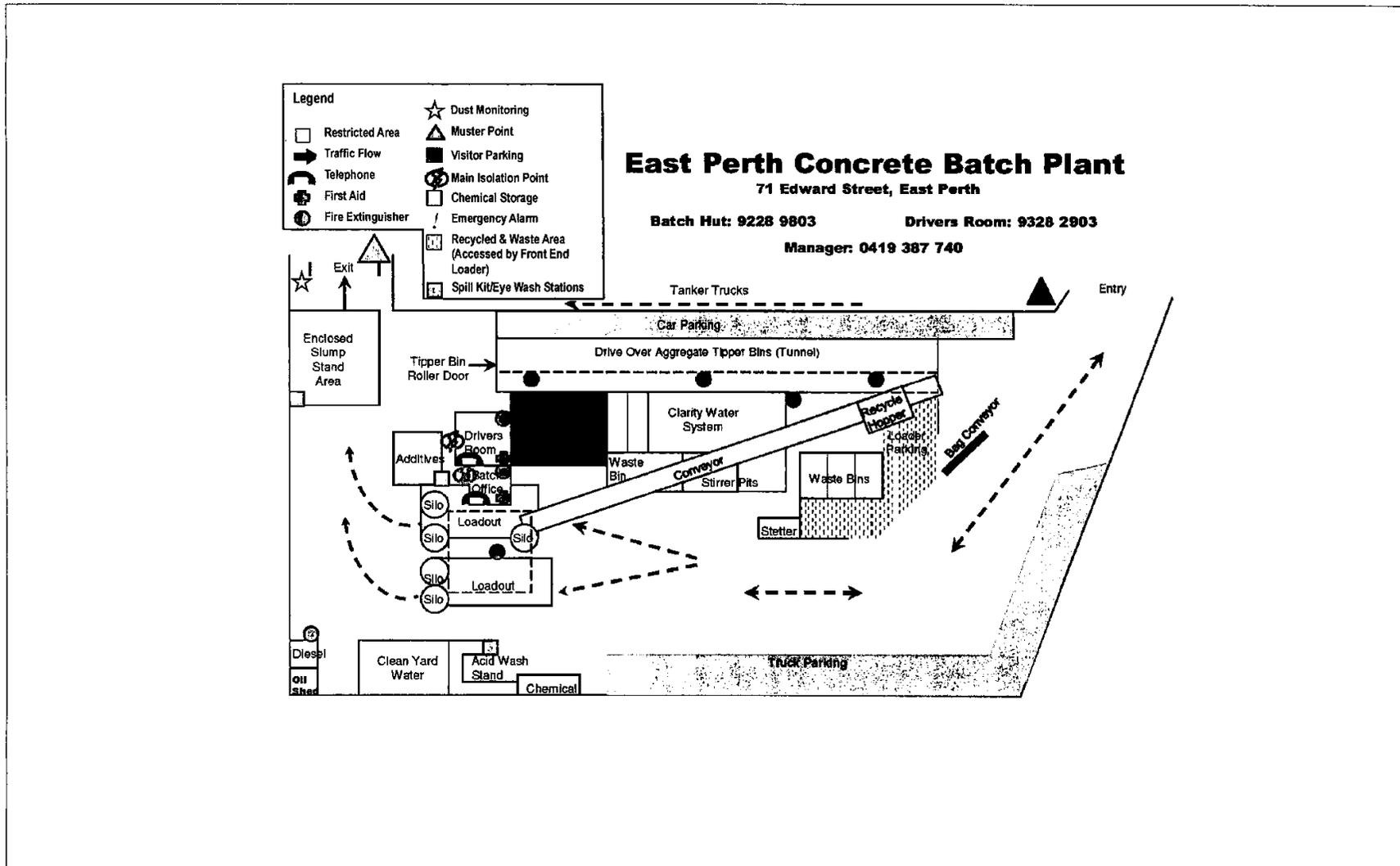
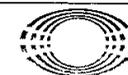


Figure 1: East Perth Concrete Batch Plant

Date: 27/07/2014
 Author: JCrute
 Source: Hanson East Perth Management Plan - May 2014

Path: Q:\Consul\12014\HANPHAN14149\ArcMap_documents\R001\Rev9\HAN14149_01_R001_RevB_F001.mxd



STRATEGEN
 info@strategen.com.au www.strategen.com.au

2. Roles and responsibilities

A number of different Hanson personnel have responsibilities applicable to the operation of the East Perth Concrete Plant and implementation of this EMP (Table 2; Figure 2). Personnel assigned the following responsibilities will be held accountable for achieving the various performance targets through the internal performance assessment process.

Table 2: Roles and responsibilities

Role	Acronym	Action
Regional General Manager	RGM	<ul style="list-style-type: none"> ensure that business outcomes are achieved ensure the site operates in accordance with appropriate licences and the <i>Environmental Protection Act 1986</i> (EP Act) and Regulations communicate incidents to regulators.
Risk Manager	RM	<ul style="list-style-type: none"> approve and implement the EMP accountable for implementation of Health, Safety and Environment aspects of the EMP, including the dust, noise and traffic management plans, and implementation of the community relations procedure develop, implement, monitor and review performance of the Annual Improvement Plan – Health, Safety and Environment maintain the Risk Reporting system and the Integrated Risk Management System (IRMS) monitor performance of the EMP, including incident reports and mitigation actions undertaken direct internal audits of the EMP facilitate annual independent audit of the dust management plan, including the monitoring program co-ordinate the annual performance review of the EMP communicate with regulators communicate incidents to the RGM.
Metropolitan Operations Manager	MOM	<ul style="list-style-type: none"> ensure personnel are aware of their obligations under the EP Act and Regulations approve and implement the EMP annual review of the EMP ensure appropriate resources are available to meet the commitments made in the EMP provide assistance in community relations activities with respect to external communications communicate with complainants as per the complaints handling process communicate summary of complaints and responses to the City of Vincent communicate incidents to the RGM.

East Perth Concrete Plant

Role	Acronym	Action
Plant Production Manager	PPM	<ul style="list-style-type: none"> • accountable for implementation of operational aspects of the EMP, including the dust, noise and traffic management plans, and implementation of the community relations procedure • provide resources to ensure employees are trained in the correct use of plant and equipment • ensure that scopes and contracts reflect the requirements of the EMP • communicate the EMP to operations personnel, including site induction on an annual basis • communicate the EMP to maintenance personnel, including site induction on an annual basis • maintain a training register • develop, implement, monitor and review Annual Improvement Plan • undertake annual review of the EMP • provide resources to ensure plant and control equipment is well maintained • establish and maintain an open and transparent relationship with the community • facilitate site meetings with employees and contractors • report all incidents through the IRMS and Risk Reporting systems • approve and monitor the use of contingency measures • prepare summary of complaints and responses • communicate incidents to the RGM.
Customer Service Centre	CSC	<ul style="list-style-type: none"> • allocation of deliveries • communication with delivery drivers.
Employees	E	<ul style="list-style-type: none"> • report conditions and/or faulty equipment that may lead to an abnormal event/ incident • report incidents to the PPM • adhere to standard operating procedures as they apply at the time of induction • suggest operational control improvements • attend site meetings.
Sub contractors and suppliers	SC/S	<ul style="list-style-type: none"> • adhere to the conditions and requirements of scopes and contracts • adhere to standard operating procedures as they apply at the time of induction • suggest operational control improvements • report conditions and/or faulty equipment that may lead to an abnormal event/ incident • report incidents to the PPM • attend site meeting on request.

HANSON - METRO CONCRETE OPERATIONS

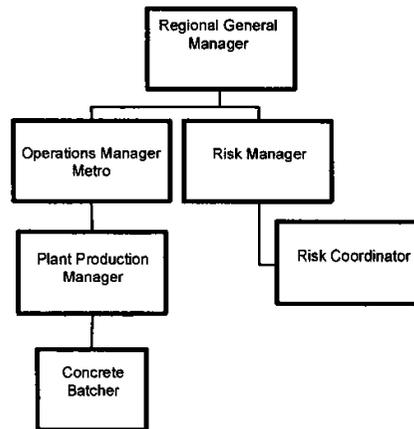


Figure 2: Hanson Metro Concrete Operations

Date: 27/07/2014
Author: JCrute
Source: Hanson East Perth Management Plan - May 2014
Path: Q:\Consult\2014\HAN\HAN14149\ArcMap_documents\R001\RevB\HAN14149_01_R001_RevB_F002.mxd



3. Environmental Management System

3.1 Training

A site induction detailing the requirements of the EMP will be provided to all new full time personnel at East Perth Concrete Plant. All plant staff will be inducted to the requirements of the EMP on an annual basis. A training register will be maintained, and provided to the City of Vincent.

3.2 Internal Quality and Environment Hazard Identification

Quality and environmental hazards identified in relation to the operation of the plant are recorded through the internal Risk Reporting Process. This is a tracked, documented process that promotes the involvement of all personnel in a non-confronting, proactive format; a methodology for continuous improvement. The Risk Reporting process enables the storage, processing and analysis of incident trends.

3.3 Integrated Risk Management System (IRMS)

The IRMS details the process for reporting of incidents and escalation to senior management. Safety and environmental incidents are covered by the process. All incidents are logged in the Risk Database as are Risk Reports.

3.4 Site meetings

Regular site meetings are held and all operational matters are an agenda item that enables the ongoing promotion of correct work practices and a platform to table non-conformances and outstanding identified quality and environment hazards. These site meetings will identify suggested amendments to the EMP which will be approved by the Risk Manager and the Metro Operations Manager before inclusion in updated versions of the EMP.

Community relations related issues will be included in on-site meeting agenda.

3.5 Inspections and audits

Informal and formal inspections of work areas, plant and activities on-site will be conducted regularly as per the management and monitoring actions within the dust, noise and traffic management plans (Sections 6, 7 and 8). Records will be kept of these inspections to allow compliance with the EMP to be assessed.

The EMP will be internally audited in advance of the annual review process to ensure compliance is being achieved.

3.5.1 Independent audit of dust monitoring equipment

In accordance with condition 4(d) of State Administrative Tribunal Order DR264/2011 the permanent and fixed dust monitoring equipment installed on the perimeter of the site (Section 6) shall be independently audited to the satisfaction of the City of Vincent.

This will entail an annual assessment against audit criteria relevant to the dust monitoring equipment by a suitably qualified independent auditor. An audit report will be generated and submitted to City of Vincent for endorsement. In the event the City requests, on submission of the report, further detail or assessment this will be undertaken in accordance with the City's request, following a period of consultation if necessary. Other comment and feedback from the City, including amendments to audit criteria, will be incorporated into the following year's audit program as appropriate.

Annual audit reports will be submitted to the City of Vincent by the 12 month anniversary of the date of submission of the first report.

3.6 Review and reporting

3.6.1 Review

The EMP will be reviewed annually in line with Hanson business planning processes.

The annual review will include assessment of:

- Risk Reports
- Contingency responses and their adequacy
- Incident register
- Complaints register
- Site meeting identification of shortfalls of the EMP
- Induction training register
- Currency of licensing and regulation requirements
- Internal or external audit results
- Periodic internal technical reviews of operational control trials and investigations
- Annual external reviews of management practices
- Regulator and City of Vincent communications and feedback.

If it is determined that updates are required to the EMP, an updated version will be submitted to the City of Vincent. The updated plan will then be implemented.

3.6.2 Reporting

The results of the annual review will be provided to internal stakeholders and regulators where required. Trigger levels for external and internal reporting are identified with the management plans for dust, noise and traffic (Sections 6, 7 and 8).

4. Incident management

4.1 Incident management and reporting

Environmental incidents are events or occurrences that result in, or have the potential to result in, unacceptable impacts to the environment in accordance with the provisions of this EMP. Environmental incidents are assigned a level of severity, with the level determined by the PPM (Table 3). This is recorded within the Risk Report. The MOM shall review and if necessary amend the level.

Table 3: Environmental incident level

Level	Description
1	Minor non-adherence to procedures, and/or negligible environmental impact.
2	Minor non-adherence to procedure and minor environmental impact that requires little management to be rectified.
3	Moderate breach of procedure and/or environmental impact that requires management/ mitigation to be rectified.
4	(Serious incident). Extreme breach of procedure and/or environmental impact that could lead to a breach of environmental approval conditions.

All incidents are to be reported to the PPM by the person responsible for the incident, or the first person at the site of an accident. The PPM shall then respond to the incident in accordance with the IRMS. In the event of a major environmental or safety incident the Crisis Management Plan is to be followed.

Measures to limit the impact of Level 4 incidents on the environment shall be implemented as soon as practicable by the Risk Manager or Operations Manager.

4.2 Incident investigation

All incidents and non-conformances are recorded and maintained through the Risk Reporting electronic database. The Risk Reporting database enables the storage, processing and analysis of incident trends.

Incidents and complaints are also reported through the IRMS system.

Corrective measures will be identified as part of the incident report, and implemented where required. The effectiveness of the corrective action(s) will be monitored, with results included in the EMP review process.

Any non-conformance to targets is investigated and the results reported to statutory authorities as required. Trigger levels for reporting are identified with the management plans for dust, noise and traffic (Sections 6,7 and 8).

5. Community relations procedure

The Risk Manager is accountable for the implementation of community relations management plan as detailed below.

5.1 Objectives, targets and indicators for community relations

Objectives, targets and indicators for community relations are detailed in Table 4.

Table 4: Objectives, targets and performance indicators for community relations

Objectives	Targets	Key Performance Indicator
To ensure that Hanson operations do not adversely affect the health, welfare or amenity of people and adjacent land uses.	Minimal impact to community activities from Hanson operational activities.	Complaints register Incident reports

5.2 Management measures for community relations

Management measures for community relations are detailed in Table 5.

Table 5: Management measures for community relations

Parameter	Management Action	Timing	Responsibility
Induction	Induct all employees and contractors to the requirements of the community relations management plan.	Prior to commencing work on-site	MOM PPM
Consultation	Facilitate consultation with the local community through provision of site signage; website information; public notifications and site tours.	On-going	MOM PPM
Site signage	Provide relevant contact details on site signage, including: <ul style="list-style-type: none"> a phone number which is available 24 hours per day, 7 days per week website details email address for community enquiries. 	At all times	RM
Website	Provide information relevant to the East Perth concrete plant, including contact phone numbers and email address for site operations, and include an invitation to community members to participate in site tours on arrangement.	At all times	RM
Site tours	Detail the current complaints procedure.	At all times	RM
Landscaping	Extend an open invitation to community members to participate in site tours on arrangement.	At all times	MOM
Community support	Limit spray from landscape watering to within site boundaries.	At all times	PPM
Records	Continue to allocate support for local community initiatives.	On-going	RM
Reporting	Keep records of the following: <ul style="list-style-type: none"> visitors to site support provided to local community initiatives all complaints received (via IRMS system) responses to complaints. 	On-going	PPM MOM
Complaint handling process	Report the complaints received; enquiries logged and responses provided by Hanson to the City of Vincent	Six monthly	RM
	Record all complaints in the IRMS and Risk Reporting database.	At all times	PPM
	Report all complaints to the MOM for an assessment of severity.	Immediately on receipt of complaint	All staff

East Perth Concrete Plant

Parameter	Management Action	Timing	Responsibility
	Respond to all complaints.	Within 48 hours for minor complaints Immediately for major complaints	MOM PPM
	Noise complaints only- Monitor informally the noise emissions of plant operations to allow short term abatement of complaints.	Immediately upon receipt of complaint	PPM
	Identify the source of noise emission which may be responsible for the noise complaint, to allow short term abatement.	As soon as practicable upon receipt of complaint	PPM
	Noise complaints only- Make arrangements to monitor noise emissions relevant to the complaint, to allow short term abatement.	During complaint handling process	PPM MOM
	Noise complaints only- Ensure the noise management plan is being implemented, including contingency measures within the noise management plan (section 7.5).	Following complaint investigation	PPM
	Ensure the Risk Report process is followed to close out all complaints in a timely manner.	Following complaint investigation	MOM
	Communicate outcomes of complaints at sites meetings to allow for long term abatement of complaints.	Site meetings	PPM

6. Dust management plan

6.1 Air quality guidelines

The National Environment Protection Measures (NEPMs) are broad framework-setting statutory instruments defined in the *National Environment Protection Council (NEPC) Act 1994*. National objectives for protecting and managing particular environmental aspects are outlined in NEPMs. The Ambient Air Quality NEPM includes a maximum concentration for particulate matter which is used as a measure for dust. Particulate matter, or PM₁₀, means particulate matter with an equivalent aerodynamic diameter of 10 micrometres or less (COAG 2014). The air quality guidelines for PM₁₀ are indicated in Table 6. The location of dust monitors is provided in Figure 1.

Table 6: Air quality guidelines for PM₁₀

Pollutant	Averaging Period	Maximum concentration	Goal within 10 years Maximum allowable exceedences	Source
PM ₁₀	1 day	50 µg/m ³	5 days a year	Ambient Air Quality NEPM

6.2 Potential impacts from dust

Dust may be generated from operational activities at the site, particularly during dry, windy conditions. Excessive dust may be detrimental to human health, reduce visual amenity, smother vegetation and interfere with fauna.

6.3 Objectives, targets and indicators for dust management

Objectives, targets and indicators for dust management are detailed in Table 7.

Table 7: Objectives, targets and indicators for dust management

Objective	Target	Key Performance Indicator
To implement all reasonable and practicable measures to ensure the prevention or minimisation of dust from all operation activities.	No sustained visual dust observed beyond the immediate boundaries of the plant during operation.	Visual monitoring of dust movement during site inspections.
To ensure that dust emissions do not adversely affect environmental values or the health, welfare or amenity of people and adjacent land uses.	No signs of excessive dust deposition outside the site. No public complaint of excessive dust during operations.	Monitoring of site boundaries. Number of public complaints related to dust.
Ensure compliance with dust emission levels standards.	Dust generated does not exceed NEPM and DER standards and guidance. Monitored dust levels do not exceed 50 µg/m ³ averaged over 1 day.	Dust monitoring at boundaries. Dust management plan conformance.

6.4 Management actions for dust control

Table 8 details the management actions for dust control.

Table 8: Management actions for dust control

Parameter	Management Action	Timing	Responsibility
Induction	Induct all employees and contractors to the requirements of the dust management plan.	Prior to commencing work on-site	MOM PPM

East Perth Concrete Plant

Parameter	Management Action	Timing	Responsibility
Aggregate preparation	Condition aggregates at the source.	At all times	PPM
Delivery	Cover fine aggregates.	At all times during transport and delivery	PPM
	Enclose cement in purpose built enclosed tankers.	At all times during delivery	PPM
Engineering dust control measures	Include high level alarms and cut off valves in delivery lines.	Construction and operation	PPM
	Install and operate dust extraction equipment on silos and weigh hoppers.	Construction and operation	PPM
	Install filters and overpressure valves (valves to be ducted to ground).	Construction	PPM
	Include flexible enclosed joints in cement air slides to mixer.	Construction	PPM
	Enclose loading bays	Construction	PPM
Tipping	Apply water sprays in tipper bin tunnel.	During operation	PPM
	Engage tipper bin door during tipping	During tipping	PPM
	Ensure truck and trailer requirements match bin specifications	During tipping	PPM
Loading	Ensure loading bay doors are in the closed position prior to loading being commenced.	During loading - prior to commencement of loading.	PPM
General maintenance	Sweep and wash the yard to remove residual build up of dust.	Weekly	PPM
	Handle cement products in a clean and dust free manner.	At all times	PPM
	Clean slumping bays with water.	Daily	PPM
	Clean exit driveway.	Daily	PPM
	Clean delivery trucks with water.	Prior to exiting the site	PPM
	Clean pits	When monitoring indicates cleaning is required	PPM
	Clean recycled and waste storage area following pit cleans.	Following pit cleans	PPM
	Clean the recycled and waste storage area daily prior to closing.	Daily prior to closing	PPM
Stockpiles	Wet down stockpiles to reduce dust lift off.	Daily	PPM
Maintenance of equipment and plant	Maintain filter media regularly.	As per maintenance schedule	PPM
	Maintain and operate all plant to manufacturer's specification or other relevant standard (e.g. DER guidance/licence).	At all times	PPM
	Prepare and implement a preventative maintenance checklist in line with manufacturer's specification or other relevant standard (e.g. DER guidance/licence).	At all times	PPM
	Conduct routine inspections of all dust control equipment – as per preventative maintenance checklist.	As per maintenance checklist	PPM
	Review preventative maintenance checklist for existing dust control equipment, including frequency and appropriateness of preventative maintenance.	Annual	PPM
	Modify preventative maintenance checklist in line with review findings.	On completion of review	PPM

HAN14149_01 R001 Rev 0.docx

14-Aug-14

14



East Perth Concrete Plant

Parameter	Management Action	Timing	Responsibility
Waste disposal	Collect all waste water generated through daily cleaning of slumping bays in appropriate waste pits.	At all times	PPM
	Dispose of collected waste material from cleaning of slumping bays in an appropriate waste stream.	On-going	PPM
	Dampen waste materials prior to loading.	Prior to loading	PPM
	Dispose of waste materials in an appropriately licensed facility.	At all times	PPM
Street sweeping	Sweep Edward Street from the eastern most vehicle entrance to Lord Street.	Twice weekly	PPM
	Contribute half the City's costs of weekly street sweeping on Edward Street.	On-going	PPM
Contractors	Ensure all scopes and contracts are in line with the requirements of the dust management plan.	At all times	PPM
Complaints	Address all complaints as per the complaints handling process (Section 5.2).	At all times	PPM
Community consultation	Communicate changes to operations and dust control performance to affected community members as per Section 5.	At all times	PPM
Dust monitoring equipment	Install and maintain permanent and fixed dust monitoring equipment at the perimeter of site.	On-going	PPM
	Engage independent auditor to undertake audit of dust monitoring equipment (refer to Section 3.5.1).	Annually (as per Section 3.5.1)	MOM
Environmental incident reporting	Report incidents in accordance with Section 4.	At all times	PPM

6.5 Monitoring actions for dust

Monitoring actions for dust are detailed in Table 9.

Table 9: Monitoring actions for dust

Parameter	Frequency	Location	Purpose	Responsibility
Visible dust at the perimeter	Opportunistic	Perimeter of site	To identify incidents of dust crossing the perimeter.	PPM
Equipment maintenance	Daily	Tipper bins and conveyors	Inspect tipper bins and conveyors to ensure good working order.	PPM
	Daily	Tipper bin tunnel	Inspect water sprays in tipper bin tunnel to ensure good working order.	PPM
	Weekly	Silos and weigh hoppers	Inspect dust extraction equipment on silos and weigh hoppers to ensure good working order.	PPM
	Weekly	Cement filtration equipment	Inspect cement filtration equipment utilising plant maintenance checklist.	PPM
Site cleanliness	Daily	Exit driveway	Inspect exit driveway for cleanliness	PPM
	Daily	Yard	Inspect the yard for unusual occurrences of visible dust.	PPM
	Daily	Pit	Inspect the pit for cleanliness	PPM
Dust PM ₁₀	Daily	At site perimeter	Monitor air quality against NEPM standards (Table 6)	MOM PPM

East Perth Concrete Plant

6.6 Contingency actions for dust management

Contingency actions for dust management are detailed in Table 10.

Table 10: Contingency actions for dust management

Trigger	Action	Responsibility
Spill incident within the yard	<ol style="list-style-type: none"> 1. Identify source of spill 2. Sweep affected area of the yard 3. Wash affected area of the yard 4. Record incident in the Risk Reporting database 	PPM
Spill incident on a public road	<ol style="list-style-type: none"> 1. Spills occurring outside the site will be attended to immediately 2. Identify source of spill 3. Manage any traffic hazard created by the spill in line with relevant standards 4. Make arrangements for material to be cleaned up or isolated until such time as clean up can be completed 5. Ensure that recycling or disposal of materials occurs as appropriate to the incident 6. Record incident in the Risk Reporting database 7. Determine the severity of incident as per Section 4.1 8. Metro Operations Manager to notify City of Vincent and other authorities as appropriate 	PPM RM
Failure of dust control plant or equipment	<ol style="list-style-type: none"> 1. Ascertain if dust can be controlled safely by alternative measures while repair is undertaken 2. If control mechanism cannot be replaced, cease use of plant until repair can be completed 3. Complete a maintenance record, including recommendations for actions which may avoid a repeat occurrence 	PPM
Exceedance of PM ₁₀ dust monitoring levels	<ol style="list-style-type: none"> 1. Identify source of dust emissions contributing to exceedance 2. Review the implementation of dust control measures 3. Metropolitan Operations Manager to report exceedance to the City of Vincent and relevant regulators 4. Update the Dust Management Plan to improve dust control measures, if required 5. Provide feedback to all staff via Site meetings or toolbox meetings 	PPM RM

7. Noise management plan

7.1 Potential impact from noise emissions

The East Perth concrete plant is located adjacent to inner city residential areas which are potentially sensitive to noise emissions.

7.2 Objectives, targets and indicators for noise management

Objectives, targets and performance indicators for noise are detailed in Table 11.

Table 11: Objectives, targets and indicators for noise management

Objective	Target	Key Performance Indicator
Ensure compliance with Notice of Determination of Application by Minister, 22 May 2012.	No concrete batching operations and access to the site by trucks and semi-trailers on Sundays and public holidays.	Complaints register
Minimise noise emissions.	No public complaints relevant to noise emissions.	Records of noise control equipment down time. Noise monitoring results Noise control equipment maintenance schedule. Noise control equipment inspections. Complaints register.

7.3 Management actions for noise control

Management actions for noise control are detailed in Table 12.

Table 12: Management actions for noise control

Parameter	Management Action	Timing	Responsibility
Induction	Induct all employees and contractors to the requirements of the noise management plan.	Prior to commencing work on-site	PPM
Truck movement	Design the vehicle flow system to minimise the use of any reversing alarm (Figure 1, Section 8.4).	Design phase	PPM
	Install low intensity reversing alarms on all trucks accessing the site.	Prior to commencing work on-site	PPM
	Utilise quieter truck models at the East Perth concrete plant.	At all times	PPM
	Utilise quieter truck models exclusively, for all night/ early morning work.	Night work and early morning work	PPM
	Minimise traffic movement in the yard. Limit speed to 8 km/hr within the yard.	At all times	PPM
Tipping	Engage tipper bin door.	During tipping	PPM
	Ensure truck and trailer requirements match bin specifications.	During tipping	PPM
Slumping	Lower slumping shed doors.	During high revving slumping activities	PPM
Loading Noise buffer	Enclose truck loading bays.	During loading	PPM
	Install an acoustic barrier (wall) along Lord St fence line.	Completed by December 2012	MOM

East Perth Concrete Plant

Parameter	Management Action	Timing	Responsibility
General maintenance	Maintain screening trees/shrubs along site boundaries.	On-going	PPM
	Inspect loading and slumping door operations as per maintenance checklist.	As per maintenance checklist	PPM
Maintenance of equipment and plant	Maintain and operate all plant and vehicles to manufacturer's specification or other relevant standard (e.g. noise regulations).	At all times	PPM
	Prepare and implement a preventative maintenance checklist in line with manufacturer's specification or other relevant standard (e.g. noise regulations).	At all times	PPM
	Review current preventative maintenance program for existing noise control equipment, including the appropriateness of frequency and preventative maintenance schedules.	Annual	PPM
	Modify preventative maintenance schedule in line with review findings.	Following review	PPM
	Conduct routine inspections of all noise control equipment – as per preventative maintenance checklist.	As per maintenance checklist	PPM
Assessment	Engage an appropriately qualified consultant to assess the noise control systems.	Bi-annual	PPM
Reporting	Report the results of noise equipment testing to the MOM and RM.	Bi-annual	PPM
Monitoring	Monitor noise emissions at locations adjacent to the nearest receptors (on the corner of Lord St and Edward St, with additional measurements from Edward St).	Monitoring	Noise monitoring consultant
Contractors	Ensure all scopes and contracts are in line with the requirements of the noise management plan.	At all times	PPM
Complaints	Address all complaints as per the complaints handling process (Section 5.2).	At all times	PPM
Community consultation	Communicate changes to operations and noise emission performance to affected community members as per section 5.	At all times	PPM
Environmental incident reporting	Report incidents in accordance with section 4	At all times	PPM

7.4 Monitoring actions for noise

Monitoring actions for noise management are detailed in Table 13.

Table 13: Monitoring actions for noise

Parameter	Frequency	Location	Purpose	Responsibility
Vehicle speed	Opportunistic	Yard	To ensure that the 8 km/hr limit is adhered to.	PPM
Noise emissions	Quarterly	Corner of Lord St and Edward St, with additional measurements from Edward St	To monitor noise experienced by adjacent sensitive receptors.	PPM Noise monitoring consultant
Noise control equipment	Weekly	Site	Ensure that records of noise control maintenance are being kept.	PPM
Equipment maintenance	As per maintenance schedule	Site	Ensure the maintenance schedule is being applied.	PPM

East Perth Concrete Plant

7.5 Contingency actions for noise management

Contingency actions for noise management are detailed in Table 14.

Table 14: Contingency actions for noise management

Trigger	Action	Responsibility
Unscheduled work occurring outside of licensed hours (Sunday and Public Holidays).	<ol style="list-style-type: none"> 1. Record work as an incident 2. Investigate incident 3. Undertake toolbox or other appropriate training to ensure the workforce understand the limits of site operational times. 	PPM
Failure of noise control equipment	<ol style="list-style-type: none"> 1. Ascertain if noise can be controlled safely by alternative measures while repair is undertaken 2. If control mechanism cannot be replaced, cease use of plant until repair can be completed. 3. Complete a maintenance record, including recommendations for actions which may avoid a repeat occurrence. 	PPM
Exceedence of speed limit in the yard	<ol style="list-style-type: none"> 1. Record the incident 2. Provide training to the driver concerned to ensure the speed limits of site are understood 	PPM
Noise complaint	<ol style="list-style-type: none"> 1. Implement the complaints handling procedure in section 5.2 	RM

8. Traffic management plan

8.1 Potential impacts of traffic

Traffic, particularly heavy vehicle traffic, entering and exiting the site may present both a nuisance and a safety risk to workers, residents and onlookers.

8.2 Requirements of DR264/2011

Operational activities necessitate a constant volume of vehicles including trucks, semitrailers, and light vehicles within the site and surrounding areas.

Operation hours are limited by the requirements of the Environmental Protection (Noise) Regulations 1997 (WA) by ensuring that during the period:

1. 0700 hours to 2200 hours Monday to Saturday two trucks are not simultaneously idling or moving between the filling and slumping stations for a period exceeding 24 minutes in any four hour period; and
2. 2200 hours and 0700 hours Monday to Saturday only one truck is ever idling or moving between the filling and slumping stations at any one time and that such idling or movement does not exceed 24 minutes in any four hour period.

8.3 Road use agreement with the City of Vincent

Hanson and the City of Vincent have agreed to inspect and discuss actions regarding repairs to roads which have been potentially damaged by Hanson trucks as required.

8.4 Vehicle flow system

Flow of vehicles entering and exiting the site is managed as detailed in Figure 1. The vehicle flow system is signposted and included in the induction materials of the traffic management plan.

The vehicle flow system is designed to limit the use of reversing alarms and to limit the need for overflow parking outside of the site.

East Perth Concrete Plant

8.5 Objectives, targets and indicators for traffic management

Objectives, targets and indicators are detailed in Table 15.

Table 15: Objectives, targets and indicators for traffic management

Objective	Target	Key Performance Indicator
Minimal disruption to traffic on public roads	No public complaints about operation related traffic.	No adverse publicity Complaints register
No increase to existing traffic safety risk on public roads.	No safety incidents arising from site related traffic.	Number of incidents related to traffic Records of delays in delivery process
Ensure compliance with Environmental Protection (Noise) Regulations 1997 (WA)	<ol style="list-style-type: none"> 0700 hours to 2200 hours Monday to Saturday two trucks are not simultaneously idling or moving between the filling and slumping stations for a period exceeding 24 minutes in any four hour period; and 2200 hours and 0700 hours Monday to Saturday only one truck is ever idling or moving between the filling and slumping stations at any one time and that such idling or movement does not exceed 24 minutes in any four hour period. 	Complaints register Incidents reporting exceedences of vehicle movement requirements

8.6 Management actions for traffic control

Management actions for traffic control are detailed in Table 16.

Table 16: Management actions for traffic control

Parameter	Management Action	Timing	Responsibility
Induction	Induct all employees and contractors to the requirements of the traffic management plan, including vehicle flow system and communication requirements.	Prior to commencing work on-site	PPM
Site communication meetings	Provide regular communication of vehicle flow system and communication requirements to delivery vehicle drivers at site communication meetings.	On-going	PPM
Vehicle flow	Signpost the approved vehicle flow system (Figure 1).	On-going	PPM
Vehicle operation	Adhere to all public road speed limits.	At all times	All staff and contractors
	Adhere to on-site speed limit of 8 km/hr.	At all times	All staff and contractors
	Follow signposted vehicle flow directions.	At all times	All staff and contractors
	Comply with all traffic calming devices.	At all times	All staff and contractors
Delivery	Manage vehicle movements to ensure that during the hours of 0700 hours to 2200 hours Monday to Saturday two trucks are not simultaneously idling or moving between the filling and slumping stations for a period exceeding 24 minutes in any four hour period.	0700 – 2200, Monday - Saturday	PPM
	Manage vehicle movements to ensure that during the hours of 2200 hours and 0700 hours Monday to Saturday only one truck is ever idling or moving between the filling and slumping stations at any one time and that such idling or movement does not exceed 24 minutes in any four hour period.	2200 – 0700 Monday - Saturday	PPM
	Communicate vehicle movements to the CSC to reduce delays in traffic flow.	Prior to arrival at site.	Delivery vehicle drivers
	Communicate delays in receipt process to delivery vehicle drivers.	During delay events	CSC

East Perth Concrete Plant

Parameter	Management Action	Timing	Responsibility
	Park aggregate delivery vehicles in the yard, until cleared to tip in a designated area.	Upon arrival at site	Delivery vehicle driver
	Provide direction in regards to designated areas for tipping.	Upon arrival to site	PPM
	Tip aggregate in designated areas only.	During delivery	Delivery vehicle driver
Incident reporting	Report incidents in accordance with Section 4	At all times	PPM
Contractors	Ensure all scopes and contracts are in line with the requirements of the traffic management plan.	At all times	PPM
Infrastructure	Report all damage to public infrastructure to the City of Vincent	As required	RM
Complaints	Address all complaints as per the complaints handling process (Section 5.2)	At all times	PPM
Community consultation	Communicate changes to traffic management and delivery delay performance to affected community members as per Section 5.	As required	RM

8.7 Monitoring actions for traffic

Monitoring actions for traffic management at the East Perth concrete plant are detailed in Table 17.

Table 17: Monitoring actions for traffic

Parameter	Frequency	Location	Purpose	Responsibility
Infrastructure	Opportunistic	Public infrastructure	To monitor all damage to public infrastructure and inform reporting to the City of Vincent.	PPM
Traffic movement	Opportunistic	Local streets adjacent to the site	To assess truck movements in local streets are in line with the requirements of the traffic management plan.	PPM
Vehicle flow	Daily	Yard	To ensure that vehicle flow directions are followed by all delivery vehicles.	PPM
Delay in delivery process	During delay events	Yard	To record details of delay events.	PPM

East Perth Concrete Plant

8.8 Contingency actions for traffic management

Contingency actions for traffic management are detailed in Table 18.

Table 18: Contingency actions for traffic management

Trigger	Action	Responsibility
<p>Delay events where the following trigger point occurs, constituting an incident requiring incident reporting:</p> <ul style="list-style-type: none"> Where delivery vehicles are unable to be accommodated on-site. 	<ol style="list-style-type: none"> 1. Communicate with incoming delivery vehicles and reschedule arrival times to allow for the yard to adequately clear 2. Ensure monitoring over movement of vehicles in the yard is undertaken 3. Ensure monitoring of overflow parking locations is undertaken 4. Address any delay in handling of delivered materials to speed up throughput 5. Record the incident 6. Investigate the incident, including assessment of the cause of the delay event and actions undertaken to manage the impact, and recommendations for updates to the traffic management plan or traffic flow system 7. Communicate the outcomes of the investigation at site meetings and to Hanson management team 8. Communicate the incident to the City of Vincent and other authorities as appropriate 9. Communicate a summary of the incident to affected residents, or to complainants in line with section 5. 	PPM
Traffic accident involving a Hanson vehicle or delivery vehicle	<ol style="list-style-type: none"> 1. Alert the required authorities and ensure the safety of all involved 2. Secure the site to limit further potential for accidents to occur 3. Make arrangements for the damage to be rectified 4. Record the incident 5. Investigate the incident, including assessment of the cause of the delay event and actions undertaken to manage the impact, and recommendations for updates to the traffic management plan or traffic flow system 6. Communicate the outcomes of the investigation at site meetings and to Hanson management team 7. Communicate the incident to the City of Vincent and other authorities as appropriate 8. Communicate a summary of the incident to affected residents, or to complainants in line with Section 5. 	PPM
Delivery vehicle arriving outside of licensed hours.	<ol style="list-style-type: none"> 1. Redirect or park up vehicle until the site is within approved operating hours 2. Record arrival as an incident 3. Investigate incident 4. Undertake toolbox or other appropriate training to ensure the workforce understands the limits of site operational times. 	PPM

East Perth Concrete Plant

Trigger	Action	Responsibility
<p>Exceedence of operating requirements:</p> <ul style="list-style-type: none"> • 0700 hours to 2200 hours Monday to Saturday two trucks are not simultaneously idling or moving between the filling and slumping stations for a period exceeding 24 minutes in any four hour period; and • 2200 hours and 0700 hours Monday to Saturday only one truck is ever idling or moving between the filling and slumping stations at any one time and that such idling or movement does not exceed 24 minutes in any four hour period. 	<ol style="list-style-type: none"> 1. Record vehicle movements in excess of the requirements. 2. Review the implementation of the traffic management plan 3. Report exceedences to the City of Vincent 4. Update the Noise Management Plan to improve noise control measures, if required. 5. Provide feedback to all staff via Site meetings or toolbox meetings. 	<p>PPM RM</p>

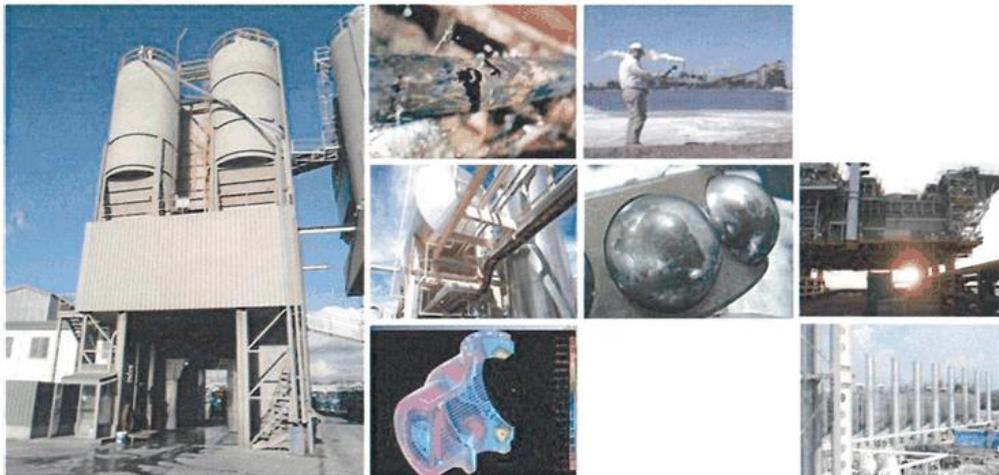
East Perth Concrete Plant

9. References

Council of Australian Governments (COAG) 20 May 2014, National Environment Protection (Ambient Air Quality) Measure [online] Standing Council on Environment and Water (incorporating the National Environment Protection Council), available from <http://www.scew.gov.au/nepms/ambient-air-quality> [11 June 2014]



ENVIRONMENTAL NOISE ASSESSMENT FOR THE EAST PERTH CONCRETE BATCHING PLANT



HANSON CONSTRUCTION MATERIALS PTY LTD

Rpt02-1052749-Rev2-21 Apr 11

www.svt.com.au

Head Office: Perth, Western Australia
Kuala Lumpur, Malaysia
Melbourne, Australia

Acoustics • Corrosion
Performance Monitoring • Vibration
Advanced Engineering Services • R&D • Training
Machine Condition Monitoring • Structural Dynamics

Client: Hanson Construction Materials Pty Ltd
 Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



DOCUMENT CONTROL & REVIEW INFORMATION

Client: Hanson Construction Materials Pty Ltd

Client Contact: Peter Honczarenko

SVT Contact: Jim McLoughlin

SVT Office: Perth

SVT Job No: 1052749

SVT Document No: Rpt02-1052749-Rev2-21 Apr 11

Rev	Description	Prepared	Reviewed	Date
0	Issued for Use	Jim McLoughlin	Paul Keswick	25 Oct 10
1	Minor Amendments	Jim McLoughlin	Paul Keswick	20 Apr 11
2	Correction to Assigned Level	Jim McLoughlin	Paul Keswick	21 Apr 11

SVT Engineering Consultants ABN: 18 122 767 944

SVT Perth (HEAD OFFICE)
 112 Cambridge Street
 West Leederville WA 6007
 Australia

Tel: +61 (0)8 9489 2000
 Fax: +61 (0)8 9489 2088
 Email: mailbox@svt.com.au

SVT Kuala Lumpur Office

SVT Engineering Malaysia Sdn Bhd (Malaysian Office)
 No A-2-6, Jalan SS7/13B, Aman Seri, Kelana Jaya,
 47301 Petaling Jaya, Selangor, Malaysia

Tel: +6.03.7877.2690
 Fax: +6.03.7877.2689
 Email: mailbox@svt.com.au

SVT Melbourne Office

Suite 1, 20 Cato Street
 Hawthorn East, VIC 3123
 Australia

Tel: +61 (0)3 9832 4406
 Fax: +61 (0)3 9917 2204
 Email: mailbox@svt.com.au

Client: Hanson Construction Materials Pty Ltd
Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



EXECUTIVE SUMMARY

Noise measurements have been recorded in and around Hanson's East Perth concrete batching plant to assess the potential that noise emissions may exceed environmental noise limits.

The most significant sources of environmental noise emissions are the agitator trucks during filling and slumping operations when they are run at high idle.

Noise from filling and slumping impacts residential and commercial premises on Lord St to the west of the plant. Noise from other operations at the plant is effectively screened by buildings at the site. Noise from the plant was inaudible on Edward St during the noise measurements.

Agitator trucks were clearly audible on Lord St during filling and slumping operations, but only during breaks in traffic. For most of the time traffic noise levels exceeded noise levels from the batching plant.

Indicative noise levels for filling and slumping operations were recorded during lulls in traffic but it was not possible to obtain measurements of sufficient duration to enable a direct comparison with environmental noise limits to be made. However, the noise data that was obtained suggests that noise emissions from the plant have the potential to exceed environmental noise limits on Lord St.

There are several noise mitigation options available to reduce noise impacts on properties on Lord St. Enclosing the filling stations would significantly reduce noise from this source and increasing the height of the Western boundary fence would reduce noise from truck movements in the yard facing Lord St. These controls combined with noise management measures to limit noise emissions at various time of the day (eg by controlling the number of truck movements) should enable Hanson to achieve compliance with environmental noise limits.

Client: Hanson Construction Materials Pty Ltd
 Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



TABLE OF CONTENTS

DOCUMENT CONTROL & REVIEW INFORMATION	I
EXECUTIVE SUMMARY	II
TABLE OF CONTENTS.....	III
1. INTRODUCTION.....	1
1.1 Potential Noise Impact Zones.....	1
1.2 Batching Plant Operations.....	1
2. ASSESSMENT METHODOLOGY.....	3
3. ENVIRONMENTAL NOISE LIMITS.....	4
4. NOISE MEASUREMENTS & OBSERVATIONS.....	5
4.1 Attended Noise Measurements and Observations at the Batching Plant.....	5
4.2 Attended Noise Measurements and Observations in Surrounding Streets	6
4.2.1 Background Noise from Traffic.....	6
4.2.2 Measurements and Observations of Plant Noise	6
4.2.3 Review of Intrusive Characteristics.....	7
4.2.4 Other Observations	8
5. COMPARISON OF PLANT NOISE WITH ENVIRONMENTAL NOISE LIMITS.....	10
6. CONCLUSIONS.....	11
7. NOISE MITIGATION SUGGESTIONS.....	12
APPENDIX A : ASSIGNED NOISE LEVELS	A-1
APPENDIX B : EQUIPMENT DETAILS	B-1

Client: Hanson Construction Materials Pty Ltd
Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



1. INTRODUCTION

SVT has recorded sound level measurements and observations to assess the likely noise impact of Hanson's concrete batching plant in East Perth on the nearest receiving premises. The objective of the assessment is to determine whether the batching plant has the potential to exceed environment noise limits, and if so provide noise mitigation suggestions.

The batching plant is located at the junction of Lord St and Edward Street in East Perth. The plant is bounded to the south by the Graham Farmer Freeway.

1.1 Potential Noise Impact Zones

The receiving premises likely to be most affected by noise from the batching plant are those on Lord St, (to the west of the plant) and those on Edward Street (to the north of the plant). Noise impacts in adjacent streets will reduce as distance from the plant increases. Figure 1-1 shows the location of the batching plant and the potential noise impact zones to the west and north of the plant. Land use in the potential impact zones is predominantly a mix of commercial and light industrial premises. There are also some residential premises, the closest of which are located on the junction of Lord Street and Edward Street and on Edward Street itself. Assessment locations representing these nearby residential premises are shown in Figure 1-1.



Figure 1-1 : Batching Plant and Surrounding Area

1.2 Batching Plant Operations

The following operations are undertaken at the batching plant:

Client: Hanson Construction Materials Pty Ltd
 Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



- Delivery of aggregate. This takes place within an enclosed tunnel close to the northern site boundary. Raw materials are transferred to the agitator truck loading stations via an enclosed conveyor.
- Tanker deliveries. Tankers park up between the two loading stations, facing into the main yard, while whilst cement is pumped to the silos.
- Loading of agitator trucks with concrete. There are two loading stations. The agitator trucks run at high idle during loading with their engines (i.e. front of vehicles) facing Lord St. The loading cycle lasts for a few minutes and there are typically 40 – 100 loads per day. There are automatic doors on the loading stations which face into the main yard. These doors close automatically during loading to minimise dust. However, there are no doors on exits of the loading stations which face Lord St. The front of the agitator trucks protrude slightly from the loading station during loading. The loading stations have dust filtration equipment which uses bursts of compressed air.
- Slumping (final adjustment of the consistency of the concrete within the loaded agitator trucks). Slumping is undertaken within a three sided enclosure on the Lord St boundary. The open side of the enclosure faces south-west. There are double acoustic doors on the exit of the slumping building facing north-east (on to Edward St). Agitator trucks are run at high idle during this process. The trucks are fully inside the enclosure when slumping occurs.

Figure 1-2 shows the locations of the main operations within the batching plant site.



Figure 1-2 : Location of Main Activities

There are typically several agitator trucks running at low idle in the main yard while waiting to be loaded. There are also facilities for washing trucks in the main yard.

Client: Hanson Construction Materials Pty Ltd
Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



2. ASSESSMENT METHODOLOGY

Because of the proximity of the batching plant to major roads (particularly Lord St and the Graham Farmer Freeway) it is very difficult to record noise levels at receiving premises that are unaffected by traffic noise. Therefore a range of measurements and observations have been recorded to provide an indication of potential noise impacts associated with the batching plant. These include:

- Attended spot noise measurements and observations within the batching plant; and
- Attended spot noise measurements and observations in the streets surrounding the batching plant (predominantly on Lord St and Edward St).

The measurements and observations recorded have been used to estimate the magnitude of the noise emissions and to compare received noise levels with environmental noise limits.

A review of the characteristics of the noise emissions from the batching plant has also been undertaken. (Ie noise emissions have been assessed to determine if they contain tonality, impulsiveness or modulation).

A range of noise mitigation suggestions has been provided to reduce noise impacts from the batching plant.

Client: Hanson Construction Materials Pty Ltd
 Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



3. ENVIRONMENTAL NOISE LIMITS

Environmental noise limits (assigned noise levels) are prescribed in the *Environmental Protection (Noise) Regulations 1997* for premises receiving noise. Appendix A provides a summary of the process for evaluating assigned noise levels.

Assigned noise levels have been evaluated for the nearest noise sensitive premises and commercial premises on Lord St and Edward St. (Assessment locations are show in Figure 1-1.) The applicable noise limits are presented in Table 3-1.

Table 3-1 : Assigned Noise Levels

Premises receiving noise	Time of Day	Assigned Noise Level –dB(A) ¹		
		L _{A10}	L _{A1}	L _{Amax}
Noise sensitive premises at corner of Lord St & Edward St ²	0700 to 1900 hours Monday to Saturday	60	70	80
	0900 to 1900 hours Sunday and public holidays	55	65	80
	1900 to 2200 hours all days	55	65	70
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays	50	60	70
Noise sensitive premises at eastern end of Edward St ³	0700 to 1900 hours Monday to Saturday	58	68	78
	0900 to 1900 hours Sunday and public holidays	53	63	78
	1900 to 2200 hours all days	53	63	68
Commercial premises on Lord St & Edward St	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays	48	58	68
	All hours	60	75	80

Note that the assigned noise levels at other noise sensitive premises will vary depending on their proximity to roads, commercial and industrial land.

¹ In evaluating assigned noise levels for noise sensitive premises it is assumed that Hanson's batching plant, Holcim's batching plant, and the Claisebrook rail facility are industrial premises. All other developed areas (i.e. excluding parks, road & rail corridors) are commercial.

² The assigned levels at this location include an influencing factor of 15 dB

³ The assigned levels at this location include an influencing factor of 13 dB

Client: Hanson Construction Materials Pty Ltd
 Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



4. NOISE MEASUREMENTS & OBSERVATIONS

Attended noise measurements and observations were recorded on 13th, 14th and 19th October 2010.

- Measurements on 13th October were recorded between 10.00 am and midday.
- Measurements on 14th October were recorded between 5.30 am and 7.30 am (i.e. before rush-hour traffic).
- Measurements on 19th October were recorded between 6.00 am and 8.30 am (i.e. before and during rush-hour traffic).

Details of measurement equipment are provided in Appendix B.

4.1 Attended Noise Measurements and Observations at the Batching Plant

Table 4-1 presents the noise measurements recorded at the plant.

Loading of agitator trucks is the most significant source of noise emissions at the batching plant. The source of high noise emissions is the operation of the agitator trucks at high idle during the loading process. Two makes of agitator truck are filled at the batching plant: Iveco and Mack. The Mack trucks are significantly noisier than the Iveco trucks.

The agitator trucks are also run at high idle during slumping. However, noise emissions associated with slumping are reduced by the slumping enclosure.

Table 4-1 : Measurements of Operational Noise at the Plant

Ref	Operation	Measurement Location	L _{Aeq} Noise Level dB(A)
1	2 x Mack agitator trucks loading simultaneously	15 m from loading bay, near Lord St site boundary	87
2	1 x Iveco agitator truck loading	15 m from loading bay, near Lord St site boundary	79
3	2 x agitator trucks slumping	10 m from open end of slumping enclosure, near Lord St site boundary	81
4	6 x agitator trucks idling in main yard	Centre of main yard	79
5	Tanker delivery	In main yard, 8 m to side of tanker engine, near southern site boundary	85

Noise from operations within the main yard at the plant (ie trucks idling, washing trucks and tanker deliveries) is well contained by the barrier effects of the site buildings. Noise from the western area of the plant (where filling and slumping occurs) is effectively screened to the north by site buildings and buildings immediately adjacent the plant. However, the screening provided by the boundary fence is less effective for sound propagation to the west (towards Lord St).

Client: Hanson Construction Materials Pty Ltd
 Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



4.2 Attended Noise Measurements and Observations in Surrounding Streets

Measurements and observations were recorded in the streets surrounding the batching plant in order to:

- determine underlying background noise levels from traffic during periods when the batching plant was either not operating or inaudible;
- attempt to quantify noise levels received from the batching plant at premises on Lord St and Edward St; and
- assess the audibility of noise emissions from the batching plant and to determine whether noise emissions contained intrusive characteristics (i.e. tonality, impulsiveness or modulation).

4.2.1 Background Noise from Traffic

Traffic noise levels were measured at the two assessment locations shown in Figure 1-1. The measured levels are presented in Table 4-2.

Table 4-2 : Traffic Noise Measurements

Ref	Location	Duration of Measurement	Date / Time	LA10	LA90	L _{Amin}
6	Lord St	15 min	13 Oct 11:30 am	76	64	60
7	Edward St	15 min	13 Oct 11:50 am	68	61	57
8	Lord St	5 min	19 Oct 6:00 am	67	55	52
9	Lord St	5 min	19 Oct 6:20 am	73	57	53
10	Lord St	3.5 min	19 Oct 7:05 am	73	60	55
11	Lord St	4 min	19 Oct 7:30 am	74	62	59

Measurements 6 and 7 were recorded during the late morning period on 13th October. The batching plant was operational at the time, however the measurements were recorded during periods when the plant was inaudible.

Measurements 8 – 11 were recorded as traffic was building before the rush-hour peak and show a steady increase in noise levels.

Measurement 11 was recorded immediately before loading operations began at the batching plant on 19th October.

4.2.2 Measurements and Observations of Plant Noise

Representative samples of noise from operations at the batching plant could not be reliably measured because of the consistently high background noise from traffic on Lord St and the Graham Farmer Freeway.

Client: Hanson Construction Materials Pty Ltd
 Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



Noise from the loading and slumping operations at the batching plant was frequently audible at the assessment location on Lord St, and some measurements were obtained on Lord St during lulls in traffic noise. These lulls mostly occurred when traffic was stationary, waiting for traffic signals to change. However, the measurements recorded were still influenced to some degree by traffic noise, and the lulls in traffic noise were generally very short in duration such that continuous measurements could not be recorded for more than approximately 10 - 15 seconds at a time. Consequently, the measurements do not provide a reliable quantification of the statistical noise levels required for comparison with the assigned noise levels. They do, however, provide an indication of the order of magnitude of individual operations at the batching plant.

Table 4-3 : Plant Noise Measurements

Ref	Operation	Date / Time	Measured Noise Level L _{Aeq} dB(A)	Comment
12	Filling	13 Oct 11:12 am	64	unknown truck
13	Slumping	14 Oct 5:40 am	60	Iveco truck
14	Filling	14 Oct 5:45 am	64	Iveco truck
15	Filling & Slumping	14 Oct 5:50 am	64	2 x Iveco trucks
16	Slumping	14 Oct 5:55 am	59	Iveco truck
17	Filling	19 Oct 7:35 am	62	Mack truck
18	Filling	19 Oct 7:40 am	66	2 x Mack trucks

Noise from the batching plant was inaudible above traffic noise at all times at the assessment location on Edward Street during the monitoring periods.

Short bursts of air release noise were frequently audible from the dust collection equipment at the batching plant. However, because of the short duration of the bursts and the high traffic noise levels it was not possible to assess the level of these noise emissions.

4.2.3 Review of Intrusive Characteristics

Intrusive noise characteristics have been reviewed for the most significant noise emitting operations, ie filling and slumping.

Subjectively, noise from these operations was tonal in character when observed from the Lord St assessment location, and measurements recorded within the plant demonstrate strong tonality from the agitator trucks at high idle. However, again it is very difficult to obtain objective measurements at receiving locations on Lord St that clearly demonstrate tonality in received noise levels.

Figure 4-1 presents a comparison of the noise spectrum recorded on Lord St during filling of two Mack trucks with the spectrum recorded within the plant while the same two trucks were slumping. The measurements recorded within the plant show strong tonality in the 80 Hz, 160 Hz, 250 Hz and 500 Hz 1/3 octave bands. However, only the tonality in the 500 Hz band is observable in the measurement recorded on Lord St. Furthermore, in order to satisfy the definition of tonality in the

Client: Hanson Construction Materials Pty Ltd
 Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



Environmental Protection (Noise) Regulations 1997, the tonality must persist for at least 10% of the assessment period. Because of the high levels of background noise it is not possible to determine whether or not tonality in noise emissions from the agitator trucks would protrude sufficiently from background noise so as to persist for 10% of the time.

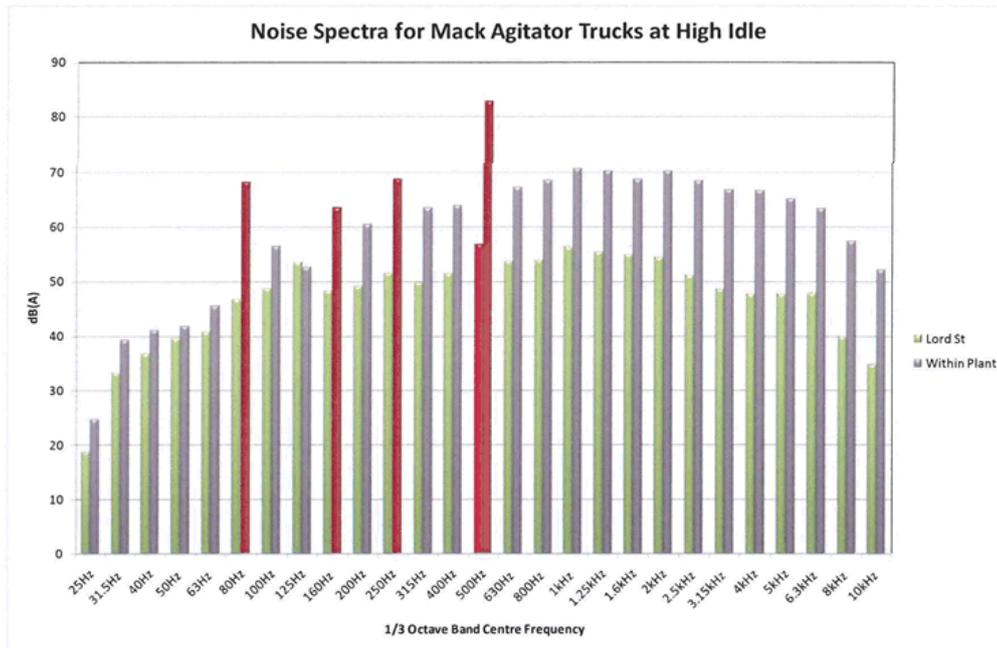


Figure 4-1 : Tonality Assessment for Mack Agitator Trucks

Impulsiveness and modulation were not observed in noise emissions from filling and slumping operations.

4.2.4 Other Observations

There is considerable variation in the level of noise received at the nearest premises on Lord Street and Edward Street to the west of the plant. This variation is due to the complexity of the screening effect provided by the boundary fence, plant buildings and other buildings, as well as the effect of sound reflections from surrounding buildings. This can result in localised high noise areas and quiet zones in the received noise field. The measurement location on Lord St was selected because it had a direct line of sight to the agitator truck loading bays and plant noise was clearly audible during lulls in traffic. However, because of the complexity of the received sound field, the measurements recorded at this location cannot be considered representative of other receiving locations – even if these locations are very close to the assessment location.

As discussed previously noise from the loading operations at the batching plant is frequently masked by traffic noise. This masking is demonstrated in Figure 4-2 which presents a comparison of traffic noise levels with noise levels for an agitator truck loading. The upper and lower curves (in red) are from the same measurement and represent the average noise level and the minimum noise level recorded over the same period of approximately 4 minutes. The middle curve (in green)

Client: Hanson Construction Materials Pty Ltd
 Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



shows the noise level recorded immediately afterwards during a lull in traffic when a single Mack truck was being loaded.

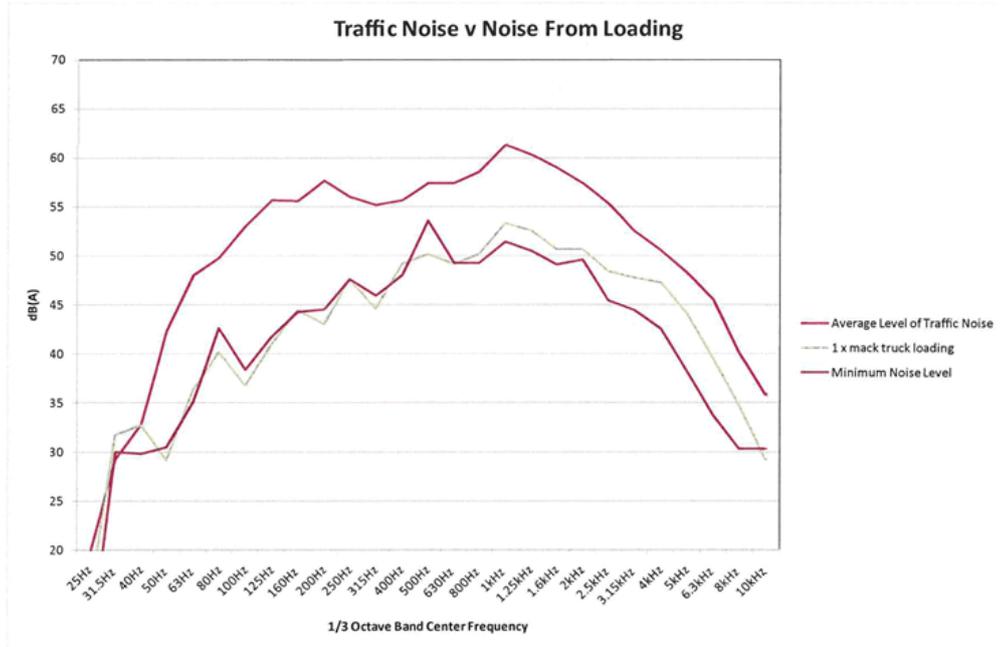


Figure 4-2 : Comparison of Traffic Noise and Noise from Loading Agitator Truck

Client: Hanson Construction Materials Pty Ltd
Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



5. COMPARISON OF PLANT NOISE WITH ENVIRONMENTAL NOISE LIMITS

The results presented in Table 4-3 show that noise levels in the range of approximately 60 dB(A) to 65 dB(A) were recorded at the assessment location on Lord Street during filling and slumping operations. However, these levels provide only an indication of the magnitude of noise emissions from the batching plant and cannot be directly compared with the assigned noise levels for the following reasons:

- The measured levels include some contribution from traffic noise; and
- Measurements could not be recorded of sufficient duration to allow representative values of L_{A10} , L_{A1} and L_{Amax} to be determined.

The measured levels are, however, high enough to suggest that there is potential for the assigned noise levels to be exceeded on Lord St, both for residential and commercial receiving premises:

- L_{A10} noise limits may potentially be exceeded at both residential and commercial premises at all times of the day, although exceedance is more likely during evening and night time hours.
- L_{A1} noise limits could potentially be exceeded at both residential premises at all times of the day, although exceedance is more likely during evening and night time hours, However, it is unlikely that L_{A1} noise limits would be exceeded at commercial premises.
- It is unlikely that L_{Amax} noise limits would be exceeded at any time at either residential or commercial premises.

Although tonality is subjectively observable at Lord St, it is unlikely to protrude sufficiently from background noise, and to persist for sufficient periods of time during the day to satisfy the assessment criteria for tonality defined in the *Environmental Protection (Noise) Regulations 1997*. However, there is potential for noise emissions from filling and slumping operations to exhibit tonality when background noise levels are lower during the evening and night time hours.

Based on observations at the assessment location on Edward Street, it is unlikely that environmental noise limits will be exceeded at this location.

Client: Hanson Construction Materials Pty Ltd
Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



6. CONCLUSIONS

- Filling of agitator trucks is the most significant source of noise emissions at the batching plant, followed by slumping.
- The most significant noise impacts are on Lord St to the west of the batching plant.
- Traffic noise dominates throughout the day on Lord St, but noise from the filling and slumping operations at the batching plant is clearly audible during lulls in traffic.
- During the monitoring periods, it was not possible to obtain reliable measurements of noise from the batching plant that were sufficiently unaffected by traffic noise to allow direct comparison with the assigned noise levels.
- The measurements that were obtained on Lord St suggest that there is potential for the assigned noise levels to be exceeded at both residential and commercial premises.
- The potential for exceedance of the assigned levels is likely to increase at residential premises during the evening and night time hours when noise limits are lower.
- Tonality in noise emissions from filling and slumping operations may become evident when background noise levels are lower during the evening and night-time.
- Noise from the batching plant was inaudible at Edward St throughout the monitoring periods.

Client: Hanson Construction Materials Pty Ltd
Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



7. NOISE MITIGATION SUGGESTIONS

The following outlines some noise mitigation suggestions which may help to reduce noise impacts from the batching plant:

- Fully enclosing the filling stations would significantly reduce noise from the filling operations.
- Increasing the height of the western boundary fence would reduce noise from truck movements in the yard.
- In combination with the engineering noise controls above, noise management measures could be implemented to ensure compliance is achieved at all times. For example:
 - It was noticed that Iveco trucks were quieter than Mack trucks during filling and slumping. Therefore, using Iveco trucks in preference to Mack trucks would help to reduce noise impacts, particularly during the night and early hours of the morning when background noise levels are lower.
 - Limiting the number of trucks filling and slumping at any one time would also help to reduce noise emissions.

Client: Hanson Construction Materials Pty Ltd
Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



APPENDIX A : ASSIGNED NOISE LEVELS

Noise management in Western Australia is implemented through the Environmental Protection (Noise) Regulations 1997 which operate under the *Environmental Protection Act 1986*. The Regulations specify maximum noise levels (assigned levels) which are the highest noise levels that can be received at noise-sensitive premises, commercial and industrial premises.

The regulations define three types of assigned noise level:

- L_{A10} assigned noise level which is not to be exceeded for more than 10% of the time;
- L_{A1} assigned noise level which is not to be exceeded for more than 1% of the time;
- L_{Amax} assigned noise level means a noise level which is not to be exceeded at any time.

Assigned noise levels have been set differently for noise sensitive premises, commercial premises, and industrial premises. For noise sensitive premises, e.g. residences, an "influencing factor" is incorporated into the assigned noise levels. The influencing factor depends on land use zonings within circles of 100m and 450m radius from the noise receiver, including:

- the proportion of industrial land use zonings;
- the proportion of commercial zonings; and
- the presence of major roads.

For noise sensitive residences, the time of day also affects the assigned levels.

Regulation 7 sets prescribed standards for noise emissions. In summary, noise emissions must not cause, or significantly contribute to, a level of noise which exceeds the assigned level at the receiving premises. A noise emission is taken to significantly contribute to a level of noise if the noise emission exceeds a value which is 5 dB below the assigned level at the point of reception.

Under the current noise regulations, noise emissions must comply with the assigned noise levels, which refer to the premises **receiving** the noise. The assigned noise levels are presented in Table A-1.

Client: Hanson Construction Materials Pty Ltd
 Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



Table A1 : Assigned Noise Levels

Type of premises receiving noise	Time of Day	Assigned Noise Level –dB(A)		
		L _{A10}	L _{A1}	L _{Amax}
Noise sensitive premises at locations within 15 metres of a building directly associated with a noise sensitive use	0700 to 1900 hours Monday to Saturday	45 + Influencing factor	55 + Influencing factor	65 + Influencing factor
	0900 to 1900 hours Sunday and public holidays	40 + Influencing factor	50 + Influencing factor	65 + Influencing factor
	1900 to 2200 hours all days	40 + Influencing factor	50 + Influencing factor	55 + Influencing factor
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays	35 + Influencing factor	45 + Influencing factor	55 + Influencing factor
Noise sensitive premises at locations further than 15 metres from a building directly associated with a noise sensitive use	All hours	60	75	80
Commercial premises	All hours	60	75	80
Industrial premises	All hours	65	80	90

Regulation 7 also requires that the noise does not contain annoying characteristics, namely:

- tonality, e.g. whining, droning;
- modulation, e.g. like a siren;
- impulsiveness, e.g., banging, thumping.

Regulation 9 specifies objective assessment methods to determine if these characteristics are observed at the receiver location. If these characteristics cannot be reasonably and practicably removed, then an adjustment to the measured levels is required before comparison with the assigned level. The adjustments for each characteristic are outlined in Table A2.

Table A2 : Adjustments for annoying noise characteristics where source is not music

Adjustment Level cumulative to a maximum of 15 dB		
Tonality	Modulation	Impulsiveness
+5 dB	+5 dB	+10 dB

Client: Hanson Construction Materials Pty Ltd
Subject: Environmental Noise Assessment for the East Perth Concrete Batching Plant



APPENDIX B : EQUIPMENT DETAILS

Equipment details are provided in the table below. All equipment was field-calibrated using an acoustic calibrator immediately before and after each series of measurements. All equipment had been calibrated within the preceding 2 years at a NATA accredited calibration laboratory. Calibration certificates can be supplied on request.

Table B1: Measurement Equipment

Model	Serial Number
Brüel & Kjær 2260 sound level meter	2063189
Brüel & Kjær 2260 sound level meter	2248361
Brüel & Kjær 4230 Acoustic Calibrator	1103797

Determination Advice Notes:

1. In regards to Condition 1, a time limited approval has been imposed so to enable the City's Local Planning Framework, Town Planning Scheme No 2, to be finalised.
2. Any new signage that does not comply with the City's Policy No. 7.5.2 – Signs and Advertising shall be subject to a separate Planning Application and all signage shall be subject to a Building Permit application, being submitted and approved prior to the erection of the signage.
3. If an applicant or owner is aggrieved by this determination there is a right of review by the State Administrative Tribunal in accordance with the Planning and Development Act 2005 Part 14. An application must be made within 28 days of the determination.

SUBJECT SITE

MURCHISON TCE

CLAISEBROOK RD

CAVERSHAM ST

SOMERVILLE ST

EDWARD ST

HELSEA ST

GRAHAM FARMER FWY

GRAHAM FARMER FWY

GRAHAM FARMER FWY

GRAHAM FARMER FWY

0 10 20

 CITY OF VINCENT

The City of Vincent does not warrant the accuracy of information in this publication and any person using or relying upon such information does so on the basis that the City of Vincent shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Includes layers based on information provided by and with the permission of the Western Australian Land Information Authority (Landgate) (2013).

No. 120 Claisebrook Road, Perth





**Minister for Planning; Culture & the Arts; Science & Innovation
Government of Western Australia**

Our ref: 33-16340

Mr Jamie Harrington
HOLCIM AUSTRALIA PTY LTD
PO Box 1269
BENTLEY DC WA 6983

Dear Mr Harrington

HOLCIM AUSTRALIA PTY LTD AND CITY OF VINCENT: DR 225/2011

I have considered the State Administrative Tribunal's recommendations as provided in DR 225/2011 and I agree with the Tribunal's recommendations. I have determined that the application for review is allowed, and the deemed refusal of the respondent is set aside and conditional approval is granted. I attach a notice which gives effect to my decision.

Pursuant to the requirements of s247(4)(a) of the Planning and Development Act 2005, you are advised that the reasons for my determination on the application are those set down in DR 225/2011.

In summary, I determined that Holcim Australia Pty Ltd be given conditional approval to operate for a further five years, during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land. I have written to the Western Australian Planning Commission to request that this planning be commenced and carried out as a priority, in liaison with the City of Vincent, in order to provide certainty to all parties with an interest in the future of the area.

Yours sincerely

A handwritten signature in black ink that reads "John Day".

**JOHN DAY MLA
MINISTER FOR PLANNING;
CULTURE AND THE ARTS**

Att 22 MAY 2012

cc Ms Margie Tannock, Partner, Squire Sanders

11th Floor, 2 Havelock Street, West Perth, Western Australia 6005
Telephone: +61 8 6552 6200 Facsimile: +61 8 6552 6201 Email: Minister.Day@dpc.wa.gov.au

NOTICE OF DETERMINATION OF APPLICATION BY MINISTER**Pursuant to section 246 of the *Planning and Development Act***

The Minister for Planning has pursuant to the provisions of Section 246(2)(b) of the *Planning and Development Act 2005* in the matter of Holcim Australia Pty Ltd and the City of Vincent determined the application for review as follows:

1. Planning approval be given for the development of the applicant's East Perth concrete batching plant, subject to the following conditions:
 - 1) This approval is granted for a term expiring on 16 October 2017.
 - 2) This approval authorises concrete batching operations and access to the site by trucks and semi-trailers at any time between Monday and Saturday inclusive.
 - 3) There is to be no access to the site by trucks and semi-trailers on Sundays or public holidays.
 - 4) Within one calendar month of the grant of approval, the applicant must submit to the City for its approval and thereafter implement either an updated version of the Environmental Management Plan East Perth Concrete Batching Plant (Holcim) dated 24 March 2011, or a new environmental management plan which addresses the following matters:
 - a. Noise management for on-site activities;
 - b. Dust and concrete waste management including regular washing down of trucks before exiting the site, dust control on-site and the regular sweeping and cleaning of materials spilled on surrounding roads;
 - c. A traffic management plan for all vehicles entering and exiting the site, including driver education in regard to truck routes, vehicle speeds, and operations to minimise disturbance and public safety concerns;
 - d. The implementation of a complaint handling system which provides:

- i. A telephone number, facsimile number and email address to be manned during all hours of operation to log complaints and enquiries; and
 - ii. A record of complaints and enquiries logged, and the applicant's response, which must be provided on a quarterly basis to the City for its monitoring information;
 - e. The annual review of the environmental management plan after each year following the grant of approval; and
 - f. The inclusion in the environmental management plan of any addenda necessary to address any specific matter identified by either the Applicant or the Respondent between annual reviews, which addenda are to form part of the environmental management plan.
- 5) The development must be carried out in accordance with the recommendations made in the Herring Storer Acoustics Noise Management Plan (Ref: 12645-3-10164), or other Noise Management Plan approved by the City, including in particular, but without limitation:
 - a. Reverse the truck access route during night operations (7pm to 6am), so mixing trucks enter the loading area from the west, travel east through the loading bay building, then move to the night slump stand, located behind the existing delivery shed then following slumping, they turn within the site and exit via Claisebrook Road;
 - b. The installation of an automatic door on the western entry point of the loading area, similar to that which is installed on the eastern side; and
 - c. Ensuring that the personnel entry door to the production tower is not left open between 7pm and 7am.
- 6) Prior to the issue of a building licence for this development, the following shall be submitted to and approved by the City:

- a. An amended plan detailing:
 - i. Material, colour and a minimum of two significant design features being incorporated in the proposed sound attenuation wall to reduce the visual impact on the adjoining properties; and
 - ii. Relocated footpath, footpath material, separation between proposed crossover and Westrail crossover, type, material and finish of proposed gate, which is to be visually permeable, curved mirror and appropriate internal warning signs; and
- b. A construction management plan addressing the following issues:
 - i. Public safety, amenity and site security;
 - ii. Contract details of essential site personnel;
 - iii. Construction operating hours;
 - iv. Noise control and vibration management;
 - v. Air and dust management;
 - vi. Waste management and materials re-use;
 - vii. Parking arrangements for contractors and subcontractors;
 - viii. Consultation plan with nearby properties; and
- c. A detailed landscape and reticulation plan for the development site and adjoining road verge drawn to scale of 1:100 showing the following:
 - i. The location and type of existing and proposed trees and plants;
 - ii. All vegetation including lawns;
 - iii. Areas to be irrigated or reticulated and the method to be used;
 - iv. Proposed watering system to ensure the establishment of species and their survival during the hot and dry months; and
 - v. Separate soft and hard landscaping plans (indicating details of materials to be used).

7) The following plans, as approved by the City, shall be implemented:

- a. The amended plan referred to in condition 6(a);
- b. The construction management plan referred to in condition 6(b); and
- c. The landscaping and reticulation plan referred to in condition 6(c).



**JOHN DAY
MINISTER FOR PLANNING;
CULTURE AND THE ARTS**

21.5.2012.

Reasons for decision:

Holcim Australia Pty Ltd applied for development approval to allow the continuing operation of an existing concrete batching plant in East Perth. Holcim Australia Pty Ltd then sought review of the City of Vincent's deemed refusal of that decision by the State Administrative Tribunal. The Minister for Planning considered that the application to the Tribunal raised issues of such regional importance that it was appropriate for the application to be determined by the Minister. The Minister directed the Tribunal to hear the application but, without determining it, to refer it with recommendations to the Minister for determination.

The matter was heard before the Tribunal on 1-2 March 2012 and the result and the reasons for the recommendations of the Tribunal are provided in DR 225 2011, which result and reasons are accepted by the Minister for Planning.

In summary, the Minister has determined that Holcim Australia Pty Ltd be given conditional approval to operate for a further five years, during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land.

Timeline of Events – History

Date	Description
1987	The Readymix Concrete Batching Plant relocated to current location from its previous site on Trafalgar Road, East Perth. Approval expires in October 2012.
1996	The Readymix Concrete Batching Plant was rebuilt as a result of land acquired for the Graham Farmer Freeway.
1998	East Perth Redevelopment Authority (EPRA) refused an application for extended hours of operation.
25 March 1999	The Minister for Planning conditionally upheld an appeal against EPRA's refusal for an extension of 12 months of unlimited operating hours.
13 April 2000 and 13 March 2001	EPRA granted approval for Readymix for an extension of unlimited hours for a 12 month period.
29 August 2006	The City of Perth granted Readymix Concrete Batching Plant a 12 month period of unlimited hours of operation.
13 March 2007	The Council considered the extension of time for the operating time of the Readymix Concrete Batching Plant at the above site as part of the advertising process, which at that point in time was under the jurisdiction of the City of Perth and resolved to advise City of Perth strongly objects to the proposal.
1 July 2007	Land bounded by Lord Street, Summers Street and the Freeway including the subject site was transferred to the then Town of Vincent as part of the Local Government boundary changes.
5 and 6 November 2007	The Town's administration did not object to the temporary removal of the restriction on the hours of operation on 5 and 6 November 2007.
6 November 2007	The Council refused an application for the temporary removal of the restriction on the hours of operation.
20 November 2007	The Council deferred an application for extension of operating hours to existing general industry premises (Ready Concrete Batching Plant).
18 December 2007	The Council refused an application for extension of operating hours to existing general industry premises (Ready Concrete Batching Plant).
11 March 2008	The Council considered a confidential report for extension of operating hours to existing general industry (Readymix Concrete Batching Plant)- State Administrative Tribunal.
11 March 2009	The Minister for Planning, Culture and Arts granted conditional approval to Readymix Concrete Batching Plant for extension of hours.
26 July 2011	The Council considered an application for alterations and additions to existing concrete batching plant and the lifting of Time Limited Condition requiring the concrete batching plant to cease operating after 16 October 2012 and extended hours of operation (Holcim Batching Plant) and resolved to seek an urgent deputation to the Minister.
9 August 2011	The Council considered a confidential report for an application for alterations and additions to existing concrete batching plant and the lifting of Time Limited Condition requiring the concrete batching plant to cease operating after 16 October 2012 and extended hours of operation (Holcim Batching Plant) and resolved to approve the Town Planning Consultant's Recommendations.
11 October 2011	The Council considered a confidential report for an application for alterations and additions to existing concrete batching plant and the lifting of Time Limited Condition and extended hours of operation (Holcim Batching Plant)- State Administrative Tribunal.
13 March 2012	The Council considered the State Administrative Tribunal Decision relating to Concrete Batching Plants at No.71 Edward Street, Perth (Hanson) and 120 Claisebrook Road, Perth (Holcim.)
22 May 2012	The Minister for Planning granted approval to the batching plant for a term expiring on 16 October 2017.
12 June 2012	The Council considered a report on Minister for Planning, Culture and the Arts, Science and Innovation Decision relating to Concrete Batching Plants at No.71 Edward Street Perth (Hanson) and No.120 Claisebrook Road, Perth (Holcim).
24 December 2013	The City issued a Building Permit for Alterations and Additions to the Concrete Batching Plant.
2 May 2017	The Council conditionally approved the Concrete Batching Plant for a term expiring on 16 October 2018

Timeline – Concrete Batching Plants & Town Planning Scheme No. 2

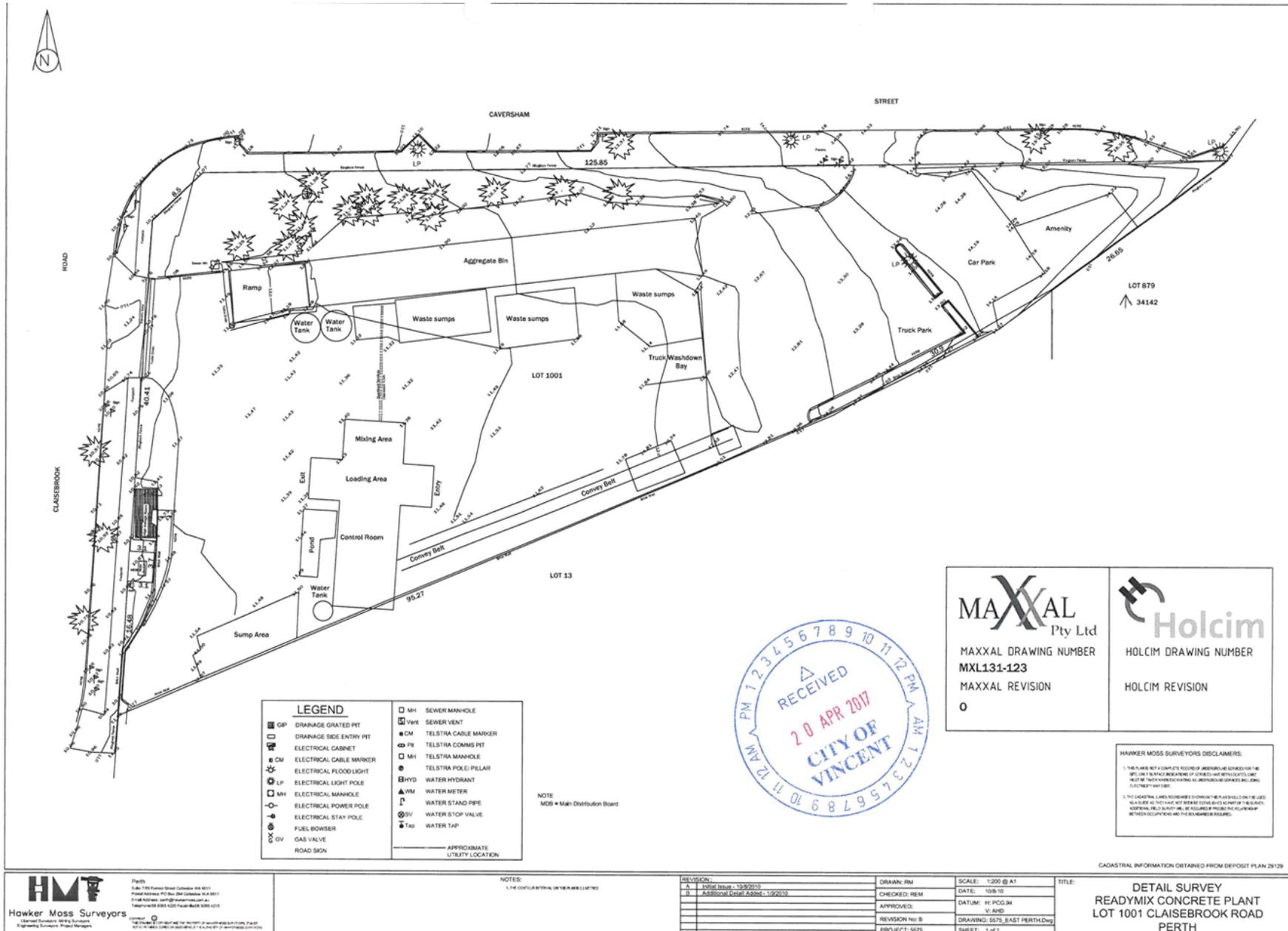
Date	Description
11 October 2011	Draft TPS 2 adopted by Council to be forwarded to the Commission for consent to advertise. It is unclear exactly what was adopted as the Council report that went up was confidential and was not in the usual report format (Item 14.2).
14 April 2012	A community visioning workshop was facilitated by the City with business and land owners to obtain their views and aspiration for the strategic direction of the area.
21 May 2013	The Minister called in the application on the basis that the application gave rise to issues of state and regional significant. The Minister granted Hanson and Holcim (the batching plant operators) conditional approval to operate for a further five years, "during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land".
3 September 2013 (Date according to the Council Report for Item 9.1.5 from 8 October 2013)	Minister granted consent to advertise draft TPS 2 subject to the following modifications being made by the City: <ol style="list-style-type: none"> 1. The zoning of the batching plants be amended to 'Special Use – Concrete Batching Plant'; 2. The zoning of the greater Claisebrook locality be amended from 'Residential/Commercial' to 'Commercial'; and 3. A new clause 4.16 be included in the text as follows: <p style="margin-left: 40px;">"4.16 Residential Developments and Uses</p> <p style="margin-left: 40px;">'Aged of dependent persons dwelling', 'grouped dwelling', 'single house', 'residential building', 'multiple dwelling', 'short term accommodation' are not permitted on lots with direct frontage to Edward Street east of Lord Street, Caversham Street and Claisebrook Road between Chelsea Street and Murchison Terrace."</p>
8 October 2013	Council considered a report outlining the modifications that the City was required to make and provided a response to these modifications. The scheme was advertised in its modified form. See Council Report from 8 October 2013 (Item 9.1.5).
16 October 2013	Public meeting with the land owners was held.
3 December 2013	Council considered a report on the outcome of the public meeting for the Claisebrook North Precinct in draft TPS 2.
11 March 2014 – 27 June 2014	Draft TPS 2 advertised for public comment in accordance with formal advertising requirements of the <i>Town Planning Regulations 1967</i> (that were in place at the time).
27 August 2014 – 12 September 2014	Additional advertising for public comments. The additional advertising period was undertaken to specifically consult surrounding land owners on changes requested by land owners during the initial consultation period. For example the Charles Hotel requested during the initial advertising that their zone/code be changed so surrounding land owners were consulted in the additional advertising period. Note that there were other modifications that Council made (not from landowner requests during the initial consultation) that were not consulted on further.
18 November 2014	Draft TPS 2 considered by Council, following advertising, for final adoption. Council endorsed the draft TPS2 for forwarding to the WAPC for determination. Council recommended the concrete batching plant sites be zoned Residential/Commercial R160 with "Special Use" for Concrete Batching Plant with a sunset clause (coinciding with the existing terms of approval – October 2017) and the surrounding area being zoned Residential/Commercial R100. See Council Report from 18 November 2014.

Date	Description
Following Council Meeting in November 2014	Draft TPS 2 as adopted by Council on 18 November 2014 was forwarded to the WAPC for final consideration.
19 October 2015	New Regulations came into effect.
10 August 2016	Meeting with the Minister for Planning.
8 November 2016	TPS 2 was considered at a Statutory Planning Committee meeting and the City made a deputation.
22 November 2016	Applications for Holcim and Hansen concrete batching sites were received by the City. The applications seek to amend conditions of the existing approval. Specifically they are seeking to: <ol style="list-style-type: none"> 1. Remove the time restriction (i.e. to allow the concrete batching plants to operate indefinitely); and 2. Amend conditions relating to the environmental assessment and noise that accord with the current plan rather than require new plans to be submitted.
22 February 2017	The applicants for the Holcim and Hansen concrete batching plants submitted an application for a review by the SAT for deemed refusal.
17 March 2017	SAT issued orders inviting the City to consider the applications and set dates for hearings
23 May 2017	SAT determined the Minister's decision granting approval to the Concrete Batching Plant on 21 May 2012 cannot be reviewed under Clause 77 for the application dated 22 November 2016 and the appeal was dismissed.

Development Approvals within the Locality

Address	Application Type	For	Determination
187 Claisebrook Road	Development Application	Change of use from Warehouse and Office to Recreational Facility	Not yet determined.
123 Claisebrook Road	Development Application	Construction of Four Storey Mixed Use Development Comprising of 15 Multiple Dwellings and Commercial Studio	Not yet determined.
179 Claisebrook Road	Development Application	Change of use from Warehouse to Recreational Facility	Approved by Delegated Authority 22 July 2016
	Building Application	Internal Fit Out: Commercial	Approved by Delegated Authority 2 September 2016
159 Claisebrook Road	Building Application	Demolition: Commercial	Approved by Delegated Authority 2 July 2015
	Development Application	Construction of Four Storey Multiple Dwelling Comprising of 15 Multiple Dwellings	Determined 14 September 2015
	Amendment to Development Approval	Change of Use of Shop to Restaurant	Not yet determined.
	Building Application	Mixed Use Development	Approved by Delegated Authority 9 May 2016

Address	Application Type	For	Determination
155 Claisebrook Road	Development Application	Change of use from Cinema to Lodging House and Eating House	Approved by Delegated Authority 6 October 2016
1/2 Edward Street	Development Application	Signage Addition to Existing Mixed Use Development	Approved by Delegated Authority 16 March 2016
	Development Application	Reconsideration of Condition of Planning Approval	Refusal by Council 26 July 2016
	Building Application	Occupancy Permit	Approved by Delegated Authority 19 April 2016
	Building Application	Occupancy Permit Strata	Approved by Delegated Authority 19 April 2016
152, 158 & 150 Claisebrook Road	Development Application	Demolition of Existing Hostel and Construction of 9 Storey Mixed Use Development	Approved by JDAP 18 August 2016
120 Claisebrook Road (Batching Plant)	Development Application	Proposed Reconsideration of Conditions to Existing Concrete Batching Plant	Not yet determined.
71 Edward Street (Batching Plant)	Development Application	Proposed Reconsideration of Conditions to Existing Slumping Building	Not yet determined.
51, 47, 43 & 39 Edward Street	Development Application	Change of Use from Vacant Site to Storage and Shed Addition	Approved by Delegated Authority 16 February 2016



LEGEND	
GP	SEWER MANHOLE
GP	SEWER VENT
GP	TELSTRA CABLE MARKER
GP	TELSTRA COINAGE PIT
GP	TELSTRA MANHOLE
GP	TELSTRA POLE FILLER
GP	WATER HYDRANT
GP	WATER METER
GP	WATER STAND PIPE
GP	WATER STOP VALVE
GP	WATER TAP
GP	APPROXIMATE UTILITY LOCATION
GP	ROAD SIGN
GP	DRAINAGE GRATED PIT
GP	DRAINAGE SIDE ENTRY PIT
GP	ELECTRICAL CABINET
GP	ELECTRICAL CABLE MARKER
GP	ELECTRICAL FLOOD LIGHT
GP	ELECTRICAL LIGHT POLE
GP	ELECTRICAL MANHOLE
GP	ELECTRICAL POWER POLE
GP	ELECTRICAL STAY POLE
GP	FUEL BOWSER
GP	GAS VALVE
GP	ROAD SIGN



<p>MAXXAL Pty Ltd MAXXAL DRAWING NUMBER MXL131-123 MAXXAL REVISION 0</p>	<p>HOLCIM DRAWING NUMBER HOLCIM REVISION</p>
--	--

HARKER MOSS SURVEYORS DISCLAIMERS:

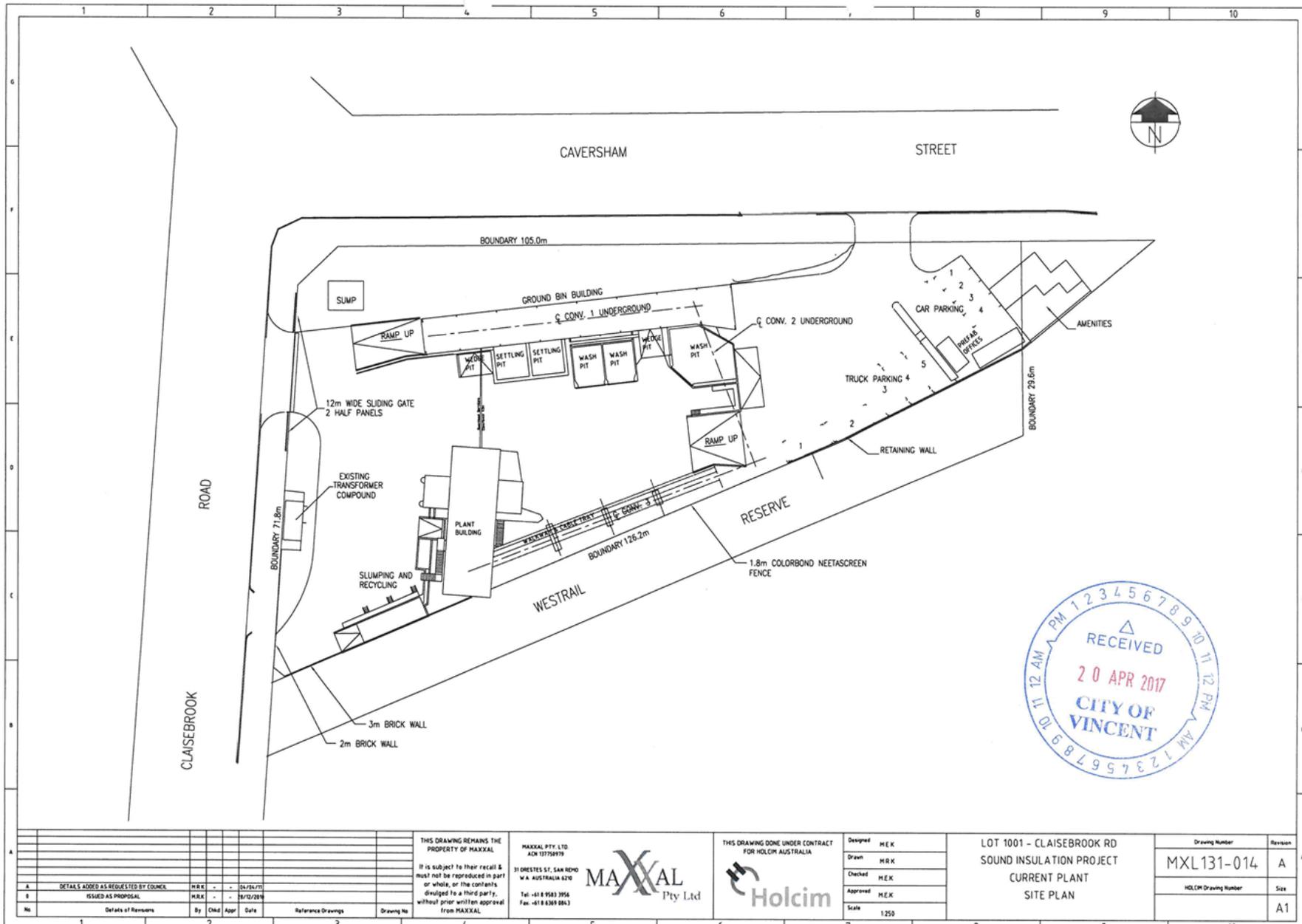
1. THERE ARE NOT A COMPLETE RECORD OF INTERFERING SERVICES FOR THE SITE AND THEREFORE THE POSITION OF SERVICES AND UTILITIES CAN ONLY BE DETERMINED BY EXCAVATION OR BY THE USE OF GROUND PENETRATING RADAR (GPR).

2. THE CADASTRAL LINES NUMBERED 1-10 ON THIS PLAN SHOULD NOT BE USED AS A GUIDE AS THEY HAVE NOT BEEN VERIFIED BY THE SURVEYOR. VERIFICATION BY SURVEYOR WILL BE REQUIRED IF THE REQUIREMENT FOR THIS OCCUPATION HAS BEEN DETERMINED.

HMT
Harker Moss Surveyors
11 Market Street, Perth, Western Australia
Phone: (08) 9442 1111
Fax: (08) 9442 1112
Email: info@hmt.com.au
www.hmt.com.au

NOTES:
1. THE CONTRACTOR SHALL VERIFY ALL UTILITIES

REVISION	DRAWN: RM	SCALE: 1:200 @ A1	TITLE:
A - Initial Issue - 13/09/10	CHECKED: REM	DATE: 10/8/10	DETAIL SURVEY READYMIX CONCRETE PLANT LOT 1001 CLAUSEBROOK ROAD PERTH
B - Additional Detail Added - 1/02/12	APPROVED:	DATE: 12/02/12	
	REVISION No: B	DRAWING: 5075 EAST PERTH.Dwg	
	PROJECT: 5075	SHEET: 1 of 1	



No.	Details of Revisions	By	Chkd	Appr	Date	Reference Drawings	Drawing No
A	DETAILS ADDED AS REQUESTED BY COUNCIL	H.R.K.	-	-	04/04/17		
B	ISSUED AS PROPOSAL	H.R.K.	-	-	16/12/2016		

THIS DRAWING REMAINS THE PROPERTY OF MAXXAL
 It is subject to their recall & must not be reproduced in part or whole, or the contents divulged to a third party, without prior written approval from MAXXAL

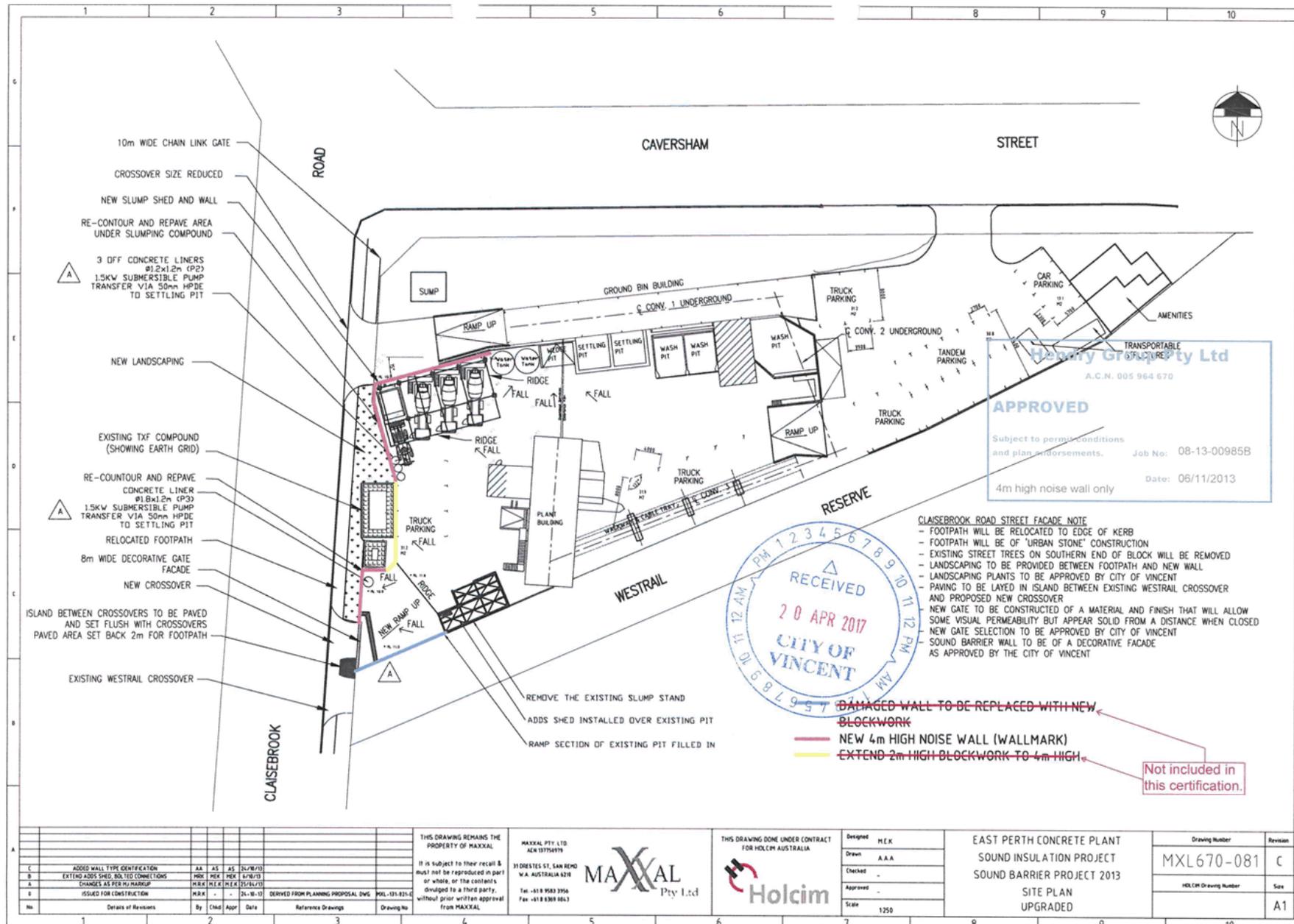
MAXXAL PTY. LTD
 A/CN 10728979
 31 ORESTES ST, SAN REMO
 W.A. AUSTRALIA 6210
 Tel: +61 8 9583 3956
 Fax: +61 8 9389 9843

THIS DRAWING DONE UNDER CONTRACT FOR HOLCIM AUSTRALIA

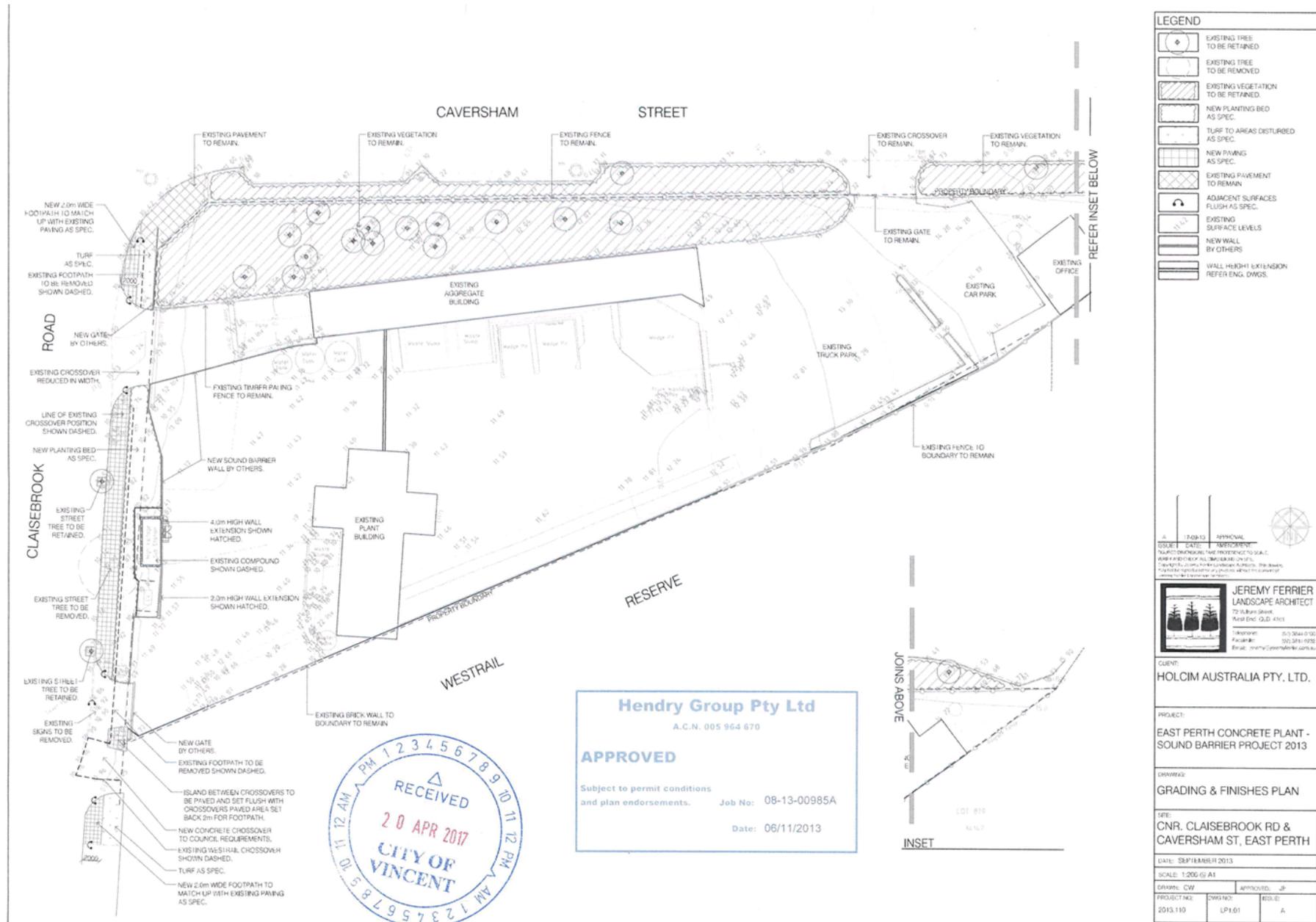
Designed	H.E.K.
Drawn	H.R.K.
Checked	H.E.K.
Approved	H.E.K.
Scale	1:250

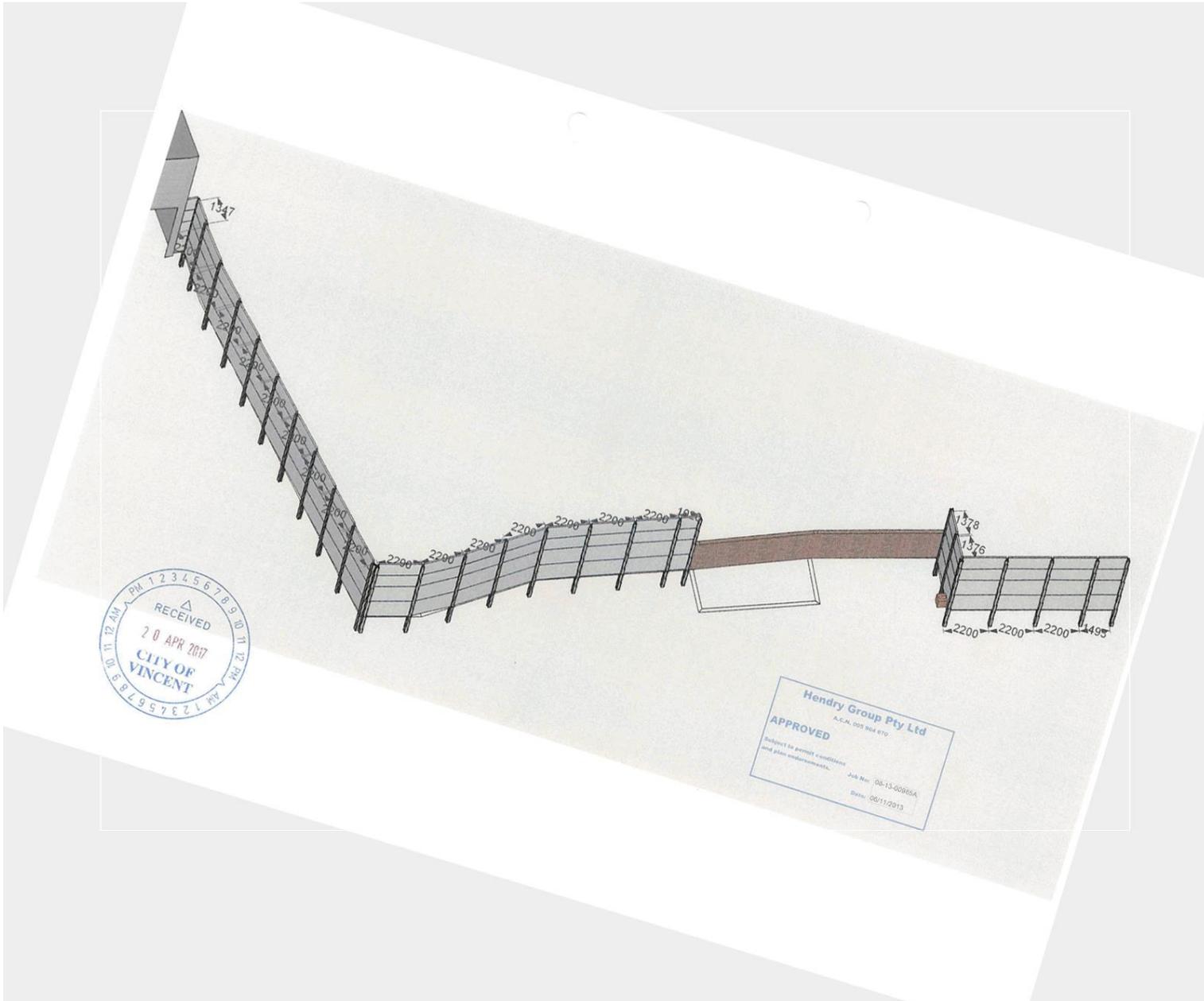
LOT 1001 - CLAISEBROOK RD
 SOUND INSULATION PROJECT
 CURRENT PLANT
 SITE PLAN

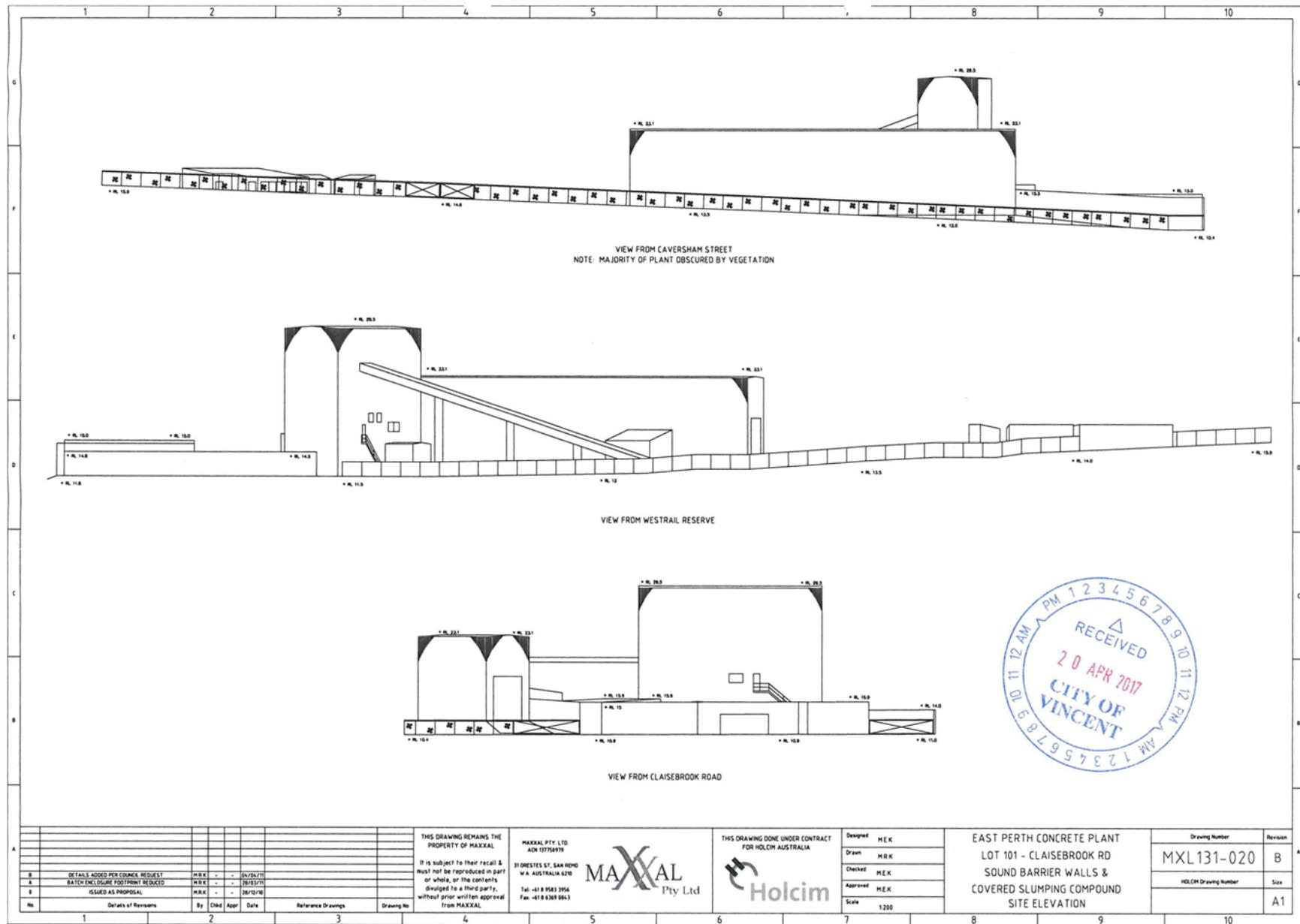
Drawing Number	Revision
MXL131-014	A
HOLCIM Drawing Number	Size
	A1



ADDITIONAL WALL TYPE IDENTIFICATION AA AS AS 31/8/10 EXTENDING ADDS SHED, BOLTED CONNECTIONS MKX MKX MKX 6/7/13 CHANGES AS PER TO PUBLIC MKX MKX MKX 15/11/13 ISSUED FOR CONSTRUCTION MKX - 1 24-08-17		THIS DRAWING REMAINS THE PROPERTY OF MAXXAL It is subject to their recall & must not be reproduced in part or whole, or the contents divulged to a third party, without prior written approval from MAXXAL	MAXXAL PTY. LTD AEN19754979 31 DRESTES ST, SAN REMO W.A. AUSTRALIA 6216 Tel: +61 8 9383 3956 Fax: +61 8 9389 8843	THIS DRAWING DONE UNDER CONTRACT FOR HOLCIM AUSTRALIA Designed P.E.K. Drawn A.A.A. Checked - Approved - Scale 1:250	EAST PERTH CONCRETE PLANT SOUND INSULATION PROJECT SOUND BARRIER PROJECT 2013 SITE PLAN UPGRADED	Drawing Number MXL670-081 Revision C
Details of Revisions No. 1 2 3 4 5 6 7 8 9 10		Reference Drawings 1 2 3 4 5 6 7 8 9 10	Drawing No. 1 2 3 4 5 6 7 8 9 10	Scale 1:250	Drawing Number MXL670-081 Revision C	Drawing Number MXL670-081 Revision C







13 April 2017

Our Ref: REA EAS GE

Chief Executive Officer
City of Vincent
PO Box 82
LEEDERVILLE WA 6902

Attention: Paola Di Perna

Dear Paola,

**RE: APPLICATION FOR DEVELOPMENT APPROVAL
HOLCIM CONCRETE BATCHING PLANT –
No. 21 (Lot 1001) Claisebrook Road, Perth**

This Application is prepared pursuant to the East Perth Redevelopment Authority (EPRA) Scheme and seeks development approval in perpetuity for the existing Holcim Concrete Batching Plant (the Plant) located at No. 21 (Lot 1001) Claisebrook Road Perth.

Planning approval for the abovementioned development was granted by the Minister for Planning on 22 May 2012 for a term expiring on 16 October 2017. This application does not involve any changes to the existing land use or physical development and seeks development approval for the continuation of the concrete batching plant use beyond 16 October 2017. Copies of the development plans and associated Management Plans are provided as **Attachments 1 and 2**. The previous conditional approval issued by the Hon Minister for Planning is provided as **Attachment 3** and a set of Draft Proposed Conditions as **Attachment 4**.

The continued operations of the Plant under the adaptive management provisions reflects the strategic significance for which the Plant has been recognised to facilitate building and infrastructure development in the Perth CBD and inner city locations.

Background

The Holcim Plant has been operating from its Claisebrook Road, Perth site since 1987; previously it was located at Trafalgar Road, East Perth. The Plant has been regularly monitored to ensure compliance with State environmental legislation and operates within the framework of an approved Environmental Management Plan. The Environmental Management Plan established an adaptive management regime (which will respond to the amenity of the surrounding locality as it evolves over time).

For the past 29 years the Plant has operated under a series of planning approvals granted by the City of Perth, the East Perth Redevelopment Authority and the Minister for Planning, respectively.

Allerding
& Associates

Town Planners, Advocates
and Subdivision Designers

ABN 24 044 036 646



125 Hamersley Road Subiaco Western Australia 6008
Telephone (08) 9382 3000 Facsimile (08) 9382 3005

Allerding Associates

The most recent of these approvals, that of the Minister, was granted in May 2012 pursuant to s246 (2)(b) of the Planning and Development Act 2005 (WA). That determination was made after the Minister determined the Plant to be of state or regional significance and directed the State Administrative Tribunal to consider and make recommendations (to him) in respect of the ongoing operation of Holcim from its current location.

The development before the Minister was for an ongoing use without a time limit.

The Minister granted approval subject to a term expiring on 16 October 2017. This was to allow time for the resolution of the planning framework, including the City of Vincent's Draft Town Planning Scheme No. 2 (**Draft TPS2**), which was under preparation at the time. Since the Tribunal's recommendation to the Hon. Minister inclusive of the time limit, two key strategic considerations have been implemented:

1. The State Government's Economic and Employment Land Strategy (**EELS**) has been adopted which recognises the strategic importance of the plant; and
2. The Hon Minister, on advice from the Western Australian Planning Commission (**WAPC**), directed the City of Vincent to amend its Draft TPS2 prior to advertising to:
 - a. incorporate the Plant within its own 'Special Use' zone for concrete batching purposes; and,
 - b. include the provision of a transition zone between the Graham Farmer Freeway, the Plant and residential development.

With the strategic recognition of the plant under EELS, and the implementation of the statutory framework under Draft TPS2 as directed by the Hon Minister for advertising, this application now seeks approval in perpetuity and to formalise adaptive environmental management (i.e. through management conditions to ensure the Plant's ongoing compatibility with its surroundings into the future).

Modifications to City of Vincent Draft Town Planning Scheme No. 2

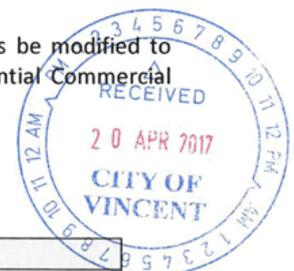
On 20th December 2011, the Council of the City of Vincent resolved to endorse Draft TPS2 and forward it to the WAPC for consent to advertise.

On 3rd September 2013, on advice from the WAPC, the Minister for Planning gave formal consent to advertise Draft TPS2 and Local Planning Strategy subject to modifications.

Among the changes was the Ministers instruction that the draft Scheme maps be modified to show Lot 1001 as 'Special Use – Concrete Batching Plant', in lieu of 'Residential Commercial (R160)' as initially sought by the City of Vincent.

These changes are outlined in the following Table:

No.	Description of land	Special Use	Conditions
2	No.21 (Lot 1001) Claisebrook Road, Perth	Concrete Batching Plant	Subject to the conditions in the determination issued by the Minister for Planning dated 21 May 2012 pursuant to section 246 of the <i>Planning and Development Act 2005</i>



Allerding
Associates

In addition, the Hon Minister also recognised the need to accommodate a land use transition between sensitive residential development and the Graham Farmer Freeway through the inclusion of the following Clause which prevented residential development from being approved in the following terms:

4.16.1 "aged or dependant persons dwelling", "grouped dwelling", "single house", "residential building", "multiple dwelling" and "short term accommodation" are not permitted on lots with direct frontage to Edward Street or Lord Street, Caversham Street and Claisebrook Road between Chelsea Street and Murchison Terrace.

In its final adoption of Draft TPS2 on 18th November 2014 (by changing the special use zone to an additional use right) the Council has departed from the Minister's requested modifications. The direction by the Hon. Minister to require a special use zoning for the site reflects the level of State significance attributed to the Plant, as identified under the EELS. This significance ought to be afforded greater weight, in making appropriate planning determinations, over the local planning scheme.

The Proposal

This proposal seeks development approval for the continuation of the concrete batching plant use beyond 16 October 2017. The development plans and associated adaptive management plans are included as **Attachments 1 and 2**.

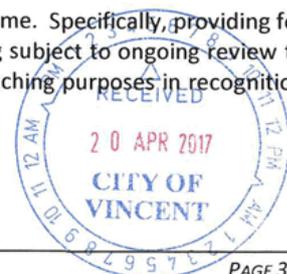
With respect to the plans, we provide the following:

1. Copies of plans prepared in relation to the application for planning approval for additions and alterations to the existing concrete batching plant lodged with the City of Vincent dated 4 April 2011 and subsequently approved by the Hon. Minister for Planning on 21 May 2012. These plans include:
 - a. Copies of plans submitted as part of the application lodged with the City of Vincent dated 4 April 2011 and subsequently approved by the Hon. Minister for Planning on 21 May 2012; and
 - b. Copies of the plans prepared to effect the development works as approved on 21 May 2012. These plans reflect the various components of the approval that have been undertaken at different stages since that time.

Three (3) scaled copies of the plans are provided, as well as one (1) A4 copy.

The proposed draft conditions of approval are included as **Attachment 4**. The conditions can be summarised as follows;

1. Approval to the proposal in perpetuity, which reflects the strategic and long term importance of the Plant within the Planning Framework;
2. Insert conditions that formalise an adaptive management regime. Specifically, providing for the current adopted Environmental Management Plans being subject to ongoing review to provide compatibility for the use of the land for concrete batching purposes in recognition of changes that may occur in the Claisebrook Precinct;



Allerding
Associates

3. Additional condition to facilitate the re-routing of trucks away from Claisebrook Road north of Caversham Street. This condition is to minimise conflicts between residential uses (in the north of the precinct) and truck movements into the future. The condition will facilitate that trucks will only access and egress the Claisebrook Precinct via Edwards Street to Lord Street (within the area identified by the Hon. Minister as being the transition area between the Graham Farmer Freeway and residential development).

Relevant planning scheme

Until Draft TPS2 is approved by the Hon. Minister, this application is to be determined under the former EPRA Scheme (which is deemed to be a local planning scheme in respect of the precinct), as amended by the deemed provisions for local planning schemes in the *Planning and Development (Local Planning Schemes) Regulations 2015* (Schedule 2).

Draft TPS2 is accepted as a relevant planning consideration.

Importance of the Plant

The Plant is a well-established historical use in the Claisebrook North Precinct that is now one of two recognised state and regionally significant suppliers of concrete to Perth's construction industry. The Site's proximity to inner city developments is strategically located and ideally suited to supplying premixed concrete to the inner metropolitan area, in particular the Perth CBD.

Growth in the Perth CBD is set to continue with significant infrastructure and building projects such as the Perth Waterfront and Perth City Link. In addition, the following projects are notable and likely to extend well beyond the current approval period:

- The newly elected Government's Metronet;
- Perth City Link;
- Perth Waterfront and Elizabeth Quay;
- Metropolitan Redevelopment Authority's River Bank project;
- New WA Museum;
- Perth Stadium and Stadium Park;
- Mitchell Freeway Extension;
- East West City Link; and
- Forrestfield Airport Link.

Additionally, there are a number of lots likely to be redeveloped within the Perth CBD, such as the Former East Perth Power Station.

There are also areas that are proximate to the Perth CBD and in need of redevelopment, such as:

- Leederville secondary centre, over which the City has prepared the Leederville Masterplan;
- Belmont race-course site;
- Victoria Park secondary centre (including the gateway precinct);
- Stirling (Innaloo) strategic regional centre;
- Scarborough Foreshore Redevelopment;
- Beaufort Towers – 30 Beaufort Street (Old Megamart Site);
- New Northbridge;
- East Perth Rail Terminus TOD; and
- South Perth Peninsula Apartment Developments (multiple).



Allerding
Associates

The location of concrete batching facilities in close proximity to service the construction of these types of projects, as Perth continues to grow, will become even more important in the future as access into the Perth CBD is likely to become increasingly challenging.

The planning framework relevant to this proposal supports the ongoing operation of the plant in line with the Government's strategic documents, which recognise the importance of concrete batching plants to service the planned growth projected for Perth to 2050.

For the abovementioned reasons, the City's approval to the proposed development application is respectfully sought.

Yours sincerely

ALLERDING AND ASSOCIATES



**STEVE ALLERDING
DIRECTOR**

Encl.





Minister for Planning; Culture & the Arts; Science & Innovation
Government of Western Australia

Our ref: 33-16340

Mr Jamie Harrington
HOLCIM AUSTRALIA PTY LTD
PO Box 1269
BENTLEY DC WA 6983

Dear Mr Harrington

HOLCIM AUSTRALIA PTY LTD AND CITY OF VINCENT: DR 225/2011

I have considered the State Administrative Tribunal's recommendations as provided in DR 225/2011 and I agree with the Tribunal's recommendations. I have determined that the application for review is allowed, and the deemed refusal of the respondent is set aside and conditional approval is granted. I attach a notice which gives effect to my decision.

Pursuant to the requirements of s247(4)(a) of the Planning and Development Act 2005, you are advised that the reasons for my determination on the application are those set down in DR 225/2011.

In summary, I determined that Holcim Australia Pty Ltd be given conditional approval to operate for a further five years, during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land. I have written to the Western Australian Planning Commission to request that this planning be commenced and carried out as a priority, in liaison with the City of Vincent, in order to provide certainty to all parties with an interest in the future of the area.

Yours sincerely

JOHN DAY MLA
MINISTER FOR PLANNING;
CULTURE AND THE ARTS

Att 2 2 MAY 2012

cc Ms Margie Tannock, Partner, Squire Sanders

11th Floor, 2 Havelock Street, West Perth, Western Australia 6005
Telephone: +61 8 6552 6200 Facsimile: +61 8 6552 6201 Email: Minister.Day@dpc.wa.gov.au



NOTICE OF DETERMINATION OF APPLICATION BY MINISTER

Pursuant to section 246 of the *Planning and Development Act*

The Minister for Planning has pursuant to the provisions of Section 246(2)(b) of the *Planning and Development Act 2005* in the matter of Holcim Australia Pty Ltd and the City of Vincent determined the application for review as follows:

1. Planning approval be given for the development of the applicant's East Perth concrete batching plant, subject to the following conditions:
 - 1) This approval is granted for a term expiring on 16 October 2017.
 - 2) This approval authorises concrete batching operations and access to the site by trucks and semi-trailers at any time between Monday and Saturday inclusive.
 - 3) There is to be no access to the site by trucks and semi-trailers on Sundays or public holidays.
 - 4) Within one calendar month of the grant of approval, the applicant must submit to the City for its approval and thereafter implement either an updated version of the Environmental Management Plan East Perth Concrete Batching Plant (Holcim) dated 24 March 2011, or a new environmental management plan which addresses the following matters:
 - a. Noise management for on-site activities;
 - b. Dust and concrete waste management including regular washing down of trucks before exiting the site, dust control on-site and the regular sweeping and cleaning of materials spilled on surrounding roads;
 - c. A traffic management plan for all vehicles entering and exiting the site, including driver education in regard to truck routes, vehicle speeds, and operations to minimise disturbance and public safety concerns;
 - d. The implementation of a complaint handling system which provides



- i. A telephone number, facsimile number and email address to be manned during all hours of operation to log complaints and enquiries; and
 - ii. A record of complaints and enquiries logged, and the applicant's response, which must be provided on a quarterly basis to the City for its monitoring information;
 - e. The annual review of the environmental management plan after each year following the grant of approval; and
 - f. The inclusion in the environmental management plan of any addenda necessary to address any specific matter identified by either the Applicant or the Respondent between annual reviews, which addenda are to form part of the environmental management plan.
- 5) The development must be carried out in accordance with the recommendations made in the Herring Storer Acoustics Noise Management Plan (Ref: 12645-3-10164), or other Noise Management Plan approved by the City, including in particular, but without limitation:
- a. Reverse the truck access route during night operations (7pm to 6am), so mixing trucks enter the loading area from the west, travel east through the loading bay building, then move to the night slump stand, located behind the existing delivery shed then following slumping, they turn within the site and exit via Claisebrook Road;
 - b. The installation of an automatic door on the western entry point of the loading area, similar to that which is installed on the eastern side; and
 - c. Ensuring that the personnel entry door to the production tower is not left open between 7pm and 7am.
- 6) Prior to the issue of a building licence for this development, the following shall be submitted to and approved by the City:



- a. An amended plan detailing:
 - i. Material, colour and a minimum of two significant design features being incorporated in the proposed sound attenuation wall to reduce the visual impact on the adjoining properties; and
 - ii. Relocated footpath, footpath material, separation between proposed crossover and Westrail crossover, type, material and finish of proposed gate, which is to be visually permeable, curved mirror and appropriate internal warning signs; and
- b. A construction management plan addressing the following issues:
 - i. Public safety, amenity and site security;
 - ii. Contract details of essential site personnel;
 - iii. Construction operating hours;
 - iv. Noise control and vibration management;
 - v. Air and dust management;
 - vi. Waste management and materials re-use;
 - vii. Parking arrangements for contractors and subcontractors;
 - viii. Consultation plan with nearby properties; and
- c. A detailed landscape and reticulation plan for the development site and adjoining road verge drawn to scale of 1:100 showing the following:
 - i. The location and type of existing and proposed trees and plants;
 - ii. All vegetation including lawns;
 - iii. Areas to be irrigated or reticulated and the method to be used;
 - iv. Proposed watering system to ensure the establishment of species and their survival during the hot and dry months; and
 - v. Separate soft and hard landscaping plans (indicating details of materials to be used).

7) The following plans, as approved by the City, shall be implemented:



- a. The amended plan referred to in condition 6(a);
- b. The construction management plan referred to in condition 6(b); and
- c. The landscaping and reticulation plan referred to in condition 6(c).



JOHN DAY
MINISTER FOR PLANNING;
CULTURE AND THE ARTS

21.5.2012.

Reasons for decision:

Holcim Australia Pty Ltd applied for development approval to allow the continuing operation of an existing concrete batching plant in East Perth. Holcim Australia Pty Ltd then sought review of the City of Vincent's deemed refusal of that decision by the State Administrative Tribunal. The Minister for Planning considered that the application to the Tribunal raised issues of such regional importance that it was appropriate for the application to be determined by the Minister. The Minister directed the Tribunal to hear the application but, without determining it, to refer it with recommendations to the Minister for determination.

The matter was heard before the Tribunal on 1-2 March 2012 and the result and the reasons for the recommendations of the Tribunal are provided in DR 225 2011, which result and reasons are accepted by the Minister for Planning.

In summary, the Minister has determined that Holcim Australia Pty Ltd be given conditional approval to operate for a further five years, during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land.



Allerding
Associates



ATTACHMENT 4

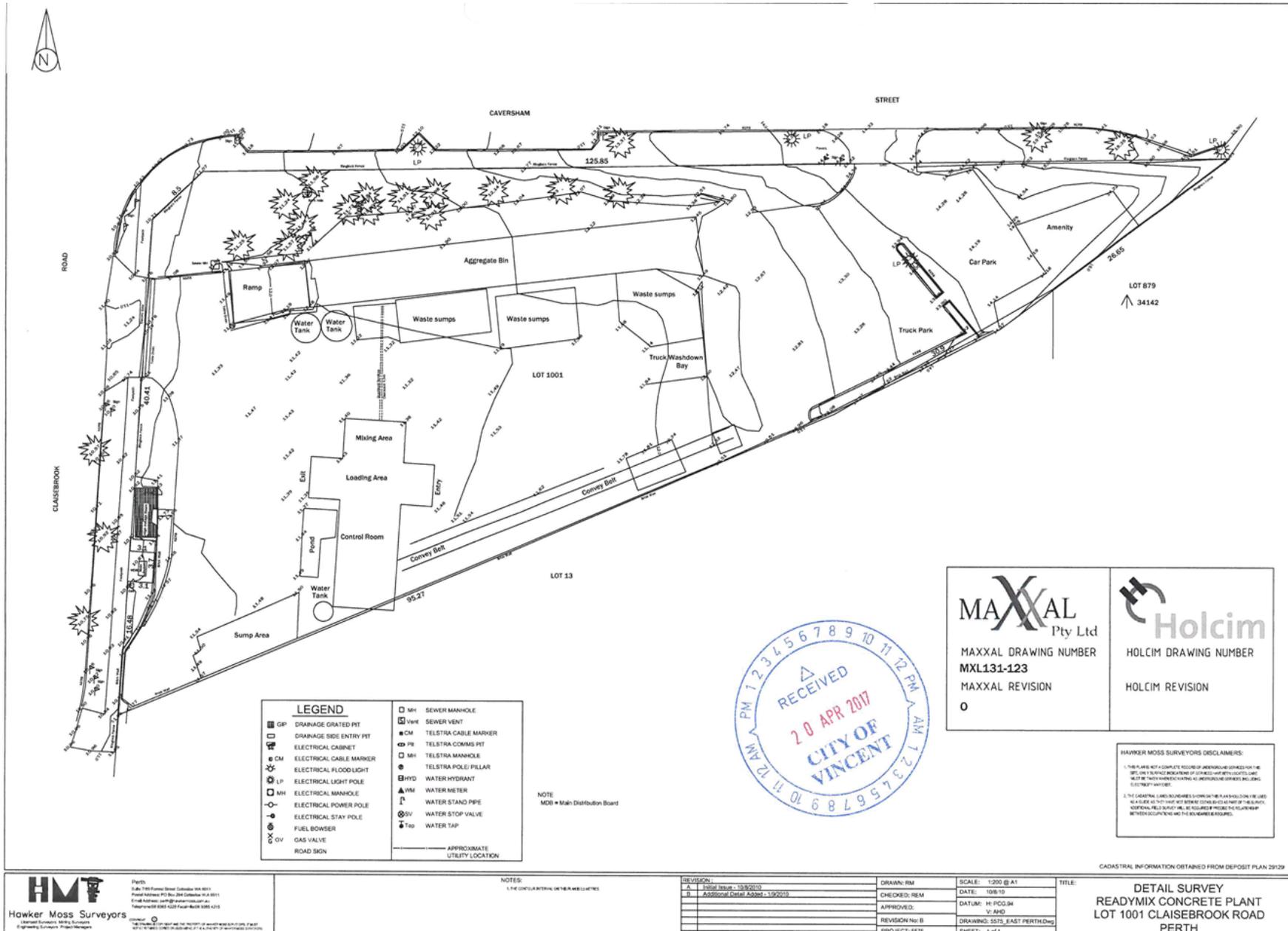
Draft Proposed Conditions

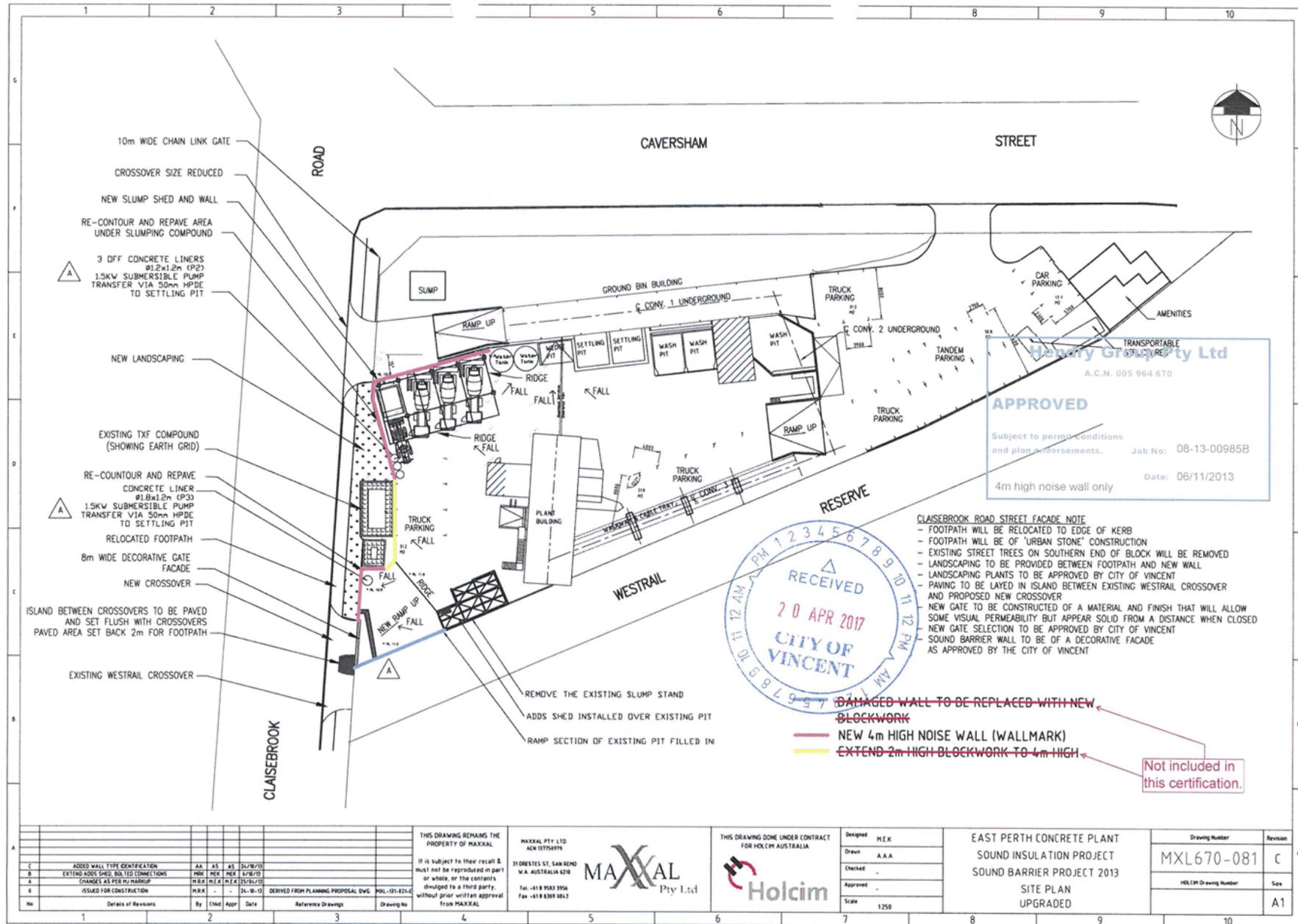
Allerding Associates

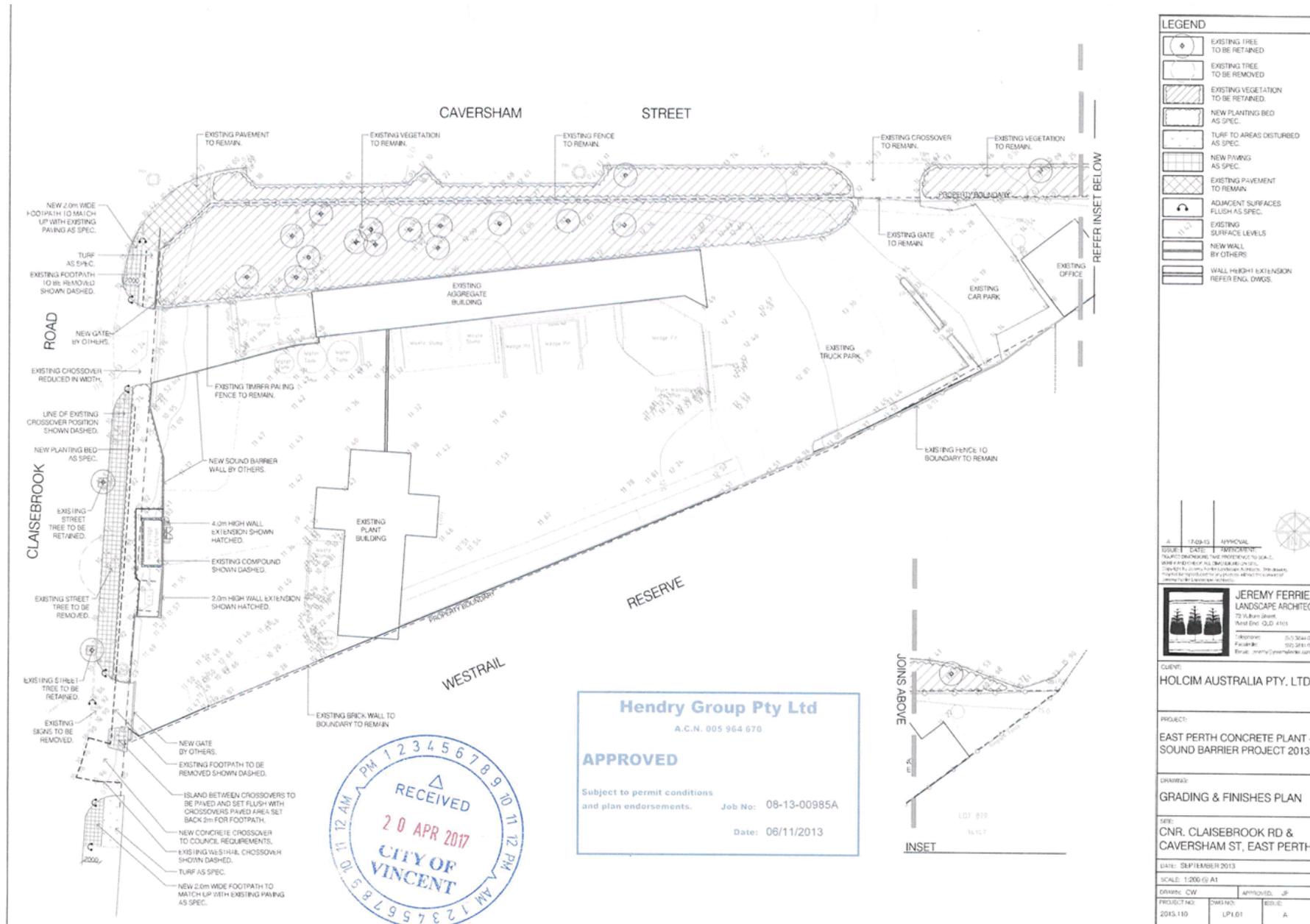
SCHEDULE OF MODIFIED CONDITIONS

#	CONDITIONS
1.	This approval authorises concrete batching operations and access to the site by trucks and semi-trailers at any time between Monday and Saturday inclusive.
2.	There is to be no access to the site by trucks and semi-trailers on Sundays or public holidays.
3.	The plant is to operate in accordance with the Environmental Management Plan dated 14 June 2016, or other Environmental Management Plan approved by the City, subject to the following: <ul style="list-style-type: none"> a) annual review of the environmental management plan after each year following the grant of approval; and b) the inclusion in the environmental management plan of any addenda necessary to address any specific matter identified by either the Operator or the City between annual reviews, which addenda are to form part of the environmental management plan.
4.	The development must be carried out in accordance with the recommendations made in the Herring Storer Acoustics Noise Management Plan (Ref: 12645-3-10164), or other Noise Management Plan approved by the City, including in particular, but without limitation: <ul style="list-style-type: none"> (a) reverse the truck access route during night operations [7 pm to 6 am], so mixing trucks enter the loading area from the west, travel east through the loading bay building, then move to the night slump stand, located behind the existing delivery shed then following slumping, they turn within the site and exit via Claisebrook Road; a) (b) ensuring that the personnel entry door to the production tower is not left open between 7 pm and 7 am.
5.	Landscaping to be maintained in accordance with the Landscape Plan (Ref: 08-13-00985A) dated September 2013 or other Landscape Plan approved by the City.
6.	All truck traffic is not to utilise Claisebrook Road north of Caversham Street unless such truck movements are to provide local supplies of concrete within the Claisebrook Precinct. All truck traffic is to access and egress the Claisebrook Precinct via Edwards Street to Lord Street.









LEGEND

- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- EXISTING VEGETATION TO BE RETAINED
- NEW PLANTING BED AS SPEC.
- TURF TO AREAS DISTURBED AS SPEC.
- NEW PAVING AS SPEC.
- EXISTING PAVEMENT TO REMAIN
- ADJACENT SURFACES FLUSH AS SPEC.
- EXISTING SURFACE LEVELS
- NEW WALL BY OTHERS
- WALL HEIGHT EXTENSION REFER ENG. DWGS

17-09-13 APPROVAL

ISSUE DATE: 17-09-13 APPROVAL

PLANT DIMENSIONS AND PROVISION TO SCALE. ALL DIMENSIONS TO BE CHECKED ON SITE. CHECK FOR LOCAL COUNCIL REQUIREMENTS. THE ISSUES AND APPROVALS ARE SUBJECT TO THE LOCAL COUNCIL'S APPROVAL.

JEREMY FERRIER
LANDSCAPE ARCHITECT
72 Wilbur Street
North Perth WA 6150

Phone: 08 9443 1100
Fax: 08 9441 9100
Email: jerry@jeremieferrier.com.au

CLIENT:
HOLCIM AUSTRALIA PTY. LTD.

PROJECT:
EAST PERTH CONCRETE PLANT -
SOUND BARRIER PROJECT 2013

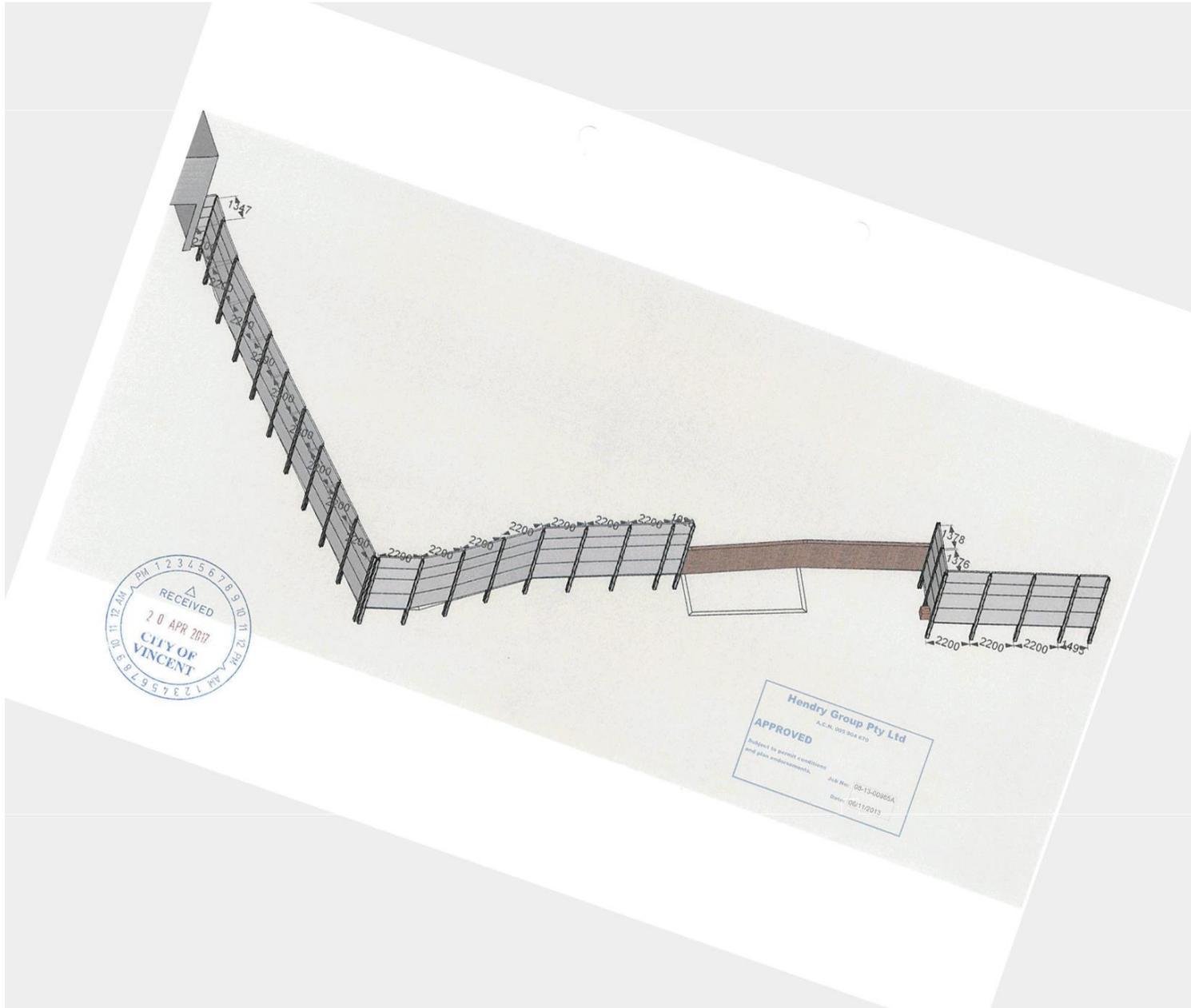
DRAWN BY:
GRADING & FINISHES PLAN

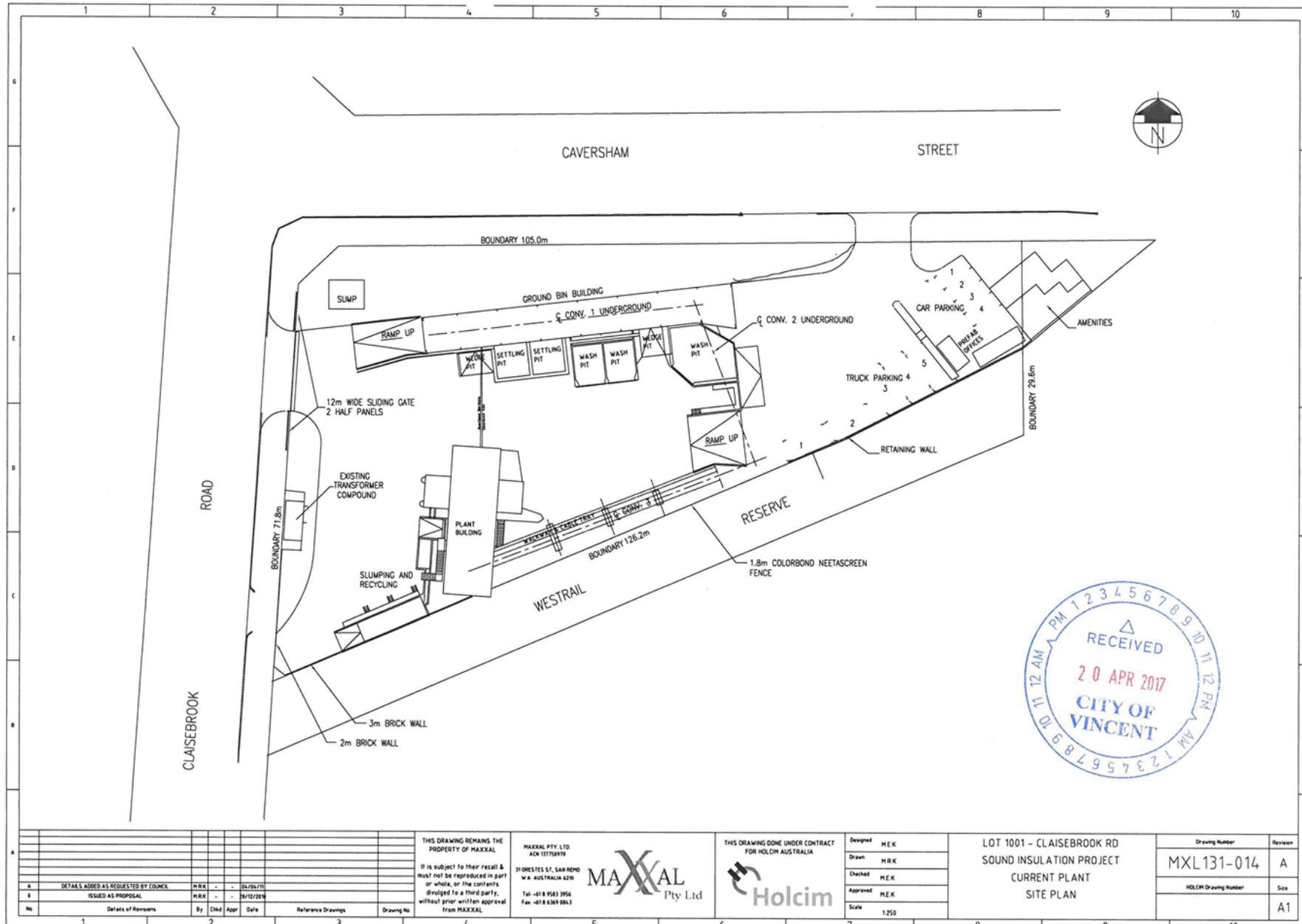
SITE:
CNR, CLAISEBROOK RD &
CAVERSHAM ST, EAST PERTH

DATE: SEPTEMBER 2013

SCALE: 1:200 @ A1

DRAWN: CW	APPROVED: JF
PROJECT NO: 2015.110	DWG NO: LP1.01
ISSUE: A	





No.	Details of Revisions	By	Chkd	Appr	Date	Reference Drawings	Drawing No.
A	DETAILS ADDED AS REQUESTED BY COUNCIL	HRK	-	-	04/04/17		
B	ISSUED AS PROPOSAL	HRK	-	-	16/12/2016		

THIS DRAWING REMAINS THE PROPERTY OF MAXXAL
 It is subject to their recall & must not be reproduced in part or whole, or the contents divulged to a third party, without prior written approval from MAXXAL

MAXXAL PTY LTD
 A/CN 1075879
 31 FORESTES ST, SAN RDND
 WA AUSTRALIA 6100
 Tel: +61 8 9583 2956
 Fax: +61 8 9589 9863

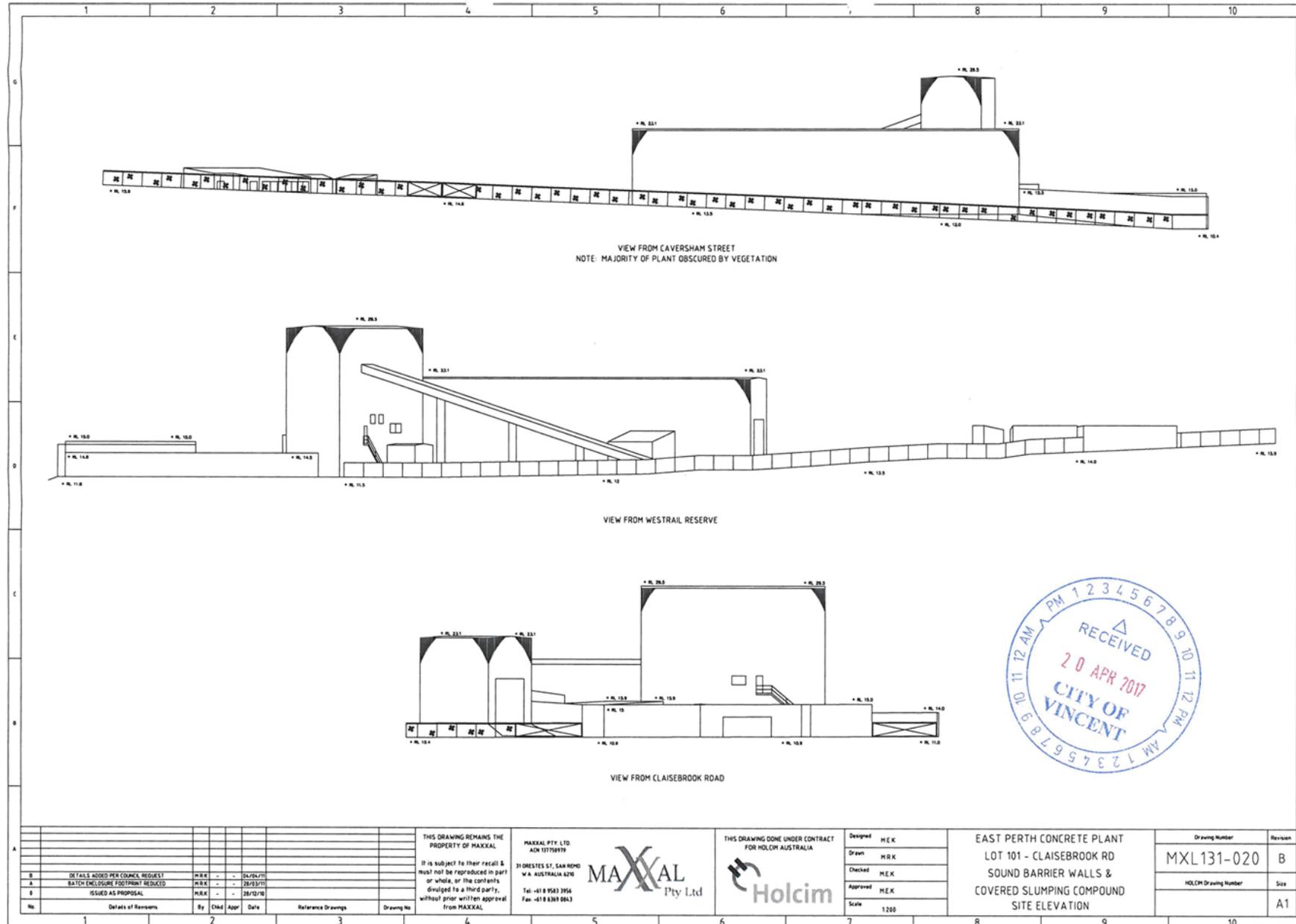


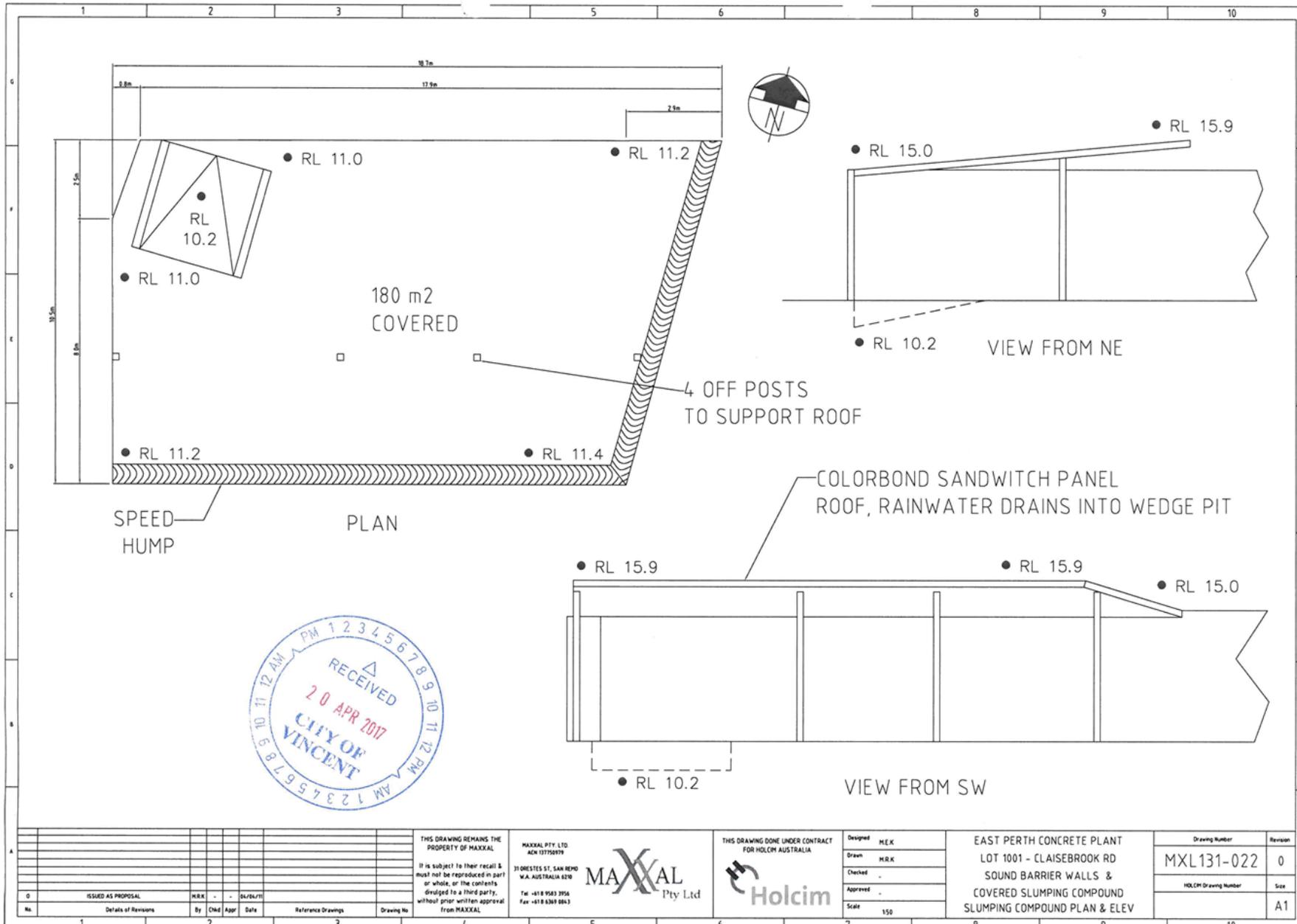
THIS DRAWING DONE UNDER CONTRACT FOR HOLCIM AUSTRALIA

Designed	HEK
Drawn	HRK
Checked	HEK
Approved	HEK
Scale	1:250

LOT 1001 - CLAISEBROOK RD
 SOUND INSULATION PROJECT
 CURRENT PLANT
 SITE PLAN

Drawing Number	Revision
MXL131-014	A
HOLCIM Drawing Number	Size
	A1





Summary of Submissions:**Concrete Batching Plant (Use Not Listed) – Extension of the Term of Approval and Modification to Conditions – No.71 Edward Street Perth**

Issue	Comment
Approval	
The batching plants should not be given planning approval as they have turned the area into an industrial zone.	Noted. On 12 May 2012 the Minister for Planning granted planning approval to the existing batching plant subject to the approval expiring on 16 October 2017 and other conditions. The reason for the Minister's decision was that a five year period would provide sufficient time to enable the necessary strategic planning framework for the subject site to be finalised to indicate clearly the ultimate development intent for the subject land. The strategic planning framework for the area is yet to be formalised and so it is considered premature for the batching plant to be approved in perpetuity and instead it is recommended that any approval be limited to 16 October 2018 to enable the strategic planning framework to be finalised to indicate clearly the ultimate development intent for the subject site.
Noise	
The noise generated by the Batching Plant and its trucks is impacting on the amenity of the area.	As part of the condition of approval issued on 12 May 2012, the proponent submitted a Noise Management Plan that demonstrate how the batching plant would comply with the requirements of the State Government's Noise Regulations. This Noise management Plan was approved by the City and the operation of the batching plant is required to be undertaken in accordance with this approved plan. Any complaints received by the City are fully investigated to ensure compliance with both the approved Noise Management Plan and the Noise Regulations.
Dust	
The dust generated by the Batching Plant and its trucks is a health risk to the surrounding residents and causing damages to the existing surrounding buildings and vehicles.	As part of the condition of approval issued on 12 May 2012, the proponent submitted a Dust Management Plan that demonstrate how the batching plant would minimise dust levels. This Dust Management Plan was approved by the City and the operation of the batching plant is required to be undertaken in accordance with this approved plan. The plant operator is also required to provide annual audits of dust levels to ensure compliance with the standards. These audit are assessed by the City and have been considered acceptable. Any complaints received by the City are fully investigated to ensure compliance with the approved Dust Management Plan.
Devaluation of Properties	
These batching plants contribute to the devaluation of the properties in the area.	Devaluation of properties is not a relevant planning consideration.
Traffic	
<p>The traffic generated by the batching plant is a constant hazard to the residents of the area as there have been some nearly miss accidents between passenger vehicles and the trucks for the batching plants.</p> <p>The proponent is proposing not to use Claisebrook to access/egress the batching plant which will have a traffic impact on the area Edward Street/Gladstone Street/Chelsea Street/ Sommerville Street and Lord Street.</p>	<p>Noted. The traffic impact assessment submitted as part of the previous application demonstrated the existing road network could safely accommodate the volume of traffic generated by the batching plant.</p> <p>Edward Street, Claisebrook Road and Summers Street between Lord Street and Claisebrook Road, are classified as Local Distributor Roads under the Metropolitan Functional Road Hierarchy and can carry up to 6,000 vehicles per day (vpd). Edward</p>

Summary of Submissions:

Issue	Comment
	Street carries approx. 1250 vpd of which 16% is classified as heavy vehicles (trucks). Claisebrook Road currently carries approx. 1,500 vpd of which 7.3% are trucks. This data suggests that the majority of the concrete batching plant traffic already is using Edward Street as their primary access. It is considered that Edward Street can accommodate the additional heavy vehicle traffic and that restricting access to Edward Street will assist in minimising impacts to local residents and is supported.
Land Use	
<p>There have been new residential/mixed use/commercial development in the area during the last 5 years. The batching plants are incompatible with these uses.</p> <p>If the batching plant is removed from the area, there will be a huge increase in activity with new businesses and residential development. The batching plant is to be relocated in an industrial area which is appropriate for such type of use.</p> <p>Claisebrook is a prime location within the City and now with the advent of the new stadium, it is expected that there will be more people interested to settle in the area, however, the batching plant will prevent this regeneration of the area.</p>	<p>The draft City's Town Planning Scheme No.2 (TPS2) was advertised in 2014 with comments being received from the community regarding the discontinued operation of the concrete batching plants and support for Councils proposal of a mixed use area. Following advertising, Council endorsed the draft TPS2 to be forwarded to the Western Australian Planning Commission for determination. At this time Council recommended the concrete batching plant sites to be zoned Residential/Commercial R160 with an additional use of concrete batching plants with a sunset clause ending in October 2017, and the surrounding area to be zoned Residential/Commercial R100.</p> <p>No determination has been made by the Minister for Planning regarding the City's draft TPS2 since lodgement in December 2014. As the strategic planning framework for the locality is yet to be finalised it is considered premature for the permanency of the batching plant use to be determined at this point in time and instead it is recommended that any approval be limited to 16 October 2018 to enable the strategic planning framework to be finalised to indicate clearly the ultimate development intent for the subject site</p>
State Planning Framework	
<p>The subject site is zoned Urban under the Metropolitan Region Scheme (MRS). Concrete Batching Plant is considered as "General Industry" land use under the Model Provisions for Local Planning Schemes contained within the Planning and Development (Local Planning Schemes) Regulations 2015. Therefore Concrete Batching Plant is considered to be incompatible with the Urban zoning under MRS.</p> <p>The batching plants contradict the long term vision for the Metro area as outlined State document Directions 2031 (Perth and Peel @ 3.5 Million/Central Sub-Regional Planning Framework)</p>	<p>Noted. In accordance with the State Planning Framework, the Council has recommended that the concrete batching plants be zoned Residential/Commercial R160 in the draft TPS2.</p>
Local Planning Framework	
<p>The Claisebrook Road North Precinct states that "<i>within this Precinct, commercial, retail, service and light industrial uses compatible with residential use will be supported, including uses providing services to the businesses and residents of the central and inner city</i>". The Concrete Batching Plants are therefore considered to be incompatible with the desired character for the locality as stated in the Claisebrook Road North Precinct.</p>	<p>Noted. The Concrete Batching Plants were previously granted planning approvals by the Minister for Planning and not the by Council. It is considered that the Concrete Batching Plants uses are incompatible with the existing surrounding uses and the future character of the area under TPS2. However, no determination has been made by the Minister for Planning regarding the City's draft TPS2 since lodgement in December 2014. As the strategic planning framework for the locality is yet to be</p>

Summary of Submissions:

Issue	Comment
<p>The Development Application is not permissible from a planning perspective. Concrete batching plant operations are not compatible both the current and future planning frameworks at all levels including but not limited to the State Planning Framework and the Local Town Planning Framework – <i>Town Planning Scheme 2</i> (as a Seriously Entertained Town Planning Scheme).</p>	<p>finalised it is considered premature for the permanency of the batching plant use to be determined at this point in time and instead it is recommended that any approval be limited to 16 October 2018 to enable the strategic planning framework to be finalised to indicate clearly the ultimate development intent for the subject site.</p>
<p>This is further emphasised in the EPRA Design Guidelines for the Claisebrook Road North Precinct, which state that preferred land uses include a range of retail, service and commercial land uses that are compatible with residential uses, and that residential development is particularly encouraged within the Precinct.</p> <p>The Draft Local Planning Scheme and Draft Town Planning Scheme No.2 seek to revitalise the area as a mixed residential/commercial precinct in accordance with the principles of Transit Oriented Development. Therefore the continued operation of the concrete batching plant is inconsistent with the desired future character for the locality.</p>	
EPRA Scheme	
<p>Under the EPRA Scheme, the batching plant use is neither 'Preferred' nor 'Contemplated' in the Claisebrook Precinct. However, the EPRS does not contain any provisions dealing with a 'Use Not Listed'. Clause 5.2.4 of the EPRS does allow for approval of a <u>Category of Use</u> that is neither Preferred nor Contemplated in a Precinct, but it does <u>not</u> allow for the approval of a Use Not Listed. The only Category of Use under the Scheme that is not Preferred or Contemplated in the Claisebrook Precinct is Research and Development. This is the only Category of Use that can be approved in the Precinct under Clause 5.2.4, and it does not include concrete batching.</p> <p>The Deemed Provisions introduced to all Local Planning Schemes in October 2015, do not provide any provisions that allow for the proposed use to be approved</p> <p>Whilst the 'Service and Light Industry' land use category is identified as a preferred use for the Claisebrook Road North Precinct, the concrete batching plant cannot reasonably be considered a Service Industry or a Light Industry as defined under the EPRS by virtue of the resultant amenity impact on surrounding properties, and therefore should be classified as a 'General Industry' land use.</p>	<p>Under the EPRA Scheme, the concrete batching plant use is neither 'preferred' nor 'contemplated' in the Claisebrook Precinct and there is no prohibition of this use. As a result the concrete batching plant has been assessed as an unlisted use. It has historically been accepted by EPRA, the City of Perth, the Minister, the City and the SAT, in its determination of Hanson Construction Materials Pty Ltd and Town of Vincent [2008] WASAT 71, that the concrete batching plants are an unlisted use.</p> <p>As the EPRA Scheme has remained unchanged since the earlier decisions of the City of Perth and the SAT, and applying the principles of proper and orderly planning as identified in SAT decisions of Hanson Construction Materials Pty Ltd and Town of Vincent and Humphries and City of Stirling, the City cannot refuse the application simply because it is not a 'contemplated' or 'preferred' use. As is set out in the SAT decision of Hanson Construction Materials Pty Ltd and Town of Vincent and Humphries and City of Stirling decisions are required to be made consistently and reasonably based on the merits of the application. Having regard to these previous decision the City considers the use 'concrete batching plant' to be an 'unlisted use' under the EPRA Scheme.</p>
Economic Impact	
<p>An Economic Assessment of the Claisebrook Concrete Batching Plants have shown the Concrete Batching Plants sites could accommodate an additional 500 residents,</p>	<p>One of the submitters provided an Economic Assessment of the Claisebrook Concrete Batching Plants as part of their submission, outlining that the land parcels that currently</p>

Summary of Submissions:

Issue	Comment
650 jobs created and attracting an investment in the order of \$154.5 million. If the concrete batching plants are relocated approximately 105 jobs and \$12 million in value added would be relocated elsewhere. Therefore the economic benefits from not approving the Concrete Batching Plants outweigh the continuation of the operation of the Concrete Batching Plants.	accommodate the Concrete Batching Plants could accommodate an additional 500 residents, support 650 jobs and attract investment in the order of \$154.5 million. The submission also states that if the concrete batching plants are relocated approximately 105 jobs and \$12 million in value would be added to the local economy. The submission concludes by outlining there are economic benefits for not approving the Concrete Batching Plants which outweigh the continuation of the operation of the concrete batching plants. The economic impact of a development application is not a relevant planning consideration and cannot be given regard by Council when determining the application.
Economic and Employment Lands Strategy (EELS)	
The Western Australian Planning Commission adopted the Economic and Employment Lands Strategy (EELS) in 2012. The document mentions batching plants as an example only of an industry that requires good access to Perth. The applicant is justifying the continuation of the batching plant based on this document. However, EELS identifies the vacant land to the rear of the former East Perth Power Station as Industrial Centre where the existing batching plant can be relocated.	There are clear inconsistencies between the state's strategic planning documents and no clarification is afforded as to which document would prevail to the extent of any inconsistency. Whilst reference to the concrete batching plants is noted in the EELS it is considered that this reference alone does not provide unequivocal strategic recognition of the importance of these concrete batching plants. Given the EELS references the former East Perth Power Station and the Capital City Planning Framework identifies the subject site as a mixed use area with commercial, retail and residential uses, it is not considered that the State's strategic planning framework supports the permanent operation of the concrete batching plant in this location.
Anti-social behaviour	
There is an increase in vandalism, graffiti, break-ins and vagrancy in the adjacent under developed areas of the batching plants.	Anti-social behaviour is a police matter.
Visual Impact	
The batching plants have a visual impact given they are visible from the main entrances to the City via Freeway, Lord Street and adjacent residential areas.	Noted.
Support	
Support the proposed	Noted.
Water Corporation and Main Road have no objections to the extension of the time of approval and the modified conditions.	Noted.

Applicant's Response to Submissions
Applications for Development Approval pursuant to the East Perth Redevelopment Authority Scheme
Hanson Concrete Batching Plant – No. 71 (Lot 200) Edward Street, Perth
Holcim Concrete Batching Plant – No. 21 (Lot 1001) Claisebrook Road, Perth

Submission	Applicant Response
<p><u>Approval</u></p> <p>The Batching Plants should not be given planning approval as they have turned the area into an industrial zone.</p>	<p>The Hanson Concrete Batching Plant (the Hanson Plant) has operated in the area since the 1960's and from the present site when the Graham Farmer Freeway was constructed in the 1990's. The Holcim Concrete Batching Plant (the Holcim Plant) has operated from the site since 1987, and previously from Trafalgar Road, East Perth. Precinct 15 has long functioned as a commercial/industrial precinct and that remains the predominant function today. This land use prominence is reflective of the applicable zoning under the East Perth Redevelopment Authority (EPRA) Scheme which lists 'Commercial', 'Service' and 'Light Industry' uses as "Preferred Uses" within Precinct 15. The Plants have therefore coexisted within a predominantly commercial/industrial area with limited residential development.</p>
<p><u>Noise</u></p> <p>The noise generated by the Batching Plant and its trucks is impacting on the amenity of the area.</p>	<p>The Plants have been regularly monitored to ensure compliance with State environmental legislation and operate within the framework of an approved Environmental Management Plan. This includes operating within the assigned noise levels under the <i>Environmental Protection (Noise) Regulations 1997</i>. This is also noting the location of the sites adjacent to the Graham Farmer Freeway which is a significant source of noise.</p>
<p><u>Dust</u></p> <p>The dust generated by the Batching Plant and its trucks is a health risk to the surrounding residents and causing damage to the existing surrounding buildings and vehicles.</p>	<p>The Plants have been regularly monitored to ensure compliance with State environmental legislation and operate within the framework of an approved Environmental Management Plan. This includes containing dust within the site pursuant to the requirements of the <i>Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998</i>.</p>
<p><u>Devaluation of properties</u></p> <p>These batching plants contribute to the devaluation of the properties in the area.</p>	<p>No comment as this is not a planning consideration.</p>

Submission	Applicant Response
<p><u>Traffic</u></p> <p>The traffic generated by the batching plant is a constant hazard to the residents of the area as there have been some nearly miss accidents between passenger vehicles and the trucks for the batching plants.</p> <p>The proponent is proposing not to use Claisebrook to access/egress the batching plant which will have a traffic impact on the area Edward Street/Gladstone Street/Chelsea Street/ Sommerville Street and Lord Street.</p>	<p>In recognition that increased residential development may occur within the northern portion of Precinct 15, the proposal is to re-route all truck movements to Lord Street via Edward Street. Traffic safety, volume and functionality for the proposed access arrangement is adequate and appropriate.</p>
<p><u>Land Use</u></p> <p>There have been new residential/mixed use/commercial development in the area during the last 5 years. The batching plants are incompatible with these uses.</p> <p>If the batching plant is removed from the area, there will be a huge increase in activity with new businesses and residential development. The batching plant is to be relocated in an industrial area which is appropriate for such type of use.</p> <p>Claisebrook is a prime location within the City and now with the advent of the new stadium, it is expected that there will be more people interested to settle in the area, however, the batching plant will prevent this regeneration of the area.</p>	<p>The Plants have coexisted with residential development within Precinct 15 for many years, albeit residential development is not the predominant land use. The Plants will not affect the capacity of the City to meet residential targets to 2031 and 2050. The Plants are also located within the portion of Precinct 15 which is the least compatible to accommodate residential development. There are significant other residential redevelopment opportunities within the City of Vincent. Further, the Plants do not prevent the capacity for commercial development to occur.</p>
<p><u>State Planning Framework</u></p> <p>The subject site is zoned Urban under the Metropolitan Region Scheme (MRS). Concrete Batching Plant is considered as "General Industry" land use under the Model Provisions for Local Planning Schemes contained within the Planning and Development (Local Planning Schemes) Regulations 2015. Therefore Concrete Batching Plant is considered to be incompatible with the Urban zoning under MRS.</p> <p>The batching plants contradict the long term vision for the Metro area as outlined State document Directions 2031 (Perth and Peel @ 3.5 Million/Central Sub-Regional Planning Framework).</p>	<p>The Plants have previously been deemed a use that is capable of approval under the provisions of the EPRA Scheme which sits under the Urban zone of the MRS.</p> <p>The Plants are entirely consistent with State Government policies, including the Economic and Employment Lands Strategy (EELS), Directions 2031 and Perth and Peel @ 3.5 Million. With respect to the latter policies, the Plants facilitate the significant residential, infrastructure and CBD development planned to occur under Directions 2031 and Perth and Peel @ 3.5 Million to 2050.</p>
<p><u>Local Planning Framework</u></p> <p>The Claisebrook Road North Precinct states that "within this Precinct, commercial, retail, service and light industrial uses compatible with residential use will be supported, including uses providing services to the businesses and residents of the central and inner city". The Concrete Batching Plants are therefore considered to be incompatible with the desired character for the locality as stated in the Claisebrook Road North Precinct.</p>	<p>The compatibility of the Plants in this location has been demonstrated by the long history of operation with very limited recorded complaints. It is also clearly noted that the Plants provide a vital service to the central and inner city locations through the provision of batched concrete for the construction industry, significant infrastructure development and to accommodate planned residential targets.</p>

Submission	Applicant Response
<p>The Development Application is not permissible from a planning perspective. Concrete batching plant operations violate both the current and future planning frameworks at ALL levels including but not limited to the State Planning Framework and the Local Town Planning Framework – Town Planning Scheme 2 (as a Seriously Entertained Town Planning Scheme).</p> <p>This is further emphasised in the EPRA Design Guidelines for the Claisebrook Road North Precinct, which state that preferred land uses include a range of retail, service and commercial land uses that are compatible with residential uses, and that residential development is particularly encouraged within the Precinct.</p> <p>The Draft Local Planning Scheme and Draft Town Planning Scheme No.2 seek to revitalise the area as a mixed residential/commercial precinct in accordance with the principles of Transit Oriented Development. Therefore the continued operation of the concrete batching plant is inconsistent with the desired future character for the locality.</p>	<p>Refer to the previous responses for comment in relation to the suitability of the retention of the Plants having regard to the statutory and strategic planning framework.</p>
<p><u>EPRA Scheme</u></p> <p>Under the EPRS, the batching plant use is neither 'Preferred' nor 'Contemplated' in the Claisebrook Precinct. However, the EPRS does not contain any provisions dealing with a 'Use Not Listed'. Clause 5.2.4 of the EPRS does allow for approval of a Category of Use that is neither Preferred nor Contemplated in a Precinct, but it does not allow for the approval of a Use Not Listed. The only Category of Use under the Scheme that is not Preferred or Contemplated in the Claisebrook Precinct is Research and Development. This is the only Category of Use that can be approved in the Precinct under Clause 5.2.4, and it does not include concrete batching.</p> <p>The Deemed Provisions introduced to all Local Planning Schemes in October 2015, do not provide any provisions that allow for the proposed use to be approved.</p> <p>Whilst the 'Service and Light Industry' land use category is identified as a preferred use for the Claisebrook Road North Precinct, the concrete batching plant cannot reasonably be considered a Service Industry or a Light Industry as defined under the EPRS by virtue of the resultant amenity impact on surrounding properties, and therefore should be classified as a 'General Industry' land use.</p>	<p>The Plants have previously been deemed a use that is capable of approval under the provisions of the EPRA Scheme.</p>

Submission	Applicant Response
<p><u>Economic Impact</u></p> <p>An Economic Assessment of the Claisebrook Concrete Batching Plants have shown the Concrete Batching Plants sites could accommodate an additional 500 residents, 650 jobs created and attracting an investment in the order of \$154.5 million. If the concrete batching plants are relocated approximately 105 jobs and \$12 million in value added would be relocated elsewhere. Therefore the economic benefits from not approving the Concrete Batching Plants outweigh the continuation of the operation of the Concrete Batching Plants.</p>	<p>A copy of the "Economic Assessment" referred to has not been provided and as such it is not possible to determine the basis on which those figures have been calculated. The Plants have been recognised for the sustainable role they play in supplying concrete to the Perth CBD. Separate assessments undertaken by the Plants have shown that if the Plants were to discontinue it would result in additional trucks travelling longer distances at increased cost with less efficiency in the delivery of concrete and with increased CO₂ emissions.</p>
<p><u>Economic and Employment Lands Strategy (EELS)</u></p> <p>The Western Australian Planning Commission adopted the Economic and Employment Lands Strategy (EELS) in 2012. The document mentions batching plants as an example only of an industry that requires good access to Perth. The applicant is justifying the continuation of the batching plant based on this document. However, EELS identifies the vacant land to the rear of the former East Perth Power Station as Industrial Centre where the existing batching plant can be relocated.</p>	<p>Within the Central sub-region, EELS specifically recognises the Plants as strategically located industrial facilities that need to be protected. This is in recognition that the plants are well serviced by primary arterial routes in and out of the city and to efficiently service CBD and inner city developments and associated infrastructure.</p>
<p><u>Anti-social behaviour</u></p> <p>There is an increase in vandalism, graffiti, break-ins and vagrancy in the adjacent under developed areas of the batching plants.</p>	<p>There is no valid basis in this submission that the Plants have contributed in any way to increased vandalism, graffiti, break-ins and vagrancy in the area. If antisocial activities were to occur in relation to the Plant sites themselves, it is acted upon immediately in conjunction with the relevant authorities.</p>
<p><u>Visual Impact</u></p> <p>The batching plants have an adverse visual impact given they are visible from the main entrances to the City via Freeway, Lord Street and adjacent residential areas.</p>	<p>The Plants are grouped with transport related infrastructure and operations including the Graham Farmer Freeway, the Claisebrook Railway Depot and the East Perth Train Station, all of which represent significant physical land areas in the immediate locality. The proximity of the Plants adjacent to these uses does not detract from the visual presentation of the locality. The Plant operators are happy to work with Council and the community to consider the provision of additional landscaping or development features to improve the visual presentation of the Plants.</p>



East Perth Concrete Batching Plant

Environmental Management Plan

Formerly URS Ref. 42908767 TESSG0455

Rev 0	April 2009	J. Neurauter (URS)
Rev 1	October 2009	J. Neurauter (URS)
Rev 2	July 2010	J. Neurauter (URS)
Rev 3	March 2011	J. Neurauter (URS)
Rev 4	October 2011	A. Ross (URS)
Rev 5	June 2012	Hannah Fletcher (URS)
Rev 6	October 2012	Hannah Fletcher (URS)
Rev 7	December 2014	Madlyn Morel (URS)

This Version Adapted and Prepared by Holcim Australia Pty Ltd

Rev 8	June 2016	C. O'Neill (Holcim)
-------	-----------	---------------------

Authorised By	Position	Signed	Date
Craig Malcolm	WA/NT Operations Manager		14/06/2016

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	1 of 18

TABLE OF CONTENTS

1. Document Management	4
2. Background	5
3. Site Description	5
3.1. Location	5
3.2. Day Operations	6
3.3. Night Operations	6
4. Dust and Concrete Waste Management	8
4.1. Objectives	8
4.2. Scope	8
4.3. Related Documents	8
4.4. Management Strategy	8
4.4.1. General	8
4.4.2. Minimisation and Control	9
4.5. Monitoring and Performance Indicators	9
4.5.1. Monitoring	9
4.5.2. Performance Indicators	10
4.6. Accountabilities	10
4.7. Review, Revision and Reporting	10
5. Noise Management	11
5.1. Objectives	11
5.2. Scope	11
5.3. Related Documents	11
5.4. Management Strategy	11
5.4.1. General	11
5.4.2. Minimisation and Control	12
5.5. Monitoring and Performance Indicators	13
5.5.1. Monitoring	13
5.5.2. Performance Indicators	13
5.6. Accountabilities	13
5.7. Review, Revision and Reporting	14
6. Traffic Management	15
6.1. Objectives	15
6.2. Scope	15
6.3. Related Documents	15
6.4. Management Strategy	15
6.4.1. General	15
6.4.2. Minimisation and Control	16
6.5. Monitoring and Performance Indicators	16
6.5.1. Monitoring	16
6.5.2. Performance Indicators	16
6.6. Accountabilities	16
6.7. Review, Revision and Reporting	16
7. Complaints Handling System	17
7.1. Objectives	17
7.2. Scope	17
7.3. Related Documents	17
7.4. Management Strategy	17
7.4.1. General	17

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	2 of 18

7.5.	Monitoring and Performance Indicators	18
7.5.1.	Monitoring	18
7.5.2.	Performance Indicators	18
7.6.	Accountabilities	18
7.7.	Review, Revision and Reporting	18
8.	Damage to Public Infrastructure	19
8.1.	Objectives	19
8.2.	Scope	19
8.3.	Related Documents	19
8.4.	Management Strategy	19
8.5.	Monitoring and Performance Indicators	19

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	3 of 18

1. DOCUMENT MANAGEMENT

Rev	Date	Revision Description	By	Check	Approved
0	7 April 2009	Final	J. Neurauter (URS)	J. Moro (URS)	J. Harrington (CEMEX)
1	28 October 2009	Final	J. Neurauter (URS)	M. Goldstone (URS)	J. Harrington (Holcim)
2	02 July 2010	Final - Reviewed with no changes. Note: Night operations have not yet commenced and no changes to day operations have occurred. No complaints have been received by Holcim.	J. Neurauter (URS)	J. Moro (URS)	J. Harrington (Holcim)
3	24 March 2011	Final	J. Neurauter (URS)	-	-
4	20 September / 27 October 2011	Unreviewed – Changes requested by Holcim	A. Ross (URS)	-	-
5	20 June 2012	Final - Minor changes to be compliant with Minister for Planning letter dated 22 May 2012	Hannah Fletcher (URS)	A. Bird (URS)	D. Lane (Holcim)
6	18 October 2012	Minor changes in response to comments from City of Vincent provided by email on 9 October 2012	Hannah Fletcher (URS)	A. Bird (URS)	D. Lane (Holcim)
7	19 December 2014	Minor changes made in response to the December 2014 EMP audit review and the commencement of night operations.	Madolyn Morel (URS)	Carl Paton (URS)	J. Russell (Holcim)
8	14 June 2016	Formatting changes to new Holcim template and minor changes in response to 2015 EMP audit review	C. O'Neill (Holcim)	J. Russell (Holcim)	C. Malcolm (Holcim)

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	4 of 18

2. BACKGROUND

This Environmental Management Plan (EMP) has been prepared for Holcim (Australia) Pty Ltd (Holcim) in response to the State Government's Minister for Planning; Culture & the Arts; Science & Innovation decision on 22 May 2012 to grant conditional approval for the East Perth Concrete Batching Plant Site (the Site) to continue operating for a further five years, including extended operating hours (Appendix A).

Approval was previously granted on 11 March 2009 for the Site to have extended hours of operation, subject to a set of conditions including the preparation of a Management Plan to address the management of dust and concrete waste, noise, traffic and implementation of a Complaints Handling System. The 2012 Minister's decision reiterates the requirement for an Environmental Management Plan (EMP) to address noise, dust, concrete waste, traffic management, a complaints handling system as well as building licence requirements. The approved extended hours of operation are 24 hours Monday to Saturday inclusive.

The Site has been operating as a concrete batching plant since 1987, and coexists with commercial, industrial and residential land uses. The purpose of this EMP is to provide measures to prevent or mitigate potential impacts to the environment and community, with specific emphasis on dust, noise and traffic during night operations (7pm to 6am) at the Site.

This EMP is intended to be a live document that was initially submitted to the City of Vincent for approval as directed, within one month of the date of the Ministers grant of approval, the 22 May 2012. Subsequently in accordance with the 2012 Minister's decision one calendar month from this date (by 22 June annually) as required by the conditions 4 and 4e. a reviewed environmental management plan shall be supplied to the City. Annual amendments to this EMP may be undertaken in consultation with relevant stakeholders such the City of Vincent and Holcim employees and management.

Ongoing and informal internal review of this plan, or components of this plan, may be completed prior to the annual formal review to show compliance with internal auditing of the Holcim Safety Health and Environment Management System (SHE MS). These amendment submissions will cover the stated period and will stand in lieu of an annual submission if they capture the relevant period.

The individual management sections of this EMP have also been created as stand-alone documents to fit within the SHE MS.

The 2012 Minister's decision permits Holcim to operate on the Site hours of operation are 24 hours Monday to Saturday inclusive (subject to conditions) until 16 October 2017.

3. SITE DESCRIPTION

3.1. LOCATION

The Site is located at No. 120 (Lot 1001) Claisebrook Road, East Perth, and is located amongst mixed commercial, residential and light industrial land uses. The 4,870 m² site is situated adjacent to the Graham Farmer Freeway to the south, Caversham Street to the north and Claisebrook Road to the east (Figure 1). Commercial businesses are located to the east and west of the Site and are generally vacant during the night.

The Rainbow Lodge backpackers' accommodation facility is located on Claisebrook Road, near the intersection with Caversham Street, approximately 50 m from the Site boundary.

The central location of the Site in East Perth is critical to the successful operation of the business, due to the demand for a ready supply of concrete to infrastructure projects in the Perth central business district. Hanson Concrete also operates a similar scale concrete batching plant in the immediate vicinity, located on Edward Street approximately 300 m southwest of the Site.

The residential apartment development, Lot 200 Edward Street, has been approved within the noise buffer for the site and is under construction. Once completed these residences will be the closest receptors.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	5 of 18

3.2. DAY OPERATIONS

Day operations are currently undertaken between the hours of 6am and 7pm Monday to Saturday. The current day time operational requirements of batching concrete at the Site involve five phases as follows:

1. Delivery and unloading of raw materials and aggregates.
2. Dry mixing and movement of cement, raw materials and aggregate around the Site.
3. Loading of concrete trucks with dry concrete mixture.
4. Mixing (slumping) of the dry concrete mixture with water.
5. Concrete waste removal and mixing truck rinsing.

The delivery and unloading of raw materials and aggregates utilises a large enclosed shed (the ground bin building) which lies along the northern property boundary. Raw materials are delivered by semi-trailers and four-axle trailers (quad dogs), which enter the Site via Claisebrook Road.

The ground bin building is sealed by an electric roller door which is closed after trucks enter and exit to reduce noise impacts at the Site and surrounds. Once raw materials have been unloaded, delivery vehicles are brushed down to reduce the spread of dust.

The raw materials and aggregates are transported by an underground conveyor from the ground bin building to the Plant building. Concrete mixture is then produced in the Plant building through the mixing of cement, aggregate and sand.

During day operations, concrete mixer trucks enter the Site via an entry gate on Caversham Street. Passing through a loading bay at the Plant building, truck mixer drums are filled with concrete mixture via a hopper situated within the roof of the Plant. An automatic door closes behind trucks during loading to reduce noise and dust.

Trucks exit the Plant loading bay from the east and move to the Slump Stand, currently located in the southwest corner of the Site and which can accommodate up to three trucks at any one time. Slumping involves mixing dry concrete with water in the truck and requires the continuous revolution of the mixing drum on the concrete truck.

To achieve a suitable consistency, slumping must occur for an estimated three minutes, however; depending on the consistency of the concrete, additional water and mixing is required. Trucks are washed of any surface dust during slumping at the Slump Stand. Sprinklers are located on the western boundary of the Site to suppress any dust as concrete trucks exit the Site via Claisebrook Road following slumping.

Returning concrete trucks are cleaned at washout pits located adjacent to the ground bin building. The washing water is disposed of into the washout pits where the concrete material sinks below waste water; the water is recycled and reused in the washing process. These washout pits are cleaned of waste concrete once a week and can hold approximately 70 tonnes of material. Waste concrete is transported for reuse at Inert Recycling at Hazelmere and / or the Holcim Quarry at Gosnells.

3.3. NIGHT OPERATIONS

As approved in the 2012 Minister's decision, Holcim implemented key changes to the site, prior to the commencement of night operations (7pm to 6am). Night operations commenced on 22 April 2014. Holcim has undertaken the following night operations measures as per the recommendations in the Noise Management Plan prepared by Herring Storer Acoustics (Appendix B):

- Reversed the day time mixer truck route, such that trucks enter and exit the Site via Claisebrook Road.
- Installed a roofed night Slump Stand adjacent to the washout pits/ground bin building.
- Installed an automatic door on the western entry to the Plant building loading bay (similar to that installed on the eastern side).
- Ensured that the personnel entry door to the production tower (upper storey on the western side of the Plant building) remains closed between 7pm and 7am.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	6 of 18

Night operations commenced once all of the above developments had been approved by the City of Vincent (Building Licences) in April 2014. They were constructed in accordance with the Noise Management Plan (Appendix B).

During night operations, the Claisebrook Road entrance to the Site is used for ingress and egress by all site traffic. This removes the need for site traffic to travel along Caversham Street.

Trucks operating at night shall reverse the day time traffic route by entering the Plant building loading bay from the west. The trucks shall then exit the loading bay to the east prior to entering the covered night Slump Stand.

Mixing trucks shall turn around on-site, pass by dust suppression sprinklers, and exit the Site via Claisebrook Road. Trucks are to be loaded with concrete, undertake slumping and be washed out within enclosed areas only, thereby limiting the level of noise and dust emissions beyond the Site boundary.

Holcim does not have approval for concrete batching on Sundays; or for trucks or semi-trailers to access the Site on Sundays or public holidays.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	7 of 18

4. DUST AND CONCRETE WASTE MANAGEMENT

4.1. OBJECTIVES

1. To minimise the impact of cement and raw materials dust and concrete waste generated from operational activities.
2. Protect the amenity of residents surrounding the East Perth Concrete Batching Plant, by ensuring dust levels are compliant with requirements of the Department of Environment and Regulation (DER), and the City of Vincent.
3. Ensure that dust levels are managed in accordance with the approval conditions set by the Minister for Planning; Culture & the Arts; Science & Innovation (Appendix A).

4.2. SCOPE

This procedure applies to all activities and personnel, contractors and visitors at the East Perth Concrete Batching Plant.

4.3. RELATED DOCUMENTS

The following documents relate to dust management at the Site and should be consulted where applicable. This list is not exhaustive and other SHE MS guideline documents and legislative requirements may also apply.

- SHE Guideline 3.01: Risk Management
- SHE Guideline 3.22: Dust - other than Silica (Nuisance Dust)
- SHE Guideline 4.1: Permits, Licences and Approvals
- SHE Guideline 4.2: Environmental Hazards and Operating Procedures
 - 4.2.1: Hazard Identification
 - 4.2.1A: Environmental Hazard Register and Action Plan
- *Environmental Protection Act 1986 (WA)*
- Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998.

4.4. MANAGEMENT STRATEGY

4.4.1. GENERAL

- Raise the awareness of the workforce about dust management. All new employees will undergo site specific awareness training during inductions. The dust component of the training will include:
 - Knowledge of operational procedures that have the potential to generate dust.
 - Dust management measures that have been/may be implemented around the Site.
 - Knowledge on the effect of wind and weather conditions of possible dust generation and suppression.
 - Issues relating to the management of dust emitted from the Site and staff responsibilities (community concern and monitoring).
- Sprinklers used for on-site dust suppression will be maintained through regular inspections to ensure safe and efficient operation.
- Ensure that when sprinklers are in use, there is no water spray beyond the boundary of the allotment, which may cause a nuisance to users of the road reserve.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	8 of 18

- Quarterly dust monitoring will be undertaken in compliance with accredited Australian Standards.
- A Complaints Handling System will be established for the Site to record the date, nature, and resolution action of any complaints. Complaints will be directed to the Site Operations Manager or delegated employee for resolution (such as the Duty Manager). If the complaint is verified as being due to a site source, remedial action will be undertaken within two working days.

4.4.2. MINIMISATION AND CONTROL

The Site will be managed to minimise the potential for dust generation from the Plant, slumping areas and vehicle operation. Minimisation measures for day time and night operations include:

- Ensuring that raw materials and aggregates trucks are covered when they enter and exit the Site.
- Utilising a housed ground bin building, and an underground conveyor for transport of raw materials and aggregates to the Plant building.
- Ensuring that doors are closed on the ground bin building and the Plant building when unloading and loading. The automatic door on the western entry to the Plant building loading bay to be utilised during night operations.
- Regular washing down of trucks at the Slump Stand (including the enclosed night Slump Stand during night operations) prior to trucks leaving the Site.
- Regular use of sprinklers on the western Site boundary and at the washout pits to suppress dust on-site (Figure 2).
- The brushing down of semi-trailers and quad dogs following unloading of raw materials and aggregates in the ground bin building.
- Regular sweeping of Caversham Street, Claisebrook Road and Edward Street. This will occur a minimum of three (3) times per week (once by the City of Vincent and twice by an independent contractor hired by Holcim).
- Rapid spill response by immediately reporting any material spills internal and external to Site (on Caversham Street, Claisebrook Road or Edward Street) to the Operations Manager. The Operations Managers is to co-ordinate the spill clean-up within 24 hours of notification.
- Any spills external to the Site will be immediately reported to the City of Vincent, with cleaning-up arranged within 24 hours (if not sooner). In the event of a major spill, the City of Vincent will be contacted to coordinate and assist with the clean-up.

4.5. MONITORING AND PERFORMANCE INDICATORS

4.5.1. MONITORING

Visual monitoring of cement and raw materials dust as well as concrete waste around the Site will be conducted daily by the Operations Manager or delegated employee. Weekly visual inspections of the immediate surrounds of the Site (Caversham Street, Claisebrook Road and Edward Street) will be conducted by the Operations Manager or his delegate.

All employees to undertake environmental and safety training, as well as refresher training, and will be informed of the night operations requirements. Truck drivers and existing employees will also be informed via regular 'toolbox' meetings of the importance of reporting any cement, raw material/aggregate, or concrete dust evident on trucks or on Caversham Street, Claisebrook Road and Edward Street to the Operations Manager.

Holcim will undertake dust monitoring for a period of 24 hours on a quarterly basis. The monitoring will be in accordance with Australian Standard AS 3580.9.6-2003 *Determination of suspended particulate matter -PM₁₀ high volume sampler with size selective inlet-Gravimetric method*. The air monitoring equipment will be placed near the Claisebrook Road entry gate, as this is the most location with respect to dust emissions from the Site. The quarterly testing and the interpretation of results will be completed by an independent consultant/laboratory.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	9 of 18

4.5.2. PERFORMANCE INDICATORS

Zero incidents or complaints involving dust on-site or in the surrounding community.

4.6. ACCOUNTABILITIES

Role	Accountability
Site (Operations) Manager	<ul style="list-style-type: none"> • Ensure that all personnel who report to you are aware of and conform to this procedure. • Ensure the site conditions of contract include dust management requirements. • Ensure sprinkler and brushing mechanisms are maintained. • Ensure the Site Complaints Handling System is maintained (with complaints and enquiries recorded in the Complaints and Enquiries Register; Appendix B) and that appropriate actions are taken within two working days if required. • Review and, if necessary, update this plan every 12 months or earlier if monitoring indicates that changes to dust emissions are required.
All Persons	<ul style="list-style-type: none"> • Conform to this procedure at all times. • Ensure any incidents (dust emissions or spray mechanism malfunction) are reported to the Operations Manager.

4.7. REVIEW, REVISION AND REPORTING

This EMP will be reviewed annually, and reported to the City of Vincent in accordance with the conditions of the Ministers approval. Holcim will also audit compliance with the Sites EMP under its SHE MS.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	10 of 18

5. NOISE MANAGEMENT

5.1. OBJECTIVES

1. Minimise the noise impact of activities at the Site, and to protect the amenity of residents surrounding the East Perth Concrete Batching Plant.
2. Ensure noise levels meet the requirements of the Environment Protection (Noise) Regulations 1997 and are managed in accordance with the approval conditions set by the Minister for Planning; Culture & the Arts; Science and Innovation (Appendix A).
3. Undertake noise management in accordance with the detailed Noise Management Plan provided in Appendix B.

5.2. SCOPE

This procedure applies to all outdoor activities and all personnel, contractors and visitors at and around the Site at all times.

5.3. RELATED DOCUMENTS

The following documents relate to noise management at the Site and should be consulted where applicable. This list is not exhaustive and other SHE MS Guideline Documents and legislative requirements may also apply.

- SHE Guideline 3.01: Risk Management
- SHE Guideline 3.17: Noise
- SHE Guideline 4.1: Permits, Licences and Approvals
- SHE Guideline 4.2: Environmental Hazards and Operating Procedures
 - 4.2.5: Noise
 - 4.2.5A: Environmental Noise Survey Report (Example)
- *Environmental Protection Act 1986 (WA)*
- Environmental Protection (Noise) Regulations 1997
- Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998.

5.4. MANAGEMENT STRATEGY

5.4.1. GENERAL

An Environmental Noise Survey Report was prepared in 2014 to record the results of the noise monitoring and demonstrate compliance with the Environmental Protection (Noise) Regulations 1997.

Noise generated by plant, trucks and other heavy machinery is currently minimised and managed during day and night operations by the following measures:

- Prohibiting the use of engine brakes.
- Ensuring the 10 km/hour speed limit is followed on-site.
- Actively maintaining plant and machinery to ensure that all worn parts are replaced and that correct greasing, lubrication and replacement of acoustic covers takes place to reduce noise emissions.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	11 of 18

- Silencers and noise attenuation will be investigated when purchasing any new equipment for the concrete plant and noise predictions will be incorporated into any new proposed buildings on-site. Examples of noise attenuation devices that will be considered include; directional reversing beepers for new trucks and loaders and suitable design for new plant.
- Trucks will be retrofitted with directional reversing beepers, prior to the commencement of night deliveries.
- Raise the awareness of the workforce about noise management by:
 - Training employees in the correct operation of fix plant that has the potential to generate noise.
 - Awareness training in the operation of trucks and other vehicles to minimise noise emissions.
 - Issuing hearing protection to staff as required.
 - Issues relating to the management of noise emitted from the Site and staff responsibilities (community concern and monitoring).
 - All employees undertake environmental and safety training, as well as refresher training, and will be informed of the night operations requirements.
- A Complaints Handling System exists for the Site to record the date, nature, and resolution action of any complaint. The person responsible for maintaining the register is the Operations Manager (or delegated employee such as the Duty Manager). This information will be submitted to the City of Vincent in accordance with the companies complaints and incident management procedure.
- During night operations, if the monitored noise levels (using handheld portable devices) are found to be greater than $L_{A10(7pm-10pm)}$ 56dB or $L_{A10(10pm-7am)}$ 51dB, the Duty Manager will review the operations process and take immediate steps to minimise the generation of the noise or relocate the noise source, as far as practical, so as to minimise its impact until practical measures can be implemented to achieve compliance with the regulations.
- For major noise non-conformances the Duty Manager will immediately notify the Operations Manager. Practical measures may include the use of temporary noise barriers or alternative equipment and/or arranging for specialist consultants to identify the reason and propose solutions. Noise monitoring will continue to be undertaken until the noise levels generated are within the criterion for the Site.

5.4.2. MINIMISATION AND CONTROL

In addition to the above, when it is possible that noise levels, particularly during night operations may exceed criteria for the Site the following additional management practices will be undertaken:

- Sensitive receptors likely to be affected by noise levels at night to be notified of any extenuating circumstances or upcoming activities by the Operations Manager as soon as practicable in advance of activities.
- Noise levels will be monitored using a hand level meter (at regular intervals) or an automatic data logger (continuously) during night operations. In the event that complaints are received, the following actions will be undertaken:
 - The Duty Manager will respond to the complaint and explain the activities being undertaken.
 - If noise levels are shown to be greater than L_{A10} 51dBA and complaints are received, the Duty Manager will review the operation process. Noise measurements will continue to be undertaken to measure the noise levels generated until noise levels are within criteria for the Site.
- Between the hours of 7pm and 6am, the following noise controls must take place:
 - The gates on Caversham Street must be closed.
 - The automatic doors on the western and eastern sides of the Plant building loading bay and ground bin building must be closed during loading.
 - The personnel entry door on the western side of the upper level of the Plant building must remain closed.
 - The night Slump Stand must be used as per the Noise Management Plan (Appendix B).

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	12 of 18

- Slumping must only take place within the roofed night Slump Stand located adjacent to the ground bin building during night operations, and may not take place anywhere else on-site.
- Implementation of a night operations traffic route on-site utilising Claisebrook Road for entry and exit.
- Maintaining the underground conveyor from the Ground bin to the Plant building.

5.5. MONITORING AND PERFORMANCE INDICATORS

5.5.1. MONITORING

- Equipment maintenance and inspection schedules shall be implemented to ensure that all equipment is operating in accordance with the manufacturer’s instructions and within regulatory requirements. This will include ensuring that all noise control equipment is correctly fitted and operating at design performance.
- During night operations, regular noise monitoring (using handheld devices) will be conducted at the boundary of 150 Claisebrook Road (Rainbow Lodge backpackers) East Perth. The results will be and reviewed by the Site Operations Manager to evaluate the effectiveness of noise control measures.
- The noise monitoring location will be reviewed on an annual basis by the City of Vincent, Holcim and an acoustic consultant agreed by both parties.

5.5.2. PERFORMANCE INDICATORS

- Zero noise incidents or complaints.
- Compliance with Environmental Protection (Noise) Regulations 1997.

5.6. ACCOUNTABILITIES

Role	Accountability
Site (Operations) Manager	<ul style="list-style-type: none"> • Ensure that all personnel who report to you are aware of and conform to this procedure. • Ensure the process for awarding and varying contracts requires internal environmental approval (where the contract has an environmental aspect). • Ensure the site conditions of contract include noise management requirements. • Ensure plant and machinery is regularly inspected and maintained to ensure they are operating correctly and noise control equipment is fitted properly. • Ensure the Site Complaints Handling System is maintained and that appropriate actions is taken within two working days if required. • Ensure noise monitoring is carried out regularly during night operations. • Review and, if necessary, update this plan every 12 months or earlier if monitoring indicates that changes to noise levels are required.
All Persons	<ul style="list-style-type: none"> • Conform to this procedure at all times. • Ensure issued hearing protection is worn when required. • Ensure plant, machinery and vehicles are operated correctly to minimise noise emissions. • Ensure any incidents (noise complaints) are reported to the Operations Manager.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	13 of 18

5.7. REVIEW, REVISION AND REPORTING

This EMP will be reviewed and reported annually to the City of Vincent in accordance with the conditions of the Ministers approval. Holcim will also audit the EMP under its SHE MS.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	14 of 18

6. TRAFFIC MANAGEMENT

6.1. OBJECTIVES

1. To ensure the safe and environmentally responsible operation of vehicles in and around the Site.
2. Ensure that all vehicle drivers are appropriately informed about the impacts of heavy vehicle use and related impacts of dust and noise on-site and on the surrounding community.

6.2. SCOPE

This procedure applies to all activities and all personnel, contractors and visitors at the Site at all times.

6.3. RELATED DOCUMENTS

The following documents relate to traffic management at the Site and should be consulted where applicable. This list is not exhaustive and other SHE MS Guideline Documents and legislative requirements may also apply.

- SHE Guideline 3.14: Traffic Management
- SHE Guideline 3.16: Road Vehicles and Transport
- SHE Guideline 2.4: Contractor Management
- SHE Guideline 3.01: Risk Management
- Road Traffic (Vehicle Standards) Regulations 2002
- Road Traffic (Vehicle Standards) Rules 2002.

6.4. MANAGEMENT STRATEGY

6.4.1. GENERAL

The following management practices will be adopted in order to meet the objectives of the EMP:

- All staff and contractors will be informed of the requirements of this EMP.
- Raise the awareness of the workforce about the traffic management plan. All employees, including drivers, will undergo site specific awareness training during inductions. The traffic component of the training will include:
 - Awareness of the day and night operations truck routes.
 - Awareness of speed limits on-site and off-site.
 - Awareness training in the operation of trucks and other vehicles to minimise noise emissions.
 - Awareness of driving techniques, such as not using engine brakes, to minimise noise and improve safety.
 - Awareness of public and employee safety.
 - All employees undertake environmental and safety training, as well as refresher training, and will be informed of the night operations requirements.
- Clear signage will be established and maintained on-site to assist in safe operation of vehicles.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	15 of 18

6.4.2. MINIMISATION AND CONTROL

- Between the hours of 7pm and 6am, all vehicles and persons entering or exiting the Site must do so via Claisebrook Road gates. The Caversham Street gates shall be closed during night operations.
- Concrete trucks must enter the Plant building loading bay from the west, exit the loading facility via the east of the building, move to the night Slump Stand located adjacent to the washout pits/ground bin building, and then exit via Claisebrook Road (Figure 2).
- All vehicles will operate within the Site speed limit of 10 km/hour.
- All drivers will be advised to comply with the designated speed limits in built up areas outside of the Site.
- All drivers will be advised to comply with the Road Traffic Code 2000.
- All concrete trucks will be washed regularly at the Slump Stand (the night Slump Stand during night operations) to reduce the possibility of dust being carried onto public roads (Figure 2).
- Hazards associated with traffic will be regularly reviewed in Site safety/toolbox meetings.

6.5. MONITORING AND PERFORMANCE INDICATORS

6.5.1. MONITORING

- Where practical, traffic monitoring will be undertaken daily by the Operations Manager to ensure all vehicles are following management procedures.
- Regular 'toolbox' meetings will discuss the implementation and practicality of traffic management procedures.

6.5.2. PERFORMANCE INDICATORS

- Zero incidents or complaints relating to dust, noise and safety related to Holcim vehicle traffic.

6.6. ACCOUNTABILITIES

Role	Accountability
Site (Operations) Manager	<ul style="list-style-type: none"> • Ensure that all personnel who report to you are aware of and conform to this procedure. • Ensure the process for awarding and varying contracts requires internal environmental approval (where the contract has an environmental aspect). • Ensure the site conditions of contract include transport management requirements.
All Persons	<ul style="list-style-type: none"> • Conform to this procedure at all times.

6.7. REVIEW, REVISION AND REPORTING

This EMP will be reviewed annually and reported to the City of Vincent. Holcim will also audit the EMP under its SHE MS.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	16 of 18

7. COMPLAINTS HANDLING SYSTEM

7.1. OBJECTIVES

To ensure effective communication between nearby occupants and residents and Site Management; by recording any complaints and responding directly to the complainant until the source of the incident is verified and resolved as far as is practicable.

7.2. SCOPE

All stakeholders; including but not limited to nearby residents, commercial business operators in the vicinity of the Site, City of Vincent and Holcim employees, contractors and visitors. The Complaint Handling System applies to any area which may be affected by the Site's activities or roads around the Site.

7.3. RELATED DOCUMENTS

- SHE Guideline 4.5: Right to Know Reporting;
- SHE Guideline 4.6: Community Awareness
 - Attachment 4.6 A: Holcim Complaints Form
- SHE Guideline 4.7: Environmental Objectives, Targets and Performance Indicators
- SHE Guideline 5.1: Incident Reporting, Recording & Investigation
 - Attachment 5.1R: Example of 5 Why's
- SHE Guideline 5.3: Audits
 - 12.7 Instructions for Environmental Self-Assessment
 - Attachment 5.3C: Environmental Management System Audit Worksheet.

7.4. MANAGEMENT STRATEGY

7.4.1. GENERAL

To effectively manage community health, safety and environment concerns, Holcim has implemented a Complaints Handling System. Complaints and enquires will be recorded in the Complaints and Enquiries Register (Appendix C). The register will record the date, nature, and resolution of any action from a complaint.

Within two working days of a complaint being made, the complaint will be recorded on the Complaints and Enquiries Register, investigated by the Operations Manager and a response sent to the complainant if necessary. Actions will then be taken to resolve the point of conflict.

All complaints will be directed to the East Perth Site office.

- Phone: (08) 9227 6783, Fax: (08) 93288987
- After hours (outside of 6am and 7pm): Call the Site office number above and if unattended call 131 188.
- Email: craig.malcom@holcim.com (Operations Manager) until further notice.

A sign will be placed on the front and side gates of the Site to inform the public of the above information.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	17 of 18

Within 28 days of commencement of night operations, Holcim will place an advertisement in the local community newspapers and undertake a letter drop of the streets surrounding the Site to inform the local community of the Complaints Handling System and the Site's 24 hour contact details.

The Complaints Handling System will be manned during all hours of operation to log complaints and enquires. It is noted that the Site may not be operational every day for 24 hours as the night operations will depend on the demand for concrete, and the Complaints Handling System will not be manned if the site is not operational (see Appendix A).

7.5. MONITORING AND PERFORMANCE INDICATORS

7.5.1. MONITORING

The Complaints Handling System will be monitored during operations. The Operations Manager and/or Duty Manager will maintain contact with any complainant until the source of the incident is verified and resolved as far as is practicable.

7.5.2. PERFORMANCE INDICATORS

The Operations Manager and/or Duty Manager maintaining contact with any complainant until the source of the incident is verified and resolved as far as is practicable.

7.6. ACCOUNTABILITIES

Role	Accountability
Site (Operations) Manager	<ul style="list-style-type: none"> • Ensure that all personnel who report to you are aware of and conform to this procedure. • Ensure the Site Complaints Handling System is maintained and that appropriate actions is taken within 48 hours if required. • Review and, if necessary, update this plan every 12 months or earlier if monitoring indicates that changes to dust, noise, traffic, and/or complaints management are required.
All Persons	<ul style="list-style-type: none"> • Conform to this procedure at all times. • Ensure complaints are directed to the Operations Manager for recording and response.

7.7. REVIEW, REVISION AND REPORTING

This EMP will be reviewed annually and reported to the City of Vincent. Holcim will also audit the EMP under its SHE MS. A record of complaints and enquiries lodged, as well as Holcim's follow up actions, will be provided to the City of Vincent on a quarterly basis for its monitoring information.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	18 of 18

8. DAMAGE TO PUBLIC INFRASTRUCTURE

8.1. OBJECTIVES

1. To ensure that any damage caused by Holcim's vehicles to roads/verges and footways and to any other infrastructure items located within the local area, is reported to Site management immediately.
2. To ensure that any damage caused by vehicles entering and exiting the Site is repaired at Holcim's expense.

8.2. SCOPE

This procedure applies to trucks that use the City of Vincent's roads in the vicinity of the Site and transport materials to and from Site.

8.3. RELATED DOCUMENTS

The following documents relate to damage to the City of Vincent's infrastructure:

- Road Traffic Act 1974-1982
- Local Government Act 1995.

8.4. MANAGEMENT STRATEGY

All drivers entering/exiting/ the Site shall be made aware of these objectives.

8.5. MONITORING AND PERFORMANCE INDICATORS

- Where practicable the City of Vincent's representative together with the Holcim Operations Manager shall inspect all affected streets at least once every three months or sooner, if deemed urgent, as determined by the City of Vincent.
- Where it is agreed, in writing, between the two parties, that the damage was caused by the operations associated with the batching plant, the City will undertake the rectification works.
- Holcim shall submit to the City an 'infrastructure maintenance' bond of \$5,000.
- Any agreed (in writing) repairs will be funded from this bond and bond 'topped up' within 14 days of the amount being expended to ensure that a \$5,000 bond is held at all times.
- If the value of the repairs exceeds the value of the bond Holcim will be required to fund any shortfall in funds over and above \$5,000.
- Holcim is not required to pay further bond where the City has used funds in a way which is contrary to Holcim's approval; and
- Holcim is not required to pay for damage caused to infrastructure which, in Holcim's view, has resulted from failure by the City to consult with Holcim about changes to infrastructure and Holcim is not required to pay a further bond thereafter.

Title	Sponsor	Date Issued	Revision Status	Date Reviewed	Page
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16	19 of 18

**Appendix A – Notice of Determination of Application by the
Minister for Planning; Culture & the Arts; Science &
Innovation, dated 22 May 2012**

Title	Sponsor	Date Issued	Revision Status	Date Reviewed
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16

PAPER COPIES ARE UNCONTROLLED



Minister for Planning; Culture & the Arts; Science & Innovation
Government of Western Australia

Our ref: 33-16340

Mr Jamie Harrington
HOLCIM AUSTRALIA PTY LTD
PO Box 1269
BENTLEY DC WA 6983

Dear Mr Harrington

HOLCIM AUSTRALIA PTY LTD AND CITY OF VINCENT: DR 225/2011

I have considered the State Administrative Tribunal's recommendations as provided in DR 225/2011 and I agree with the Tribunal's recommendations. I have determined that the application for review is allowed, and the deemed refusal of the respondent is set aside and conditional approval is granted. I attach a notice which gives effect to my decision.

Pursuant to the requirements of s247(4)(a) of the Planning and Development Act 2005, you are advised that the reasons for my determination on the application are those set down in DR 225/2011.

In summary, I determined that Holcim Australia Pty Ltd be given conditional approval to operate for a further five years, during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land. I have written to the Western Australian Planning Commission to request that this planning be commenced and carried out as a priority, in liaison with the City of Vincent, in order to provide certainty to all parties with an interest in the future of the area.

Yours sincerely

A handwritten signature in blue ink that reads "John Day".

JOHN DAY MLA
MINISTER FOR PLANNING;
CULTURE AND THE ARTS

Att 22 MAY 2012

cc Ms Margie Tannock, Partner, Squire Sanders

11th Floor, 2 Havelock Street, West Perth, Western Australia 6005
Telephone: +61 8 6552 6200 Facsimile: +61 8 6552 6201 Email: Minister.Day@dpc.wa.gov.au

NOTICE OF DETERMINATION OF APPLICATION BY MINISTER**Pursuant to section 246 of the *Planning and Development Act***

The Minister for Planning has pursuant to the provisions of Section 246(2)(b) of the *Planning and Development Act 2005* in the matter of Holcim Australia Pty Ltd and the City of Vincent determined the application for review as follows:

1. Planning approval be given for the development of the applicant's East Perth concrete batching plant, subject to the following conditions:
 - 1) This approval is granted for a term expiring on 16 October 2017.
 - 2) This approval authorises concrete batching operations and access to the site by trucks and semi-trailers at any time between Monday and Saturday inclusive.
 - 3) There is to be no access to the site by trucks and semi-trailers on Sundays or public holidays.
 - 4) Within one calendar month of the grant of approval, the applicant must submit to the City for its approval and thereafter implement either an updated version of the Environmental Management Plan East Perth Concrete Batching Plant (Holcim) dated 24 March 2011, or a new environmental management plan which addresses the following matters:
 - a. Noise management for on-site activities;
 - b. Dust and concrete waste management including regular washing down of trucks before exiting the site, dust control on-site and the regular sweeping and cleaning of materials spilled on surrounding roads;
 - c. A traffic management plan for all vehicles entering and exiting the site, including driver education in regard to truck routes, vehicle speeds, and operations to minimise disturbance and public safety concerns;
 - d. The implementation of a complaint handling system which provides:

- i. A telephone number, facsimile number and email address to be manned during all hours of operation to log complaints and enquiries; and
 - ii. A record of complaints and enquiries logged, and the applicant's response, which must be provided on a quarterly basis to the City for its monitoring information;
 - e. The annual review of the environmental management plan after each year following the grant of approval; and
 - f. The inclusion in the environmental management plan of any addenda necessary to address any specific matter identified by either the Applicant or the Respondent between annual reviews, which addenda are to form part of the environmental management plan.
- 5) The development must be carried out in accordance with the recommendations made in the Herring Storer Acoustics Noise Management Plan (Ref: 12645-3-10164), or other Noise Management Plan approved by the City, including in particular, but without limitation:
 - a. Reverse the truck access route during night operations (7pm to 6am), so mixing trucks enter the loading area from the west, travel east through the loading bay building, then move to the night slump stand, located behind the existing delivery shed then following slumping, they turn within the site and exit via Claisebrook Road;
 - b. The installation of an automatic door on the western entry point of the loading area, similar to that which is installed on the eastern side; and
 - c. Ensuring that the personnel entry door to the production tower is not left open between 7pm and 7am.
- 6) Prior to the issue of a building licence for this development, the following shall be submitted to and approved by the City:

- a. An amended plan detailing:
 - i. Material, colour and a minimum of two significant design features being incorporated in the proposed sound attenuation wall to reduce the visual impact on the adjoining properties; and
 - ii. Relocated footpath, footpath material, separation between proposed crossover and Westrail crossover, type, material and finish of proposed gate, which is to be visually permeable, curved mirror and appropriate internal warning signs; and
- b. A construction management plan addressing the following issues:
 - i. Public safety, amenity and site security;
 - ii. Contract details of essential site personnel;
 - iii. Construction operating hours;
 - iv. Noise control and vibration management;
 - v. Air and dust management;
 - vi. Waste management and materials re-use;
 - vii. Parking arrangements for contractors and subcontractors;
 - viii. Consultation plan with nearby properties; and
- c. A detailed landscape and reticulation plan for the development site and adjoining road verge drawn to scale of 1:100 showing the following:
 - i. The location and type of existing and proposed trees and plants;
 - ii. All vegetation including lawns;
 - iii. Areas to be irrigated or reticulated and the method to be used;
 - iv. Proposed watering system to ensure the establishment of species and their survival during the hot and dry months; and
 - v. Separate soft and hard landscaping plans (indicating details of materials to be used).

7) The following plans, as approved by the City, shall be implemented:

- a. The amended plan referred to in condition 6(a);
- b. The construction management plan referred to in condition 6(b); and
- c. The landscaping and reticulation plan referred to in condition 6(c).



**JOHN DAY
MINISTER FOR PLANNING;
CULTURE AND THE ARTS**

21.5.2012.

Reasons for decision:

Holcim Australia Pty Ltd applied for development approval to allow the continuing operation of an existing concrete batching plant in East Perth. Holcim Australia Pty Ltd then sought review of the City of Vincent's deemed refusal of that decision by the State Administrative Tribunal. The Minister for Planning considered that the application to the Tribunal raised issues of such regional importance that it was appropriate for the application to be determined by the Minister. The Minister directed the Tribunal to hear the application but, without determining it, to refer it with recommendations to the Minister for determination.

The matter was heard before the Tribunal on 1-2 March 2012 and the result and the reasons for the recommendations of the Tribunal are provided in DR 225 2011, which result and reasons are accepted by the Minister for Planning.

In summary, the Minister has determined that Holcim Australia Pty Ltd be given conditional approval to operate for a further five years, during which time the necessary strategic planning framework should be finalised to indicate clearly the ultimate development intent for the subject land.

**Appendix B – Noise Management Plan for Night Operations
(Herring Storer Acoustics)**

Title	Sponsor	Date Issued	Revision Status	Date Reviewed
Environmental Management Plan	C. Malcolm	14.06.16	Rev 8	14.06.16

PAPER COPIES ARE UNCONTROLLED

Rochdale Holdings Pty Ltd A.B.N. 85 009 049 067 trading as:

HERRING STORER ACOUSTICS

Suite 34, 11 Preston Street, Como, W.A. 6152
P.O. Box 219, Como, W.A. 6952
Telephone: (08) 9367 6200
Facsimile: (08) 9474 2579
Email: hsa@hsacoustics.com.au



HOLCIM

PROPOSED
BATCHING PLANT OPERATIONS

120 CLAISBROOK ROAD, EAST PERTH

NOISE MANAGEMENT PLAN

DECEMBER 2010

OUR REFERENCE: 12645-2-10164

Herring Storer Acoustics

DOCUMENT CONTROL PAGE

NOISE MANAGEMENT PLAN

120 CLAISBROOK ROAD, EAST PERTH

Copy #1

Job No: 10164

Document Reference: 12645-2-10164

FOR

HOLCIM

DOCUMENT INFORMATION				
Author:	Paul Drew	Checked By:		
Date of Issue :	23 rd March 2011			
REVISION HISTORY				
Revision	Description	Date	Author	Checked
1	Report	8/12/10	PD	
DOCUMENT DISTRIBUTION				
Copy No.	Revision No.	Destination	Hard Copy	Electronic Copy
1	2	Holcim		✓
1	2	Allerding & Associates		✓

Herring Storer Acoustics

CONTENTS

1.0	INTRODUCTION	2
2.0	CURRENT OPERATIONS	2
3.0	PROPOSED OPERATIONS	5
3.1	Proposed Day Operations	5
3.2	Proposed Night Operations	6
4.0	ENVIRONMENTAL CRITERIA	6
5.0	NOISE IMPACTS	8
5.1	Measured Noise Levels	8
5.2	Predicted Noise Levels	8
6.0	PERFORMANCE INDICATORS	9
7.0	NOISE MANAGEMENT	9
7.1	Operational Noise Management	9
7.2	Vehicular Movements and Reversing Alarms	11
8.0	ROLES AND RESPONSIBILITIES	11
9.0	MONITORING	11
10.0	CONTINGENCIES	12
11.0	STAKEHOLDER INFORMATION	12
12.0	AUDITING	12
13.0	REVIEWS AND REVISION	12

APPENDICES

A	Aerial photo of Site and Surroundings
B	Existing Site configuration
C	Proposed Site Configuration
D	Summary of Noise Management Measures
E	Example of Complaints Register

EXECUTIVE SUMMARY

Herring Storer Acoustics (HSA) was commissioned by Holcim Pty Ltd to complete a noise impact assessment and noise management plan of their current operations and proposed operations if modifications are made to the slumping area and addition of acoustic barrier walls.

The purpose of this report is to examine the noise associated with the concrete batching plant and assess noise emissions in accordance with the *Environmental Protection (Noise) Regulations 1997*.

In addition, this report presents a Noise Management Plan that has been prepared generally in accordance with the Department of Environment Draft *Compliance Monitoring & Reporting: Guidelines for Proponents – Preparing Environmental Management Plans*, May 2006.

This report examined the noise associated with the proposed operations and assessed noise emissions in accordance with the *Environmental Protection (Noise) Regulations 1997* (the Regulations). It also presented a Noise Management Plan for the proposal. By employing these noise management practices, it is expected that the noise associated with the Holcim operations will comply with the applicable noise Regulations.

1.0 INTRODUCTION

Herring Storer Acoustics (HSA) was commissioned by Holcim Pty Ltd to complete a noise impact assessment and noise management plan for future proposed operations. The proposal covers modifications to reduce environmental noise impacts from day operations, and also provisions for 'night operations' similar to the current license conditions.

The typical day operations commence from 6am through to 7pm, although on most days activity at the East Perth site significantly reduces after 4pm. The main plant modifications which will have an impact on noise emissions are a new covered slump stand backing onto the north-west corner of the site, and acoustic barrier walls filling the gaps to the existing materials shed and the western boundary. Relocation of the truck exit further south on Claisebrook Road is also expected to reduce the impact of truck generated noise.

Night operations are proposed (when required prior to 6am) to use only the Claisebrook Road entry, with slumping at a dedicated slumping stand on the south side of the materials shed during the night period.

In addition to the above, there is ongoing effort to minimize noise emissions from the site, with a recent installation of an acoustically attenuated fixed site blower for tanker unloading so that noisier tanker blowers can be bypassed during unloading operations. Noise levels from attenuated blower system are some 9 dB(A) lower than for a standard truck blower and further attenuation is planned for this blower system.

Across Caversham Road, at a distance of approximately 25m from the Holcim property boundary, is the "Youth with a Mission" accommodation and educational facility. This facility is located within 100m of the Graham Farmer Freeway, and the adjacent railway corridor. Along the Holcim property boundary is a 10m high fully enclosed shed, used for receiving aggregates. This provides a significant screen between the site activities and the adjacent residences. There is a domestic residence further north along Claisebrook Road, indicated as R2 in Appendix A .

This report presents a Noise Management Plan for Holcim East Perth Operations that has been prepared generally in accordance with the Department of Environment Draft *Compliance Monitoring & Reporting: Guidelines for Proponents – Preparing Environmental Management Plans*, May 2006.

Regulation 3 of the Regulations states that it is not applicable to apply the limits to noise associated with vehicles from the site using the adjoining roads. It also adds that it does not apply to noise emissions associated with safety warning devices fitted to motor vehicles using the site. Although these do not need to be addressed under the Regulations, both vehicles traveling along the adjoining roads and reversing alarms are capable of causing noise disturbance to nearby residences. Holcim have adopted the strategy of minimizing the impact of vehicle generated noise where practical.

2.0 CURRENT OPERATIONS

Herring Storer Acoustics
Our ref: 12645-2-10164

3

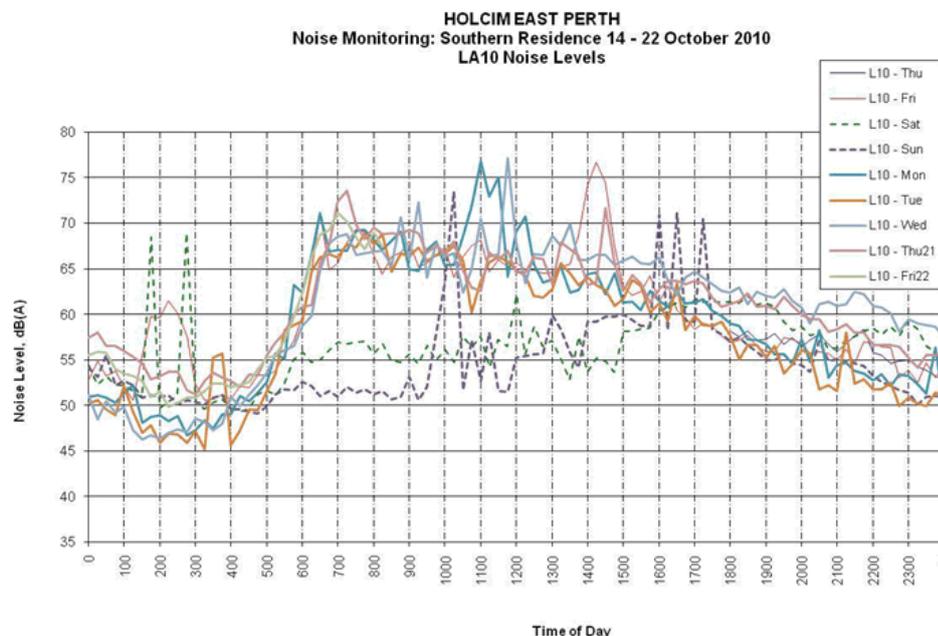
At the time of making this assessment, current operations are generally limited to the period 6am – 7pm. The operational Noise Management Plan has provision for night operations, being predominantly based on cement truck entry and exit via Claisebrook Road, and slumping on the south side of the materials shed.

Herring Storer Acoustics
Our ref: 12645-2-10164

4

The day operations consist of concrete trucks entering off Caversham Street, slumping in the existing slump stand (as per Appendix A) and exiting via Claisebrook Road. During the day tankers deliver cement, trucks deliver aggregate and sand and there is occasional use of a front end loader for cleanup of slump pits.

Statistical noise level measurement was conducted for a week at the roof level (first floor level) of the Youth With a Mission building (access provided by YWAM). The measured noise levels are dominated by road traffic on Caversham Road (including truck traffic using the Caversham Road Holcim entry). The measured noise levels show the change in background noise on weekends when not only is Holcim operations significantly reduced, but general traffic noise from the Graham Farmer Freeway, railway and local roads is also reduced.



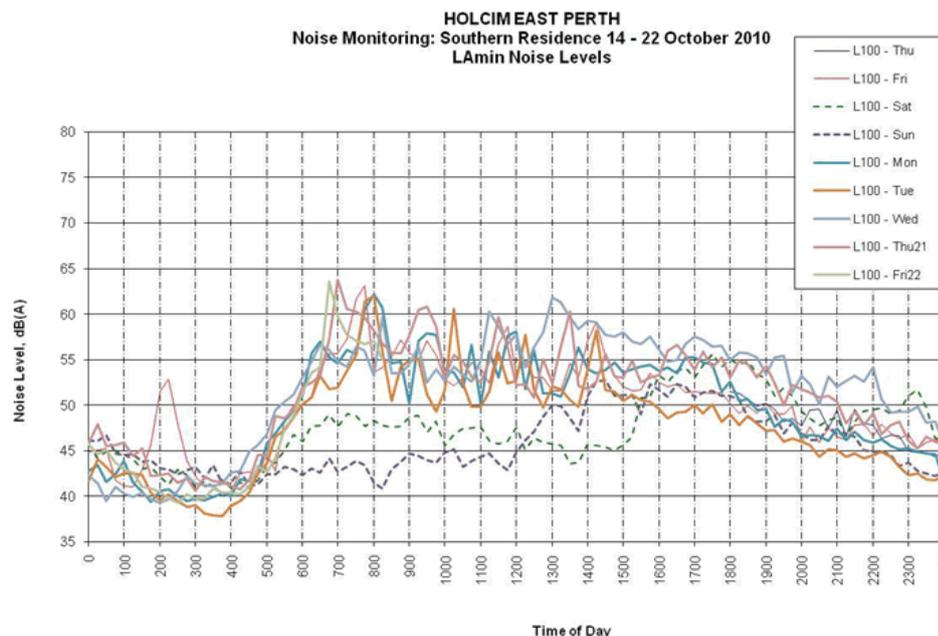
The daytime 'assigned level' is an L_{A10} of 61 dB(A) at Youth With A Mission receiver location. The background noise for much of the day period exceeds this level, due to a combination of local and Freeway traffic, with some influence from Holcim operations. This is supported by the equivalent 'minimum' measured noise levels, which are typically 55 dB(A) for the fifteen minute statistical measurement periods, showing that the measured noise levels vary over time.

It is not possible to separate the contribution from Holcim operations from the traffic / background noise based on the measured levels. However, acoustic modeling (and previous observations) indicate that Holcim predicted noise emissions are generally significantly less than the levels measured during the monitoring (the predictions do not include exempted traffic on Caversham Street). We understand that although activities vary on a daily basis, the majority of truck movements are between 6.00am - 2.00pm, and there are few trucks after 4pm. The graphs do not show a sudden decrease in noise emissions when Holcim operations cease for the day, indicating that local traffic noise and background Freeway noise are significant contributors to the measured noise levels.

Herring Storer Acoustics
Our ref: 12645-2-10164

5

The 'night time' measured levels only decrease below the L_{A10} assigned level of 51 dB(A) between the hours of midnight – 5am on some of the measurement nights. Therefore Holcim's noise impact during 'night periods' is unlikely to be significant. This is based on the predicted noise emissions for the 'night operation' mode as Youth With A Mission occupants are unlikely to notice much change in audible noise during night operations compared to existing background noise levels.



Measurements of each of the slumping and loading processes have indicated the noise levels were not tonal, modulating or impulsive. Therefore no adjustments to the testing undertaken have been for these noise characteristics.

3.0 PROPOSED OPERATIONS

3.1 PROPOSED DAY OPERATIONS

Day operations are proposed to be modified from the existing in that concrete trucks will enter the site via Caversham Street entry, fill and then slump at the proposed new covered slumping area. The proposed new slumping area (Appendix B) has been designed to attenuate slumping noise to the north and east, reducing the potential environmental noise impact on existing and future residential premises. The trucks will then leave the site via the proposed new exit on Claisebrook Road.

Day operation times are proposed to be from 6am weekdays up until 7pm, although normally the majority of truck activity will be from 6.00am to 2.00pm.

Herring Storer Acoustics
Our ref: 12645-2-10164

6

3.2 PROPOSED NIGHT OPERATIONS

The proposed night operations will include truck loading, and slumping. It is understood that the loader will not be used. Truck movements on site will be minimal; generally they will be arriving on site, loading then leaving, instead of lining up as they do in the daytime.

It is proposed that during night operations trucks will only enter or leave the site from the Claisebrook Road gate, avoiding generation of traffic noise along Caversham Street. Slumping is to occur on the south side of the materials building, maximizing the acoustic barrier attenuation to residential premises to the north. Loading of trucks will be behind a closed roller door, limiting noise emissions from this part of the process.

The proposed night operations are to facilitate early morning concrete pours, Monday to Saturday inclusive. On rare occasions particular construction projects may require operation through the night.

4.0 ENVIRONMENTAL CRITERIA

The principal environmental objective is to minimise noise received at nearby residential premises and to not exceed the stipulated criteria of the Regulations.

The Regulations stipulate allowable noise levels at any noise sensitive premises, such as residential dwelling, home or institution for persons requiring medical or rehabilitative treatment or educational facility, from another premises. The allowable noise level is determined by the calculation of an influencing factor, which is added to the baseline criteria set out in Table 4.1 of the Regulations.

TABLE 4.1 – ASSIGNED OUTDOOR NOISE LEVELS

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L _{A10}	L _{A1}	L _{Amax}
Noise sensitive premises	0700 - 1900 hours Monday to Saturday	45 + IF	55 + IF	65 + IF
	0900 - 1900 hours Sunday and Public Holidays	40 + IF	50 + IF	65 + IF
	1900 - 2200 hours all days*	40 + IF	50 + IF	55 + IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays*	35 + IF	45 + IF	55 + IF

*Represent relevant criteria for this application

It is a requirement that noise from the site be free of annoying characteristics (tonality, modulation and impulsiveness) at another premises, defined as per Regulation 9 as:

“impulsiveness” means a variation in the emission of a noise where the difference between L_{Apeak} and L_{Amax} slow is more than 15 dB where determined for a single representative event;

“modulation” means a variation in the emission of noise that –

(a) is more than 3dB L_{A fast} or is more than 3dB L_{A fast} in any one-third octave band;

- (b) is present at least 10% of the representative assessment period; and
- (c) is regular, cyclic and audible;

“tonality” means the presence in the noise emission of tonal characteristics where the difference between –

- (a) the A-weighted sound pressure level in any one-third octave band; and
- (b) the arithmetic average of the A-weighted sound pressure levels in the two adjacent one-third octave bands,

is greater than 3dB when the sound pressure levels are determined as $L_{Aeq, T}$ levels where the time period, T is greater than 10% of the representative assessment period, or greater than 8 dB at any time when the sound pressure levels are determined as $L_{A,slow}$ levels.

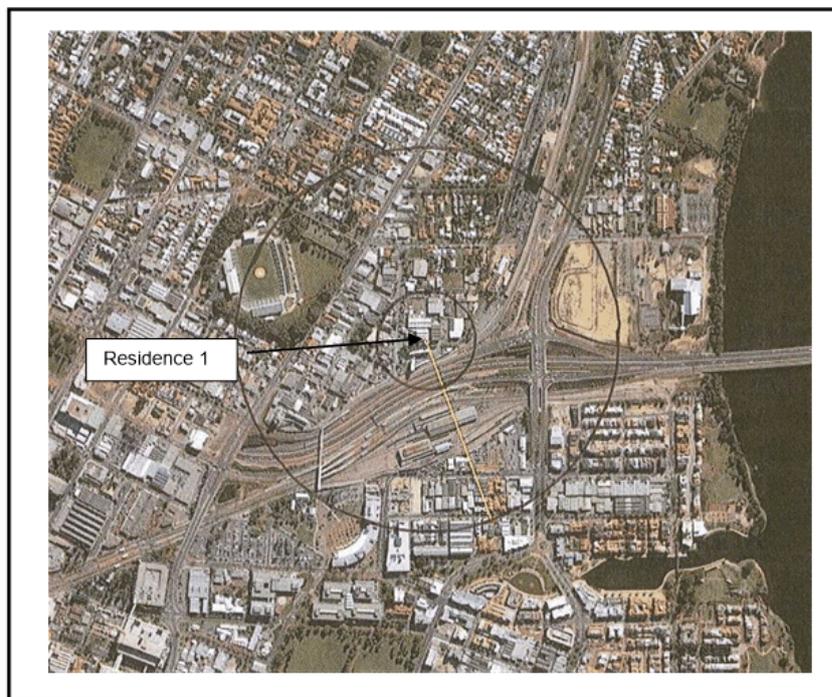
Where the above characteristics are present and cannot be practicably removed, the adjustments shown in Table 4.3 are made to the measured or predicted level at the receiving premises.

TABLE 4.2 – ADJUSTMENTS TO MEASURED LEVELS

Where tonality is present	Where modulation is present	Where impulsiveness is present
+5 dB(A)	+5 dB(A)	+10 dB(A)

The influencing factor has been calculated based on the 100m and 450m radii concentric circles shown in Figure 1.

FIGURE 1: INFLUENCING FACTOR



Based on the location of the residences and the nearby industrial premises, the influencing factor has been calculated to be 16 for Residence 1 (Youth With a

Herring Storer Acoustics
Our ref: 12645-2-10164

8

Mission) and 15 for Residence 2 (Claisebrook Road). Table 4.5 shows the 'assigned noise levels' at the nearest residence, Youth With A Mission.

TABLE 4.3 – ASSIGNED NIGHTTIME NOISE LEVELS AT RESIDENCES

Premises Receiving Noise	Time of Day	Assigned Noise Level (dB)		
		L _{A10}	L _{A1}	L _{Amax}
Noise sensitive premises	0700 - 1900 hours Monday to Saturday	61	71	76
	1900 - 2200 hours all days	56	66	71
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	51	61	71

Owing to the nature of the operations, it is considered appropriate to apply the L_{A10} parameter to the majority of the activities on the Holcim site, including loading, slumping and the hopper.

5.0 NOISE IMPACTS

5.1 MEASURED NOISE LEVELS

Measurements of each of the slumping and loading processes have previously indicated the noise levels were not tonal, modulating or impulsive, therefore no adjustments have been made to the predicted noise levels.

Section 2 of this report includes results of noise monitoring at the nearest noise sensitive premises (Youth With A Mission).

5.2 PREDICTED NOISE LEVELS

Noise emissions from the site have been modelled using the acoustic modelling software "SoundPlan 7" and the Concawe algorithms in accordance with Draft 8 Guidance Note issued by the DEC.

The resultant noise level predictions are shown in Table 5.2. The predictions include three trucks slumping at within the proposed slump stand and the tanker unloading. This represents a likely worst-case scenario

TABLE 5.1 – PREDICTED NOISE LEVELS

Location (Ref Appendix A)	Predicted Noise Level, L _{A10} dB(A)	Complies with Assigned Noise Level L _{A10} dB(A)?
Day Operation – 3 trucks slumping		
Receiver RL1	55	Yes
Receiver RL2	47	Yes
Night Operation – 1 truck slumping in night slump bay south of materials shed		
Receiver RL1	49	Yes

Herring Storer Acoustics
Our ref: 12645-2-10164

9

Receiver RL2	39	Yes
--------------	----	-----

6.0 PERFORMANCE INDICATORS

The effectiveness of the Noise Management Plan will be reviewed against the following performance indicators:

- Compliance with the assigned noise levels in the Environmental Protection (Noise) Regulations 1997; and
- Noise complaints associated with night operations.

7.0 NOISE MANAGEMENT

7.1 OPERATIONAL NOISE MANAGEMENT

The management of day operation noise emissions is based on construction of a roofed slumping stand as shown on the drawing in Appendix C, concrete trucks leaving site via the new exit on Calisebrook Road and provision of a fixed and attenuated blower for tanker unloading. The predicted noise emissions from the Holcim East Perth site comply with the Regulation 'assigned levels' for the nominated 'day period'.

The predicted noise level acoustic modelling shows that for night operations the carrying out of slumping at a dedicated 'night' slumping stand will achieve compliance with the regulation requirements.

A dedicated night slump stand can be located at the existing truck washout area on the south side of the materials building. The night slump stand will be required to have a roof, along with a wall out from the delivery shed, following the line of the existing 1.2m high above ground pits. The roof should be lined with foil-faced insulation (or an alternative sound absorbing product) to minimise reverberation within the space. This location will allow the existing shed to form a significant barrier between the slumping stand and the nearest residences.

In addition to moving the slump stand during the night, there are a number of measures which will be implemented to minimise the impact on nearby noise sensitive receptors. These include:

- Reverse the truck access route, so mixing trucks enter the loading area from the west, travel east through the loading bay building, then move to the night slump stand, located behind the existing delivery shed; following slumping, they turn and exit via Claisebrook Road;
- The installation of an automatic door on the western entry point of the loading area, similar to that which is installed on the eastern side; and

Herring Storer Acoustics
Our ref: 12645-2-10164

10

- Ensuring that the personnel entry door to the production tower remains closed at all times during the night period, between 7pm and 7am.

Herring Storer Acoustics
Our ref: 12645-2-10164

11

In addition, measures to be implemented to minimise noise impacts during general operations both during the day and night:

- Using the quietest reasonably available equipment;
- Ensuring that plant and equipment is well maintained, regularly serviced and is in good working order;
- Ensuring all employees or contractors are trained in appropriate noise management practices;
- Ensuring ongoing consultation with key stakeholders to determine the success of noise management practices; and
- Ensuring adequate complaint response procedures.

7.2 VEHICULAR MOVEMENTS AND REVERSING ALARMS

Trucks and other vehicles entering the site via the Caversham Street gate have the potential to cause annoyance to the nearby noise sensitive receptors. Although vehicles travelling along roads are exempt from the Regulations, Holcim recognises that minimising vehicular traffic along Caversham Road during night hours can assist in reducing the impact of operations on Youth With A Mission occupants. It is proposed that the Caversham Street gate be closed during night hours.

Although not required to be assessed under the Regulations, reversing alarms installed on all of the trucks entering the site have the potential to annoy nearby residences. To minimise the impact of the reversing alarms, trucks being used during the night may be retrofitted with either *Directional* or *Broadband* reversing alarms. It is understood that Holcim already employs this practice at other sites.

8.0 ROLES AND RESPONSIBILITIES

The Environmental Manager for the Holcim site is responsible for the implementation and maintenance of this Noise Management Plan.

The Environmental Manager will also be responsible for ensuring that training and an awareness program are provided to all staff and contractors working on the site.

9.0 MONITORING

Following implementation of the noise control measures proposed in this Noise Management Plan, monitoring of noise emissions at the nearby Youth With a Mission premises is proposed to determine the effectiveness of the noise control and to identify any practises or environmental noise emissions that require further attention.

10.0 CONTINGENCIES

The management of noise emissions from the site will be reactive, in that any non-conformance indicated by the noise level monitoring and/or complaints will result in a review of the process will be triggered.

A Complaints Register has been established to receive, investigate and respond to any community complaints regarding the Holcim East Perth operations.

The Complaints Register includes:

- The name(s) of the complainant(s) if provided;
- Date and time;
- Nature of the complaint; and
- Resolution action undertaken.

The investigation into the complaint includes:

- Investigations into the operations and activities to identify the likely source of the event;
- Investigate further noise amelioration strategies and record corrective actions taken.

11.0 STAKEHOLDER INFORMATION

Relevant stakeholders include:

- The Town of Vincent Council;
- Department of Environment and Conservation; and
- Local community liaison groups.

12.0 AUDITING

The Site Manager is responsible for ensuring that all management actions as per the Noise Management Section of this document are carried out.

13.0 REVIEWS AND REVISION

The management measures defined in this plan, and the work instructions arising from it will be reviewed on a regular basis and amended if required. Effectiveness will be judged by the outcomes of the monitoring program, contingency procedures, key performance indicators and feedback from complainants and/or stakeholder consultation.

Appendix C –**Complaints and Enquiries Register**

<i>Date</i>	<i>Name of Complainant</i>	<i>Address of Complainant</i>	<i>Nature of Complaint</i>	<i>Remedial Action Taken</i>	<i>Responsible Officer</i>

Noise and dust Complaints and Enquiries Register

<i>Ref No:</i>	<i>Date</i>	<i>Name of Complainant</i>	<i>Address of Complainant</i>	<i>Date and Time of Noise Event</i>	<i>Location of Dust Hazard</i>	<i>Nature of Complaint</i>	<i>Remedial Action Taken</i>	<i>Responsible Officer</i>

Rochdale Holdings Pty Ltd A.B.N. 85 009 049 067 trading as:

HERRING STORER ACOUSTICS

Suite 34, 11 Preston Street, Como, W.A. 6152
P.O. Box 219, Como, W.A. 6952
Telephone: (08) 9367 6200
Facsimile: (08) 9474 2579
Email: hsa@hsacoustics.com.au



HOLCIM

PROPOSED
BATCHING PLANT OPERATIONS

120 CLAISBROOK ROAD, EAST PERTH

NOISE MANAGEMENT PLAN

DECEMBER 2010



OUR REFERENCE: 12645-3-10164

Herring Storer Acoustics

DOCUMENT CONTROL PAGE

NOISE MANAGEMENT PLAN
 120 CLAISBROOK ROAD, EAST PERTH

Copy #1

Job No: 10164

Document Reference: 12645-3-10164

FOR

HOLCIM



DOCUMENT INFORMATION				
Author:	Paul Drew		Checked By:	
Date of Issue :		24 th March 2011		
REVISION HISTORY				
Revision	Description	Date	Author	Checked
1	Report	8/12/10	PD	
2	Revised layout drawings	23/3/11	PD	
3	Minor corrections	24/3/11	PD	
DOCUMENT DISTRIBUTION				
Copy No.	Revision No.	Destination	Hard Copy	Electronic Copy
1	3	Holcim		✓
1	3	Allerding & Associates		✓

Herring Storer Acoustics

CONTENTS

1.0	INTRODUCTION	2
2.0	CURRENT OPERATIONS	2
3.0	PROPOSED OPERATIONS	4
3.1	Proposed Day Operations	4
3.2	Proposed Night Operations	5
4.0	ENVIRONMENTAL CRITERIA	5
5.0	NOISE IMPACTS	7
5.1	Measured Noise Levels	7
5.2	Predicted Noise Levels	7
6.0	PERFORMANCE INDICATORS	8
7.0	NOISE MANAGEMENT	8
7.1	Operational Noise Management	8
7.2	Vehicular Movements and Reversing Alarms	9
8.0	ROLES AND RESPONSIBILITIES	9
9.0	MONITORING	9
10.0	CONTINGENCIES	10
11.0	STAKEHOLDER INFORMATION	10
12.0	AUDITING	10
13.0	REVIEWS AND REVISION	10

APPENDICES

- A Aerial photo of Site and Surroundings
- B Existing Site configuration
- C Proposed Site Configuration
- D Summary of Noise Management Measures
- E Example of Complaints Register



Herring Storer Acoustics
Our ref: 12645-3-10164

1

EXECUTIVE SUMMARY

Herring Storer Acoustics (HSA) was commissioned by Holcim Pty Ltd to complete a noise impact assessment and noise management plan of their current operations and proposed operations if modifications are made to the slumping area and addition of acoustic barrier walls.

The purpose of this report is to examine the noise associated with the concrete batching plant and assess noise emissions in accordance with the *Environmental Protection (Noise) Regulations 1997*.

In addition, this report presents a Noise Management Plan that has been prepared generally in accordance with the Department of Environment Draft *Compliance Monitoring & Reporting: Guidelines for Proponents – Preparing Environmental Management Plans*, May 2006.

This report examined the noise associated with the proposed operations and assessed noise emissions in accordance with the *Environmental Protection (Noise) Regulations 1997* (the Regulations). It also presented a Noise Management Plan for the proposal. By employing these noise management practices, it is expected that the noise associated with the Holcim operations will comply with the applicable noise Regulations.



Herring Storer Acoustics
Our ref: 12645-3-10164

2

1.0 INTRODUCTION

Herring Storer Acoustics (HSA) was commissioned by Holcim Pty Ltd to complete a noise impact assessment and noise management plan for future proposed operations. The proposal covers modifications to reduce environmental noise impacts from day operations, and also provisions for 'night operations' similar to the current license conditions.

The typical day operations commence from 6am through to 7pm, although on most days activity at the East Perth site significantly reduces after 4pm. The main plant modifications which will have an impact on noise emissions are a new covered slump stand backing onto the north-west corner of the site, and acoustic barrier walls filling the gaps to the existing materials shed and the western boundary. Relocation of the truck exit further south on Claisebrook Road is also expected to reduce the impact of truck generated noise.

Night operations are proposed (when required prior to 6am) to use only the Claisebrook Road entry, with slumping at a dedicated slumping stand on the south side of the materials shed during the night period.

In addition to the above, there is ongoing effort to minimize noise emissions from the site, with a recent installation of an acoustically attenuated fixed site blower for tanker unloading so that noisier tanker blowers can be bypassed during unloading operations. Noise levels from attenuated blower system are some 9 dB(A) lower than for a standard truck blower and further attenuation is planned for this blower system.

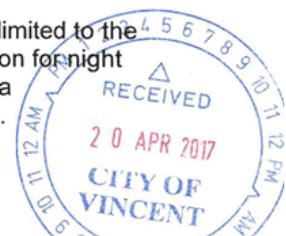
Across Caversham Road, at a distance of approximately 25m from the Holcim property boundary, is the "Youth with a Mission" accommodation and educational facility. This facility is located within 100m of the Graham Farmer Freeway, and the adjacent railway corridor. Along the Holcim property boundary is a 10m high fully enclosed shed, used for receiving aggregates. This provides a significant screen between the site activities and the adjacent residences. There is a domestic residence further north along Claisebrook Road, indicated as R2 in Appendix A .

This report presents a Noise Management Plan for Holcim East Perth Operations that has been prepared generally in accordance with the Department of Environment Draft *Compliance Monitoring & Reporting: Guidelines for Proponents – Preparing Environmental Management Plans*, May 2006.

Regulation 3 of the Regulations states that it is not applicable to apply the limits to noise associated with vehicles from the site using the adjoining roads. It also adds that it does not apply to noise emissions associated with safety warning devices fitted to motor vehicles using the site. Although these do not need to be addressed under the Regulations, both vehicles traveling along the adjoining roads and reversing alarms are capable of causing noise disturbance to nearby residences. Holcim have adopted the strategy of minimizing the impact of vehicle generated noise where practical.

2.0 CURRENT OPERATIONS

At the time of making this assessment, current operations are generally limited to the period 6am – 7pm. The operational Noise Management Plan has provision for night operations, being predominantly based on cement truck entry and exit via Claisebrook Road, and slumping on the south side of the materials shed.

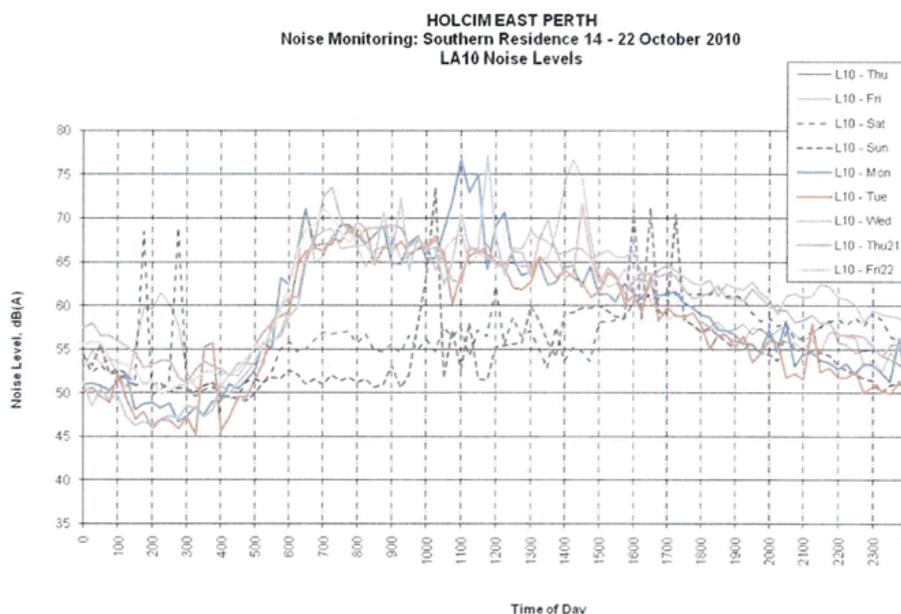


Herring Storer Acoustics
 Our ref: 12645-3-10164

3

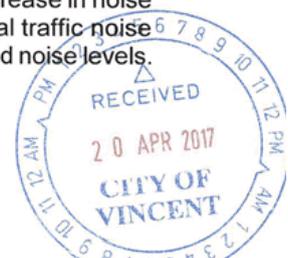
The day operations consist of concrete trucks entering off Caversham Street, slumping in the existing slump stand (as per Appendix A) and exiting via Claisebrook Road. During the day tankers deliver cement, trucks deliver aggregate and sand and there is occasional use of a front end loader for cleanup of slump pits.

Statistical noise level measurement was conducted for a week at the roof level (first floor level) of the Youth With a Mission building (access provided by YWAM). The measured noise levels are dominated by road traffic on Caversham Road (including truck traffic using the Caversham Road Holcim entry). The measured noise levels show the change in background noise on weekends when not only is Holcim operations significantly reduced, but general traffic noise from the Graham Farmer Freeway, railway and local roads is also reduced.



The daytime 'assigned level' is an L_{A10} of 61 dB(A) at Youth With A Mission receiver location. The background noise for much of the day period exceeds this level, due to a combination of local and Freeway traffic, with some influence from Holcim operations. This is supported by the equivalent 'minimum' measured noise levels, which are typically 55 dB(A) for the fifteen minute statistical measurement periods, showing that the measured noise levels vary over time.

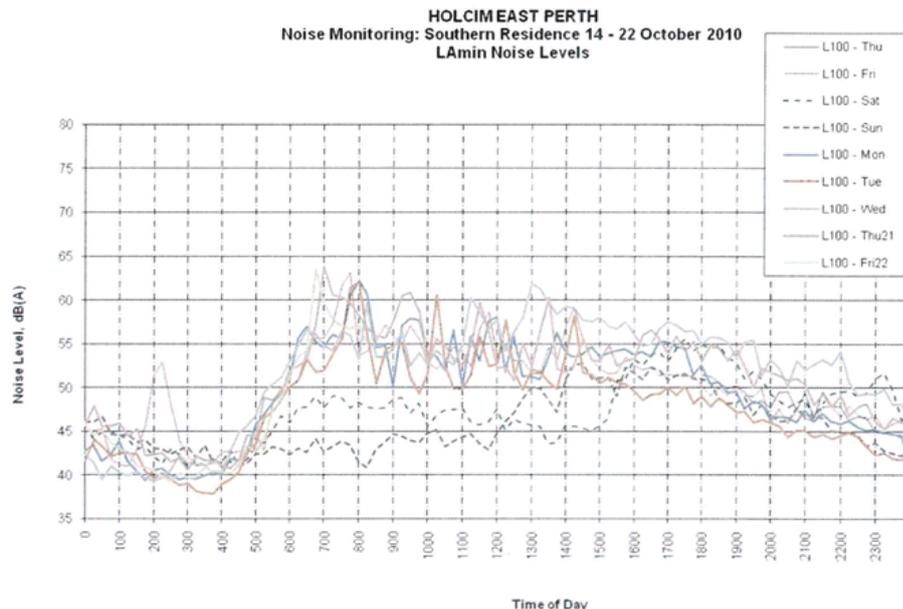
It is not possible to separate the contribution from Holcim operations from the traffic / background noise based on the measured levels. However, acoustic modeling (and previous observations) indicate that Holcim predicted noise emissions are generally significantly less than the levels measured during the monitoring (the predictions do not include exempted traffic on Caversham Street). We understand that although activities vary on a daily basis, the majority of truck movements are between 6.00am – 2.00pm, and there are few trucks after 4pm. The graphs do not show a sudden decrease in noise emissions when Holcim operations cease for the day, indicating that local traffic noise and background Freeway noise are significant contributors to the measured noise levels.



Herring Storer Acoustics
 Our ref: 12645-3-10164

4

The 'night time' measured levels only decrease below the L_{A10} assigned level of 51 dB(A) between the hours of midnight – 5am on some of the measurement nights. Therefore Holcim's noise impact during 'night periods' is unlikely to be significant. This is based on the predicted noise emissions for the 'night operation' mode as Youth With A Mission occupants are unlikely to notice much change in audible noise during night operations compared to existing background noise levels.



Measurements of each of the slumping and loading processes have indicated the noise levels were not tonal, modulating or impulsive. Therefore no adjustments to the testing undertaken have been for these noise characteristics.

3.0 PROPOSED OPERATIONS

3.1 PROPOSED DAY OPERATIONS

Day operations are proposed to be modified from the existing in that concrete trucks will enter the site via Caversham Street entry, fill and then slump at the proposed new covered slumping area. The proposed new slumping area (Appendix B) has been designed to attenuate slumping noise to the north and east, reducing the potential environmental noise impact on existing and future residential premises. The trucks will then leave the site via the proposed new exit on Claisebrook Road.

Day operation times are proposed to be from 6am weekdays up until 7pm, although normally the majority of truck activity will be from 6.00am to 2.00pm.



3.2 PROPOSED NIGHT OPERATIONS

The proposed night operations will include truck loading, and slumping. It is understood that the loader will not be used. Truck movements on site will be minimal; generally they will be arriving on site, loading then leaving, instead of lining up as they do in the daytime.

It is proposed that during night operations trucks will only enter or leave the site from the Claisebrook Road gate, avoiding generation of traffic noise along Caversham Street. Slumping is to occur on the south side of the materials building, maximizing the acoustic barrier attenuation to residential premises to the north. Loading of trucks will be behind a closed roller door, limiting noise emissions from this part of the process.

The proposed night operations are to facilitate early morning concrete pours, Monday to Saturday inclusive. On rare occasions particular construction projects may require operation through the night.

4.0 ENVIRONMENTAL CRITERIA

The principal environmental objective is to minimise noise received at nearby residential premises and to not exceed the stipulated criteria of the Regulations.

The Regulations stipulate allowable noise levels at any noise sensitive premises, such as residential dwelling, home or institution for persons requiring medical or rehabilitative treatment or educational facility, from another premises. The allowable noise level is determined by the calculation of an influencing factor, which is added to the baseline criteria set out in Table 4.1 of the Regulations.

TABLE 4.1 – ASSIGNED OUTDOOR NOISE LEVELS

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L _{A10}	L _{A1}	L _{Amax}
Noise sensitive premises	0700 - 1900 hours Monday to Saturday	45 + IF	55 + IF	65 + IF
	0900 - 1900 hours Sunday and Public Holidays	40 + IF	50 + IF	65 + IF
	1900 - 2200 hours all days*	40 + IF	50 + IF	55 + IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays*	35 + IF	45 + IF	55 + IF

*Represent relevant criteria for this application

It is a requirement that noise from the site be free of annoying characteristics (tonality, modulation and impulsiveness) at another premises, defined as per Regulation 9 as:

"impulsiveness" means a variation in the emission of a noise where the difference between L_{Apeak} and L_{Amax} slow is more than 15 dB where determined for a single representative event;

"modulation" means a variation in the emission of noise that –

- is more than 3dB L_{A fast} or is more than 3dB L_{A fast} in any one-third octave band;
- is present at least 10% of the representative assessment period; and
- is regular, cyclic and audible;



Herring Storer Acoustics
 Our ref: 12645-3-10164

6

“tonality” means the presence in the noise emission of tonal characteristics where the difference between –

- (a) the A-weighted sound pressure level in any one-third octave band; and
- (b) the arithmetic average of the A-weighted sound pressure levels in the two adjacent one-third octave bands,

is greater than 3dB when the sound pressure levels are determined as $L_{Aeq, T}$ levels where the time period, T is greater than 10% of the representative assessment period, or greater than 8 dB at any time when the sound pressure levels are determined as $L_{A, slow}$ levels.

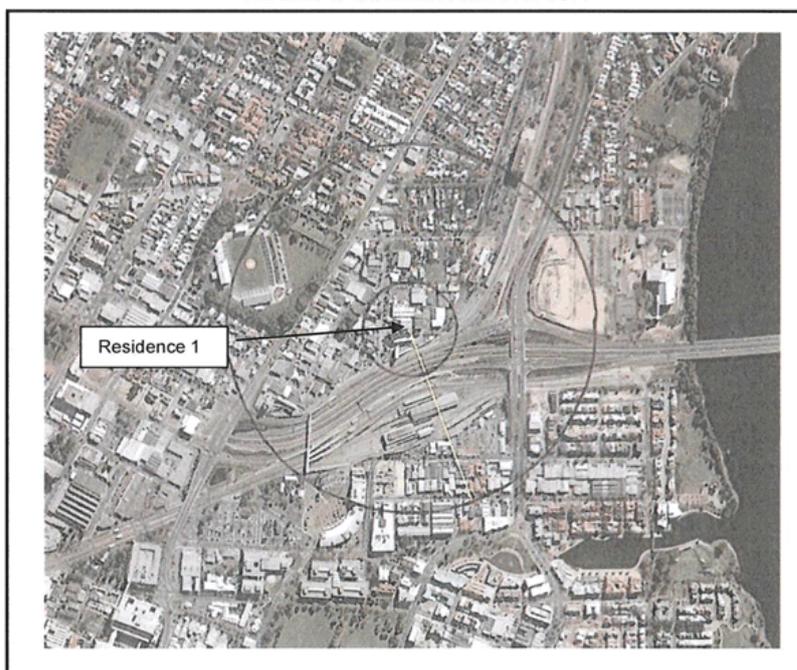
Where the above characteristics are present and cannot be practicably removed, the adjustments shown in Table 4.3 are made to the measured or predicted level at the receiving premises.

TABLE 4.2 – ADJUSTMENTS TO MEASURED LEVELS

Where tonality is present	Where modulation is present	Where impulsiveness is present
+5 dB(A)	+5 dB(A)	+10 dB(A)

The influencing factor has been calculated based on the 100m and 450m radii concentric circles shown in Figure 1.

FIGURE 1: INFLUENCING FACTOR



Based on the location of the residences and the nearby industrial premises, the influencing factor has been calculated to be 16 for Residence 1 (Youth With a Mission) and 15 for Residence 2 (Claisebrook Road). Table 4.5 shows the 'assigned noise levels' at the nearest residence, Youth With A Mission.



Herring Storer Acoustics
Our ref: 12645-3-10164

7

TABLE 4.3 – ASSIGNED NIGHTTIME NOISE LEVELS AT RESIDENCES

Premises Receiving Noise	Time of Day	Assigned Noise Level (dB)		
		LA10	LA1	LAmax
Noise sensitive premises	0700 - 1900 hours Monday to Saturday	61	71	76
	1900 - 2200 hours all days	56	66	71
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	51	61	71

Owing to the nature of the operations, it is considered appropriate to apply the LA10 parameter to the majority of the activities on the Holcim site, including loading, slumping and the hopper.

5.0 NOISE IMPACTS

5.1 MEASURED NOISE LEVELS

Measurements of each of the slumping and loading processes have previously indicated the noise levels were not tonal, modulating or impulsive, therefore no adjustments have been made to the predicted noise levels.

Section 2 of this report includes results of noise monitoring at the nearest noise sensitive premises (Youth With A Mission).

5.2 PREDICTED NOISE LEVELS

Noise emissions from the site have been modelled using the acoustic modelling software "SoundPlan 7" and the Concawe algorithms in accordance with Draft 8 Guidance Note issued by the DEC.

The resultant noise level predictions are shown in Table 5.2. The predictions include three trucks slumping at within the proposed slump stand and the tanker unloading. This represents a likely worst-case scenario

TABLE 5.1 – PREDICTED NOISE LEVELS

Location (Ref Appendix A)	Predicted Noise Level, LA10 dB(A)	Complies with Assigned Noise Level LA10 dB(A)?
Day Operation – 3 trucks slumping		
Receiver RL1	55	Yes
Receiver RL2	47	Yes
Night Operation – 1 truck slumping in night slump bay south of materials shed		
Receiver RL1	49	Yes
Receiver RL2	39	Yes



6.0 PERFORMANCE INDICATORS

The effectiveness of the Noise Management Plan will be reviewed against the following performance indicators:

- Compliance with the assigned noise levels in the Environmental Protection (Noise) Regulations 1997; and
- Noise complaints associated with night operations.

7.0 NOISE MANAGEMENT

7.1 OPERATIONAL NOISE MANAGEMENT

The management of day operation noise emissions is based on construction of a roofed slumping stand as shown on the drawing in Appendix C, concrete trucks leaving site via the new exit on Calisebrook Road and provision of a fixed and attenuated blower for tanker unloading. The predicted noise emissions from the Holcim East Perth site comply with the Regulation 'assigned levels' for the nominated 'day period'.

The predicted noise level acoustic modelling shows that for night operations the carrying out of slumping at a dedicated 'night' slumping stand will achieve compliance with the regulation requirements.

A dedicated night slump stand can be located at the existing truck washout area on the south side of the materials building. The night slump stand will be required to have a roof, along with a wall out from the delivery shed, following the line of the existing 1.2m high above ground pits. The roof should be lined with foil-faced insulation (or an alternative sound absorbing product) to minimise reverberation within the space. This location will allow the existing shed to form a significant barrier between the slumping stand and the nearest residences.

In addition to moving the slump stand during the night, there are a number of measures which will be implemented to minimise the impact on nearby noise sensitive receptors. These include:

- Reverse the truck access route, so mixing trucks enter the loading area from the west, travel east through the loading bay building, then move to the night slump stand, located behind the existing delivery shed; following slumping, they turn and exit via Claisebrook Road;
- The installation of an automatic door on the western entry point of the loading area, similar to that which is installed on the eastern side; and
- Ensuring that the personnel entry door to the production tower is not left open during the night period, between 7pm and 7am.



Herring Storer Acoustics
Our ref: 12645-3-10164

9

In addition, measures to be implemented to minimise noise impacts during general operations both during the day and night:

- Using the quietest reasonably available equipment;
- Ensuring that plant and equipment is well maintained, regularly serviced and is in good working order;
- Ensuring all employees or contractors are trained in appropriate noise management practices;
- Ensuring ongoing consultation with key stakeholders to determine the success of noise management practices; and
- Ensuring adequate complaint response procedures.

7.2 VEHICULAR MOVEMENTS AND REVERSING ALARMS

Trucks and other vehicles entering the site via the Caversham Street gate have the potential to cause annoyance to the nearby noise sensitive receptors. Although vehicles travelling along roads are exempt from the Regulations, Holcim recognises that minimising vehicular traffic along Caversham Road during night hours can assist in reducing the impact of operations on Youth With A Mission occupants. It is proposed that the Caversham Street gate be closed during night hours.

Although not required to be assessed under the Regulations, reversing alarms installed on all of the trucks entering the site have the potential to annoy nearby residences. To minimise the impact of the reversing alarms, trucks being used during the night may be retrofitted with either *Directional* or *Broadband* reversing alarms. It is understood that Holcim already employs this practice at other sites.

8.0 ROLES AND RESPONSIBILITIES

The Environmental Manager for the Holcim site is responsible for the implementation and maintenance of this Noise Management Plan.

The Environmental Manager will also be responsible for ensuring that training and an awareness program are provided to all staff and contractors working on the site.

9.0 MONITORING

Following implementation of the noise control measures proposed in this Noise Management Plan, monitoring of noise emissions at the nearby Youth With a Mission premises is proposed to determine the effectiveness of the noise control and to identify any practises or environmental noise emissions that require further attention.



Herring Storer Acoustics
Our ref: 12645-3-10164

10

10.0 CONTINGENCIES

The management of noise emissions from the site will be reactive, in that any non-conformance indicated by the noise level monitoring and/or complaints will result in a review of the process will be triggered.

A Complaints Register has been established to receive, investigate and respond to any community complaints regarding the Holcim East Perth operations.

The Complaints Register includes:

- The name(s) of the complainant(s) if provided;
- Date and time;
- Nature of the complaint; and
- Resolution action undertaken.

The investigation into the complaint includes:

- Investigations into the operations and activities to identify the likely source of the event;
- Investigate further noise amelioration strategies and record corrective actions taken.

11.0 STAKEHOLDER INFORMATION

Relevant stakeholders include:

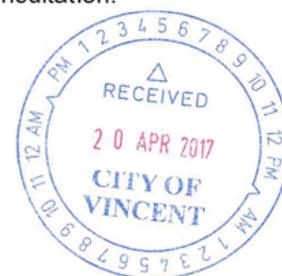
- The Town of Vincent Council;
- Department of Environment and Conservation; and
- Local community liaison groups.

12.0 AUDITING

The Site Manager is responsible for ensuring that all management actions as per the Noise Management Section of this document are carried out.

13.0 REVIEWS AND REVISION

The management measures defined in this plan, and the work instructions arising from it will be reviewed on a regular basis and amended if required. Effectiveness will be judged by the outcomes of the monitoring program, contingency procedures, key performance indicators and feedback from complainants and/or stakeholder consultation.



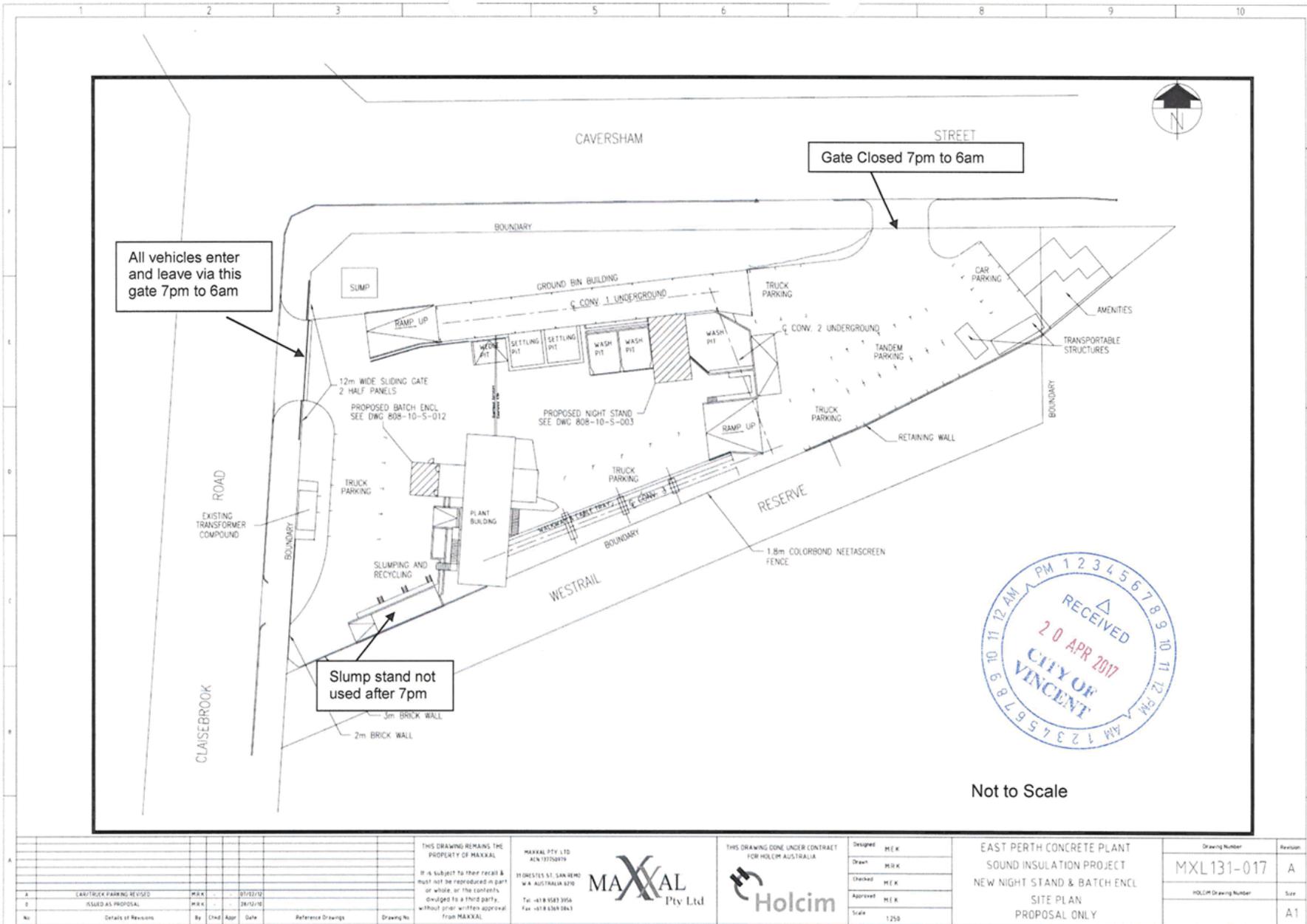
APPENDIX A
AERIAL PHOTO OF SITE AND SURROUNDINGS





APPENDIX B
2010 SITE CONFIGURATION
WITH PROPOSED NIGHT OPERATION MEASURES





No	Details of Revisions	By	CHKD	Appr	Date	Reference Drawings	Drawing No
A	LAN/TRUCK PARKING REVISED	MEK			07/03/17		
B	ISSUED AS PROPOSAL	MEK			28/12/16		

THIS DRAWING REMAINS THE PROPERTY OF MAXXAL
 If it is subject to their recall & must not be reproduced in part or whole or the contents divulged to a third party, without prior written approval from MAXXAL.

MAXXAL PTY LTD
 ALN 13758979
 31 DORESTES ST, SAN REMO
 WA AUSTRALIA 6210
 Tel: +61 8 9543 3956
 Fax: +61 8 9543 0843

MAXXAL Pty Ltd

THIS DRAWING DONE UNDER CONTRACT FOR HOLCIM AUSTRALIA

Holcim

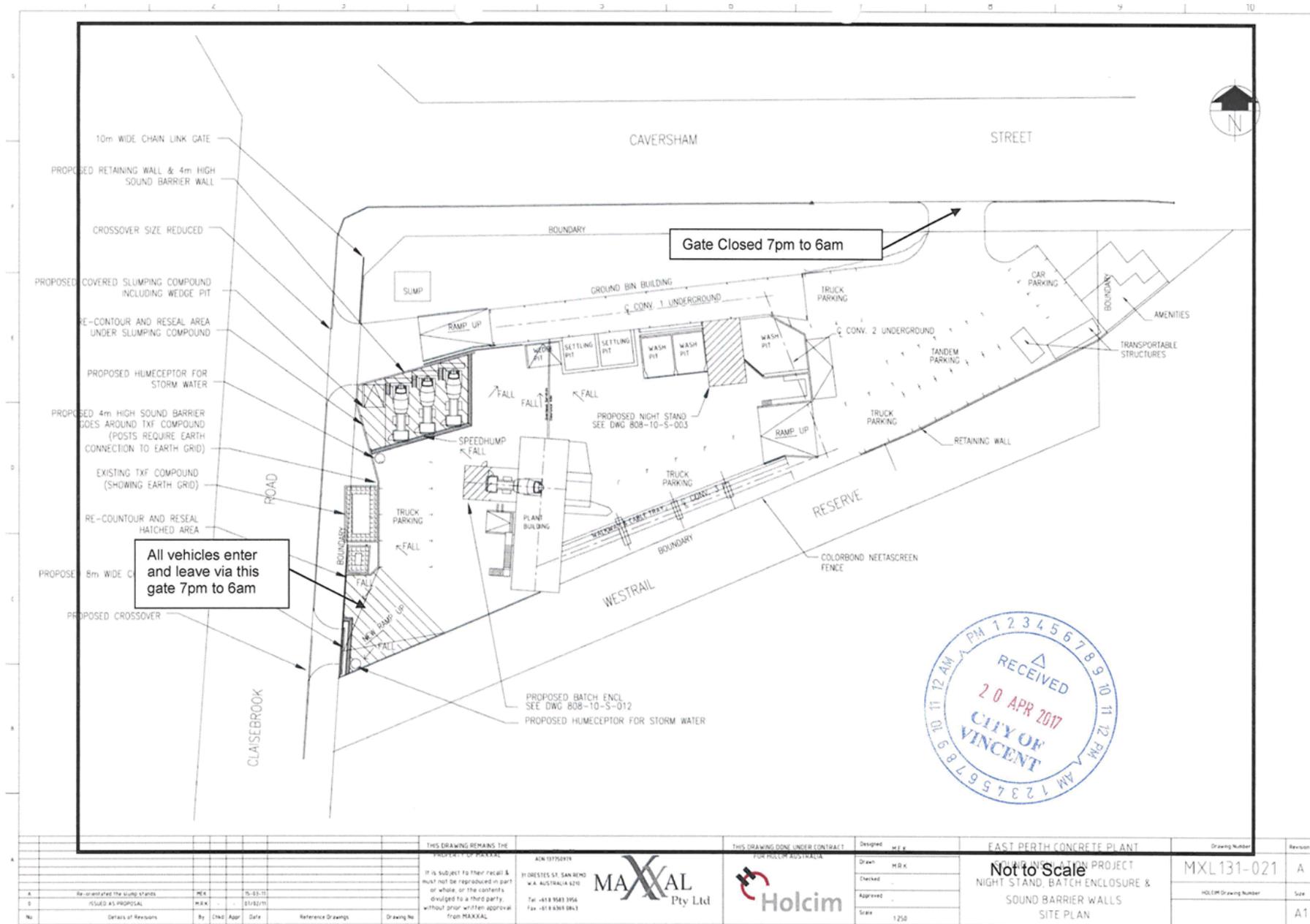
Designed	MEK
Drawn	MEK
Checked	MEK
Approved	MEK
Scale	1:250

EAST PERTH CONCRETE PLANT
 SOUND INSULATION PROJECT
 NEW NIGHT STAND & BATCH ENCL
 SITE PLAN
 PROPOSAL ONLY

Drawing Number	Revision
MXL131-017	A
HOLCIM Drawing Number	Size
	A1

APPENDIX C
PROPOSED SITE CONFIGURATION





THIS DRAWING REMAINS THE PROPERTY OF MAXXAL				THIS DRAWING DONE UNDER CONTRACT FOR HOLCIM AUSTRALIA		Designed: M.R.K.	FAST PERTH CONCRETE PLANT	Drawing Number: MXL131-021	Revision: A
It is subject to their recall & must not be reproduced in part or whole or the contents divulged to a third party without prior written approval from MAXXAL.				31 DRESTES ST SAN REMO WA AUSTRALIA 6210 Tel: +61 8 9483 3956 Fax: +61 8 9483 0861		Drawn: M.R.K.	SOUND INSULATION PROJECT NIGHT STAND, BATCH ENCLOSURE & SOUND BARRIER WALLS SITE PLAN	HOLCIM Drawing Number:	Scale: A1
						Checked: -			
						Approved: -			
						Scale: 1:250			

APPENDIX D
Summary of Noise Management Measures



APPENDIX D: Summary of Noise Management Measures

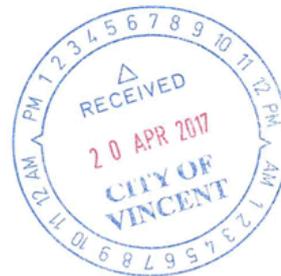
Management Objective	Action	Performance Indicator	Timing	Responsibility
To ensure that noise from the day operations do not adversely impact on nearby noise sensitive residences	Provide a roofed slump stand with barrier walls (4m high) to the north-west part of the site, immediately south of the western entry to the materials building and provide an additional exit for concrete trucks on Claisebrook Road. (Day operations)	Compliance with the assigned noise levels in the <i>Environmental Protection (Noise) Regulations 1997</i> .	During Day	Environmental Manager
	Provide a Night slump stand to the existing truck washout area and install a roof and a wall out from the delivery shed, following the line of the existing 1.2m high above ground pits.	Compliance with the assigned noise levels in the <i>Environmental Protection (Noise) Regulations 1997</i> .	During Night	Environmental Manager
To ensure that noise from the night operations do not adversely impact on nearby noise sensitive residences	Reverse the site access process at night, so trucks enter the loading area from the west, and exit via the east of the building, then move to the night slump stand, located behind the existing delivery shed; following slumping, they turn and exit via Claisebrook Road	Compliance with the assigned noise levels in the <i>Environmental Protection (Noise) Regulations 1997</i> .	During Night	Environmental Manager
	Provide an automatic door on the western entry point of the loading area;			
Monitoring	Ensure that the personnel entry door to the production tower is not left open during the night period, between 7pm and 7am;	Compliance with the assigned noise levels in the <i>Environmental Protection (Noise) Regulations 1997</i> .	During Night	Environmental Manager
	Use of the quietest reasonably available equipment;			
	All employees or contractors are to be trained in appropriate noise management practices;			
	Ongoing consultation with key stakeholders to determine the success of noise management practices.			
	Following implementation of the noise control measures proposed in this Noise Management Plan, monitoring of noise emissions at the nearby Youth With a Mission premises is proposed to determine the effectiveness of the noise control and to identify any practises or environmental noise emissions that require further attention.		Day or Night	Environmental Manager
	Measure noise emissions if there are repeated complaints about regular noise emissions.			





APPENDIX E

COMPLAINTS REGISTER



APPENDIX E: OUTLINE OF COMPLAINTS REGISTER

Date	Name of Complainant	Address of Complainant	Date & Time of Noise Event	Nature of the Complaint	Remedial Action Taken	Responsible Officer

The investigation into the complaint should include:

- Investigations into the operations and activities to identify the likely source of the event;
- implement effective noise amelioration strategies and record corrective actions.



Determination Advice Notes:

1. In regards to Condition 1, a time limited approval has been imposed so to enable the City's Local Planning Framework, Town Planning Scheme No 2, to be finalised.
2. Any new signage that does not comply with the City's Policy No. 7.5.2 – Signs and Advertising shall be subject to a separate Planning Application and all signage shall be subject to a Building Permit application, being submitted and approved prior to the erection of the signage.
3. If an applicant or owner is aggrieved by this determination there is a right of review by the State Administrative Tribunal in accordance with the Planning and Development Act 2005 Part 14. An application must be made within 28 days of the determination.