Planning and Development Act 2005.

IN THE MATTER OF:

Ransberg Pty Ltd Applicant
-and-
City of Bayswater Respondent

Matter Number: DR 243 of 2011 & DR 242 of 2011
Application Lodged: 15 July 2011

ORDER

By consent of the parties, it is on 15 July 2014 ordered that:

DR 242 of 2011

1. The development/use subject of this approval must be SUBSTANTIALLY COMMENCED within a period of two (2) years of the date of this approval notice. If the development is not substantially commenced within this period, this approval shall lapse and be of no further effect. Where an approval has lapsed, no development/use shall be carried out without the further approval of the City having first been sought and obtained.

2. The development shall be carried out only in accordance with the terms of the application as approved herein, and any approved plan, including any plan approved as a component of the Environmental Management Plan required by condition (7).

3. On completion of construction, all excess articles, equipment, rubbish and materials being removed from the site and the site left in an orderly and tidy condition.

4. All stormwater and drainage runoff produced onsite is to be disposed of onsite via the use of soakwells, approved by the Director of Technical Services. The soakwells must deal with the entire land area and be designed to contain a 24hr storm duration and 100-year ARI.

5. Unless otherwise approved by the City of Bayswater, the vegetated area at the rear of the lot, depicted as "Landscaping and Grassed Area" on the revised concept plan, is not to be used for the storage of materials or vehicles.

6. Activities associated with the use of Lot 2 (Nos. 277-279) Collier Road, Bayswater (**Land**) shall not cause the concentration of particulate matter as PM10 at the location referred to in Condition 7(i), first dot point, to exceed:

   (a) 12.4μg/m³ as a 24-hour average on any day when the ambient concentration (inclusive of the contribution from emissions from the Land) exceeds 50?g/m? of particulate matter as PM10 as a 24-hour average; or

   (b) 500μg/m³ as a 15-minute average.

7. Documentation for a proposed Environmental Management System (EMS) compliant with AS/NZS ISO 14001:1996 shall be submitted to the City for approval prior to the issue of a building permit. The EMS shall incorporate an Environmental Management Plan (EMP). The EMP shall address the following issues to the satisfaction of the City:

   (i) Dust and Particulate Management, including:

   - The use of a TEOM (PM10) monitor to be located at the previous monitoring location close to the boundary, as the primary monitoring method;
   - The use of a Beta Gauge (PM10) monitor at a second location sited in accordance with AS/NZS 3580.1.1 (as far as practical), to allow the incremental PM10 concentrations to be determined;
   - The TEOM monitor to be operated in accordance with AS/NZS 3580.9.8;
   - The Beta Gauge monitor is to be operated in accordance AS/NZS 3580.9.11;
   - The applicant is to formalise the approach and procedures for:
     (a) Determining any dust emissions from the site;
     (b) For deriving modelled incremental PM10 concentrations at the nearest sensitive premises; and
     (c) Associated thresholds which could trigger site management alerts and responses.
   - The TEOM and Beta Gauge monitors are to be maintained by an organisation accredited by the National Association of Testing Authorities (NATA) in respect to the operation of those monitors;
   - The use of an anemometer with a 10 metre pole, unless a lower pole is approved by the City;
   - PM10 concentrations from the TEOM and Beta Gauge monitors, and wind speed and wind direction from the anemometer, shall be averaged over a time period of not more than 15-minutes and electronically recorded;

- Summaries of the results of monitoring including each 24-hour average PM10 concentration are to be provided quarterly to the City by no more than 30 days after each quarter. The quarterly summary must identify and highlight the date and time on which the monitoring showed the PM10 concentration exceeded:

  (a) 50µg/m³ as a 24-hour average; and

  (b) 500µg/m³ as a 15-minute average; and

- An annual report prepared by the body carrying out the dust monitoring, which reviews whether the dust received at the nearest sensitive premises has been compliant with the NEPM PM10 standard, the extent to which the development contributed to any exceedences of 24-hour average PM10 concentrations greater than 50µg/m³, and whether the development has complied with the requirements of Condition 6.

The annual report referred to above, shall be submitted by no more than 30 days after each calendar year to which the data relates.

Dust monitoring shall be continued indefinitely, or until the City is satisfied that the operating experience of cumulative air quality has shown that the risk of exceeding the NEPM standard for annual particulates has abated. The requirement for continued dust monitoring may be reviewed by the City at the request of the applicant following the provision of an EMS audit required by condition (9).

(ii) Noise management, including the use of appropriate acoustic barriers and low noise front end loaders;

(iii) Surface water management;

(iv) Landscaping;

(v) Visual amenity;

(vi) Waste management;

(vii) Light overspill;

(viii) Traffic management;

(ix) Storage of hazardous and/or dangerous goods

(x) Complaints management;

(xi) Contingency measures to be adopted in the event of potential or actual unacceptable emissions from the site; and

(xi) Checklists and personnel responsibilities for actions assigned by the EMP.

8. The Environmental Management System (EMS) and Environmental Management Plan (EMP) approved by the City of Bayswater shall be implemented, and the development must at all times comply with the approved EMS and EMP.

9. The Environmental Management System must be audited by an independent appropriate body at least every three (3) years from the anniversary of this approval, and the results of the audit must be provided to the City of Bayswater.

10. The plant is to be equipped with audible and/or visual alarms together with supporting microprocessor hardware and software capable of determining and logging incremental concentrations and background concentrations, utilising the monitoring data collected from the monitoring equipment required by Condition 7(i), such equipment to automatically alert site management in real-time should the PM10 limits in Condition (6) be, or be likely to be exceeded. The logged data shall be made available to the City as soon a practicable upon request.

11. Any portion of the site to be used for movement or parking of vehicles and/or onsite storage of empty bins, must be sealed and drained to the satisfaction of the City of Bayswater.

12. Uncovered parking bays shall be a minimum of 5.5m x 2.5m.

13. Truck parking bays are to conform to the relevant Australian Standards.

14. A bin area is to be provided of not less than 10m2 and with a permanent water supply and drainage facility for washdown. The bin area is to be screened by a gate and brick walls or other suitable material to a height of not less than 1.8m.

15. Bins are to be washed only in the wash-down facility within the bin area, drained to a silt trap and disposal of via the Water Corporation sewer system or if this is not available, a leach drain soakwell system which is separate to the stormwater disposal system, or approved system, to the satisfaction of the City of Bayswater.

16. One (1) driveway shall be permitted onto Collier Road. The driveway shall be constructed to the City of Bayswater standards for commercial driveways.

17. Redundant driveways shall be removed and the verge and its vegetation made good at the applicants cost, prior to the commencement of concrete batching operations.

18. No earthworks shall encroach onto the Collier Road road reserve.

19. No stormwater drainage shall be discharged off-site.

20. The applicant shall make good any damage to the existing verge vegetation within the Collier Road reservation, prior to the commencement of concrete batching operations.

21. No storage of materials outside the approved buildings is permitted.

22. A copy of an approval issued by the Department of Environment and Conservation - Licensing Section for the operation of the facility shall be submitted to the City prior to operations commencing.

23. A truck wash-down area is to be provided in accordance with the requirements of the *Environmental Protection (Concrete Batching and Cement Product Manufacturing)*

Regulations 1998 and in a location approved by the City of Bayswater. Trucks may only be washed down in the approved wash down area.

24. Operating hours are to be restricted to 6:00am to 6:00pm Monday to Saturday (public holidays excluded), however no front end loader may operate prior to 7:00am.

25. The cement storage silos are to be reduced to a maximum of 12.5m in height. Amended plans showing the reduced height of the silos must be submitted with the application for a building permit.

26. The owner, or the applicant on behalf of the owner, shall comply with the City of Bayswater policy relating to Percent for Public Art, and provide an Art Project for a minimum value of one per cent ($15,000) of the estimated total cost of the development ($1,500,000). Prior to the lodgement of a building permit application, the owner/applicant shall submit details to the City, including plans of the artwork, its cost and construction, and other matters relating to the artwork's on-going maintenance and acknowledgements in accordance with the City's Percent for Public Art Policy. Upon the City receiving this information, the Art Project shall be presented to Council for its consideration and determination. The approved public art shall be installed prior to the submission of an Occupancy Permit for the subject development, and thereafter maintained at the cost of the owner/applicant.

DR 243 of 2011

1. The development/use subject of this approval must be SUBSTANTIALLY COMMENCED within a period of two (2) years of the date of this approval notice. If the development is not substantially commenced within this period, this approval shall lapse and be of no further effect. Where an approval has lapsed, no development/use shall be carried out without the further approval of the City having first been sought and obtained.

2. Retaining walls exceeding 500mm in height (above natural ground level) are to be designed by a certified practising engineer, to the satisfaction of the City of Bayswater.

3. Revised plans depicting a stepped retaining wall on the rear (northern) boundary of Lot 2 and associated landscaping shall be submitted to and approved by the City of Bayswater prior to the issue of a building permit. The plan for the proposed landscaping shall identify the proposed species, planting rate and location of vegetation, with a view to achieving dense screening vegetation to a minimum height of 3m, but including 5m specimens.

4. On completion of construction, all excess articles, equipment, rubbish and materials being removed from the site and the site left in an orderly and tidy condition.

Senior Member Peter McNab

I certify the foregoing to be a true and correct copy of the original

State Administrative Tribunal

Date: 5/7/14

LICENCE TO TAKE WATER

Granted by the Minister under section 5C of the Rights in Water and Irrigation Act 1914

Licensee(s)	Ransberg Pty Ltd		
Description of Water Resource	Perth Perth - Superficial Swan	**Annual Water Entitlement**	25000 kL
Location of Water Source	Lot 2 On Diagram 55129 - Volume/Folio 1513/683 - Lot 2 Collier Rd Bayswater		

Authorised Activities	**Taking of water for**	**Location of Activity**
	Concrete batch plant purposes	Lot 2 On Diagram 55129 - Volume/Folio 1513/683 - Lot 2 Collier Rd Bayswater
Duration of Licence	From 8 December 2010 to 8 December 2020	

This Licence is subject to the following terms, conditions and restrictions:

1 In this licence the quantity of water that may be taken for the authorised activities is limited to 25,000kL per water year.

2 The annual water year for water taken under this licence is defined as 12:00 pm at 30 November to 12:00 pm at 30 November twelve months later.

3 That should the licensee's draw adversely affect the aquifer or other users in the area, the Department of Water may reduce the amount that may be drawn.

4 The licensee must install a cumulative water meter of a type approved under the Rights in Water and Irrigation (Approved Meters) Order 2009 to each water draw point under this licence.

5 The meter(s) must be installed in accordance with the provisions of the document entitled "Guidelines for Water Meter Installation 2009" before any water is taken under this licence.

6 The licensee must ensure the installed meter(s) accuracy is maintained to within plus or minus 5% of the volume metered, in field conditions.

7 The licensee must not, in any water year, take more water than the annual water entitlement specified in this licence.

8 The licensee must take and record the reading from each meter required under this licence at the beginning and another at the end of the water year defined on this licence.

9 In addition to taking and recording the reading(s) at the beginning and the end of the water year, the licensee must, as close as practicable to the end of each month (other than the month in which the water year ends), take and record the reading from each meter required under this licence.

10 All meter readings must be recorded on the "Meter Water Use Card".

11 The completed Meter Water Use Card must be returned to the Department of Water by 7 December each year.

12 The licensee must notify the Department of Water in writing of any water meter malfunction within seven days of the malfunction being noticed.

13 The licensee must obtain authorisation from the Department of Water before removing, replacing or interfering with any meter required under this licence.

This Licence is granted subject to the Rights in Water and Irrigation Regulations 2000

LICENCE TO TAKE WATER

Granted by the Minister under section 5C of the Rights in Water and Irrigation Act 1914

This Licence is subject to the following terms, conditions and restrictions:

14 Approval by the Department of Water is to be obtained prior to the construction of additional and replacement wells and the modification or refurbishment of existing wells.

End of terms, conditions and restrictions

CITY OF BAYSWATER

MINUTES

FOR THE

ORDINARY MEETING

OF COUNCIL

22 September 2015

11.1.16 Proposed Concrete Batching Plant - Amended Plans to Approved Application - Section 31 SAT Reconsideration

Location: **Lot 2, 277-279 Collier Road, Bayswater**
Applicant: **WA Limestone**
Owner: **Ransberg Pty Ltd**
Officer: **Director Planning and Development Services**
Refer: **Item 11.1.10: OCM 25.8.2015**
Item 11.1.10: OCM 26.5.2015
Item 11.1.12: OCM 23.7.2013
Item 11.1.10: OCM 23.4.2013
Item 15.1.3: OCM 22.11.2011
Item 11.1.12: OCM 28.6.2011

Confidential Attachment - in accordance with Section 5.23(2)(b) of the Local Government Act 1995 - personal affairs of any person.

EXECUTIVE SUMMARY

Application:

In accordance with further orders from the State Administrative Tribunal (SAT), pursuant to Section 31 (1) of the *State Administrative Tribunal Act 2004*, the SAT has invited Council to reconsider its decisions made at the 26 May 2015 and 25 August 2015 Ordinary Council Meetings, to refuse and defer amended plans for approved proposed concrete batching plant at Lot 2, 277-279 Collier Road, Bayswater.

Key Issues:

- Despite Council's opposition and refusal of a concrete batching plant at the subject site, the SAT has approved this use at the site. This approval is still valid, and the applicant can proceed with the concrete batching plant accordingly.
- The current proposal is an amended design to the approved concrete batching plant, and the SAT is seeking Council's reconsideration of the amended design and not the appropriateness of a concrete batching plant at the site, as this use has already been approved by SAT.
- Council is to reconsider the appropriateness of the amended proposal in terms of the additional information contained within this report.
- SAT's comments regarding the provisions of Section 87(4)(b) of the *State Administrative Tribunal Act 2004* (WA) on awarding costs against the City where an application has not been genuinely determined on its merits.

BACKGROUND

Town Planning Scheme No. 24 Zoning:	General Industry
Use Class:	Noxious Industry - 'D'
Lot Area:	12,324m^2
Existing Land Use:	Vacant
Surrounding Land Use:	Industrial (East, West, South); Residential (North)

Size/Nature of Proposed Development:	Concrete Batching Plant - • Addition of: o Two (2) below ground aggregate delivery bins; o Mostly enclosed overhead aggregate storage bins; o Aggregate reclaimer for recycling concrete; and o Additional cement silos (total of 4). • Removal of 13 open ground storage bins.

A detailed summary of the proposals' history is contained in Item 11.1.10 of the Ordinary Council Meeting held on 25 August 2015.

Council at its Ordinary Meeting held on 25 August 2015 considered additional information in accordance with the Section 31 request from the SAT, and resolved as follows:

"That Council defers consideration of the proposed amended Concrete Batching Plant until the concerns raised, including the environmental matters raised by the City's environmental consultant and insufficient buffer, have been addressed in relation to the amended proposal."

On 2 September 2015, the City's solicitors, officers and three (3) Councillors attended a SAT mediation. The matter was mediated for approximately three (3) hours whereby no mediated outcome was resolved.

On 4 September 2015, the City's solicitors and officers attended a SAT directions hearing. The SAT's Judge Parry made orders that the City is to reconsider the application under Section 31 (1) of the *State Administrative Tribunal Act 2004*, and programmed the matter to a full hearing on 25 and 26 November 2015, in the event Council does not resolve to approve the application.

Further Information Submitted by Applicant
The applicant has provided further information dated 4 September 2015 as follows:

"*Traffic*

- *The proposed plant was previously referred to Main Roads by the City for comment. Main Roads did not raise any issues or concerns with WA Premix's proposal.*
- *Attached are plans of the upgrade of the Collier Road/Tonkin Highway interchange, which will commence construction in 2016 as part of the Perth Northlink project* (Attachment 7). *As shown by the plans, once constructed access to the site will be via a slip road to the intersection of Collier Road and Jackson Street. WA Premix has consulted extensively with Main Roads to ensure that the interchange is appropriately designed to cater for the traffic from the site.*
- *The former landuse of the site was a bulk fuel depot and service station. Traffic volumes from the plant will be substantially less than the previous use or that of other nearby businesses such as the City of Bayswater's own Waste Transfer Station.*
- *Concrete cannot be stockpiled. The truck movements required do not represent additional truck movements, rather a diversion of existing truck movements from other concrete plants within the area.*
- *The revised plans substantially improve traffic flow and vehicle interaction within the site. This significantly improves site safety and reduces the amount of time that trucks spend within the site. This will result in substantial noise reductions from the current approved design.*
- *The material storage capacity of the revised plans enables greater control over the timing of material deliveries. Standard practice is for material deliveries to occur after 10am, after the peak concrete production period has finished.*

- *WA Premix is prepared to accept a development condition restricting material deliveries to after 7:00am.*
- *Latest publically available traffic counts for Collier Road at the location of the subject site are 18,010 vehicles per day (Source: Main Roads Metropolitan Traffic Digest 2003/04-2008/2009).*
- *Estimated traffic volumes*

	Average Production Day (135m^3)	***High Production Day (500m^3)*** *Expected to occur less than 1% of the time*
Agitator (Concrete Delivery) Truck	*31*	*100*
Sand and Aggregate Delivery	*4.5*	*16.6*
Cement Delivery	*0.8*	*2.8*
Total	***36.3***	***119.4***
Percentage contribution *to traffic on Collier Road*	*0.002%*	*0.007%*

- *The above traffic volumes were used for the air quality assessment.*
- *Vehicle noise is only relevant to vehicles within the site. The improved traffic flow and material delivery system reduces sand and aggregate delivery times by 76% compared to the current approved design. The storage capacity of the plant enables greater control of delivery timing to avoid noise sensitive periods and minimise concurrent deliveries.*

Company Profile - Compliance History

- *WA Premix is part of the WA Limestone group of companies. WA Limestone is a Western Australian family owned business, which has operated for more than 40 years and more than 200 employees.*
- *WA Premix, the concrete batching division of WA Limestone has operated since 2003 and is a major supplier of concrete within the Perth Metropolitan Area. The company has concrete batching plants in Mandurah (2004), Bibra Lake (2005), and Neerabup (2015), with additional plants proposed for Bayswater and Byford.*
- *WA Premix has successfully operated for more than 10 years with no significant environmental incidents or issues and has developed a strong working relationship with state and local government regulators.*
- *Through its continual improvement program, WA Premix is an industry leader in best practice concrete batching plant technology in Western Australia. And is the first major concrete manufacturer in Western Australia to invest in "wet-mix" plants*
- *WA Premix has a triple certified integrated management system:*
    - *ISO 9001:2008 (Quality Management)*

- o *ISO 14001:2004 (Environmental Management)*
- o *AS/NZS 4801:2001 (Safety Management)*

- *With its own quarries and fleet of trucks, WA Premix has full control of the entire supply chain ensuring that material deliveries are undertaken safely and environmentally responsibly."*

Other Information

- *The retaining wall at the northern end of the property has been completed, stabilizing the bank and improving the visual amenity of Joan Rycroft Reserve. Landscaping of the retaining wall within the next few weeks in accordance with the approved plan.*
- *A landscaping plan for the remainder of the site has been completed."*

The landscaping plan can be reviewed as part of Attachment 4.

The City's environmental consultant Strategen provided a further report dated 9 September 2015, in light of the additional information provided at the SAT mediation and the applicant. Strategen has provided additional comments relating to plant capacity, operating hours, enclosed buildings, aggregate and sand delivery, emergency aggregate and sand storage, recovery of materials from emergency storage, truck wash down, dust monitoring, dust monitoring reporting, air quality impacts on amenity, environmental management plan and noise modelling. The complete report can be viewed in **Attachment 7.**

State Administrative Tribunal Comments

The SAT at its initial directions hearing held on 31 July 2015 indicated that Council would need to genuinely consider the subject application on its merits or the City may be liable for costs in accordance with Section 87(4)(b) of the *State Administrative Tribunal Act 2004* (WA).

If costs are awarded against the City, this could include the costs of the applicant's solicitors and associated consultants used to appeal Council's decision. Generally costs could amount up to 75% of the total amount spent by the applicant to appeal a decision.

CONSULTATION

In March-April 2015, the City sought comment for the subject proposed amendments from the adjacent affected property owners for a period of 35 days. At the completion of the advertising period, 12 submissions were received, 11 of which objected to the proposal. The main concerns from advertising related to:

- Dust;
- Noise;
- Wastewater; and
- Traffic.

ANALYSIS

Key Issues:

The key issues raised in relation to this matter are as follows:

- Despite Council's opposition and refusal of a concrete batching plant at the subject site, the SAT has approved this use at the site. This approval is still valid, and the applicant can proceed with the concrete batching plant accordingly.
- The current proposal is an amended design to the approved concrete batching plant, and the SAT is seeking Council's reconsideration of the amended design and not the appropriateness of a concrete batching plant at the site, as this use has already been approved by SAT.

- The City's officers are still of the view that a concrete batching plant land use is inappropriate in its current location, however the SAT overruled the City's original refusal and found the land use to be acceptable at the site. The City's officers are endeavouring to address the amended proposal with the intent to reduce the impact of the concrete batching plant on the surrounding area.

- The City is also required to give due regard to the advice received by the City's solicitors and environmental consultant, advising that the amended plans detail a better operated plant with minimal risk given the enclosing of the wet-mix plant and the existing SAT conditions, and additional conditions proposed.
- Council is to reconsider the appropriateness of the proposal in terms of the additional information contained within this report.
- SAT's comments regarding the provisions of Section 87(4)(b) of the State Administrative Tribunal Act 2004 (WA) on awarding costs against the City where an application has not been genuinely determined on its merits.

Key Considerations
Generally a planning application shall be assessed and determined in accordance with the objectives and prescribed requirements of the City's Town Planning Scheme No. 24 (TPS 24).

The original application has been approved by the SAT, therefore the concrete batching plant land use was deemed to be acceptable in its current location and previous form. The City's solicitors have advised that the original approved application has set a benchmark; therefore, if an amended application is received which is not materially different, and is deemed to be less of an impact, it is considered the City is not in a position to refuse the amended proposal.

The original SAT approved application includes stringent conditions particularly relating to dust and noise as follows:

*"6. Activities associated with the use of Lot 2 (Nos. 277-279) Collier Road, Bayswater (**Land)** shall not cause the concentration of particulate matter as PM10 at the location referred to in condition 7(i), first dot point, to exceed:*

(a) 12.4µg/m³ as a 24-hour average on any day when the ambient concentration (inclusive of the contribution from emissions from the Land) exceed 50?g/m? of particulate matter as PM10 as a 24-hour average; or

(b) 500µg/m³ as a 15-minute average.

7. Documentation for a proposed Environmental management System (EMS) compliant with AS/NZS ISO 14001:1996 shall be submitted to the City for approval prior to the issue of a building permit. The EMS shall incorporate an Environmental Management Plan (EMP). The EMP shall address the following issues to the satisfaction of the City:

i. Dust and Particulate Management, including:

- *The use of a TEOM (PM10) monitor to be located the previous monitoring location close to the boundary, as the primary monitoring method;*
- *The use of a Beta Gauge (PM10) monitor at a second location sites in accordance with AS/NZS 3580.1.1 (as far as practicable), to allow the incremental PM10 concentrations to be determined;*
- *The TEOM monitor to be operated in accordance with AS/NZS 3850.9.8;*
- *The Beta gauge monitor is to be operated in accordance AS/NZS 3580.9.11;*

- *The applicant is to formalise the approach and procedures for:*
  - *(a) Determining any dust remissions from the site;*
  - *(b) For deriving modelled incremental PM10 concentrations at the nearest sensitive premises; and*
  - *(c) Associated thresholds which could trigger site management alerts and responses.*
- *The TEOM and Beta Gauge monitors are to be maintained by an organisation accredited by the national Association of Testing Authorities (NATA) in respect to the operation of those monitors;*
- *The use of an anemometer with 10 metre pole, unless a lower pole is approved by the City.*
- *PM10 concentrations from the TEOM and Beta Gauge monitors, and wind speed and wind direction from the anemometer, shall be averaged over a time period of not more than 15-minues and electronically recorded.*
- *Summaries of the results of monitoring included each 24-hour average PM10 concentration are to be provided quarterly to the city by no more than 30 days after each quarter. The quarterly summary must identify and highlight the date and time on which the monitoring showed the PM 1- concentration exceeded:*
  - *(a) 50µg/m³ as a 24-hour average; and*
  - *(b) 500 µg/m³ as a 15-minute average; and*
- *An annual report prepared by the body carrying out the dust monitoring, which reviews whether the dust received at the nearest sensitive premises has been compliant with the NEPM PM10 standard, the extent to which the development contributed to any exceedances of 24-hour average PM10 concentrations greater than 50µg/m³, and whether the development as complied with the requirements of Condition 6.*

The annual report referred to above, shall be submitted by no more than 30 days after each calendar year to which the data releases.

Dust monitoring shall be continued indefinitely, or until the City is satisfied that the operating experience of cumulative air quality has shown that the risk of exceeding the NEPM standard for annual particulates has abated. The requirement for continues dust monitoring may be reviewed by the City at the request of the applicant following the provision of an EMS audit required by condition (9).

1) *Noise management, including the use of appropriate acoustic barriers and low noise front end loaders;*
2) *Surface water management;*
3) *Landscaping;*
4) *Visual amenity;*
5) *Waste management;*
6) *Light overspill;*
7) *Traffic management;*
8) *Storage of hazardous and/or dangerous goods;*
9) *Complaints management;*
10) *Contingency measures to be adopted in the event of potential or actual unacceptable emissions from the site; and*
11) *Checklists and personnel responsibilities for actions assigned by the EMP.*

8. *The Environmental Management System (EMS) and Environmental Management Plan (EMP) approved by the City of Bayswater shall be implemented, and the development must at all times comply with the approved EMS and EMP*
9. *The Environmental Management System must be audited by an independent appropriate body at least every three (3) years from the anniversary of this approval, and the results of the audit must be provided to the City of Bayswater.*
10. *The plant is to be equipped with audible and/or visual alarms together with supporting microprocessor hardware and software capable of determining and logging incremental concentrations and background concentrations, utilising the monitoring data collected from the monitoring equipment required by Condition 7(i), such equipment to automatically alert site management in real-time should the PM10 limits in Condition (6) be, or be likely to be exceeded. The logged data shall be made available to the City as soon as practicable upon request."*

Acronyms and measurements detailed in the above environmental conditions are explained as follows:

- µg/m³ - the concentration of an air pollutant is given in micrograms (one-millionth of a gram) per cubic meter of air or µg/m³
- PM10 - is a particulate matter 10 micrometres and is generally described as fine particles. By way of comparison, a human hair is about 100 micrometres, so roughly 40 fine particles could be placed on its width.
- TEOM - continuous ambient particulate monitor
- Beta Gauge - continuous ambient particulate monitor
- NPI - National Pollutant Inventory - Department of the Environmental, Australian Government
- NEPM - National Environment Protection Measure, which provides framework for the establishment of the NPI, which is an internet database designed to provide publicly available information on the types and amount of certain substances being emitted to air, land, and water.

Department of Environment Regulation - Status of Works Approval

The Department of Environment Regulation (DER) advised that it received a works approval application for the amended concrete batching plant proposal in January 2015, pursuant to section 54 of the *Environmental Protection Act 1986*. Shortly after submission, the works approval application was advertised by the DER from 21 January 2015 to 16 February 2015.

The DER advised the application was advertised in the West Australian newspaper and letters sent to affected properties whereby a small amount of submissions were received. The DER advised that the application is pending until a final determination is made by the SAT with respect to the amended proposal.

Capacity

The environmental report supplied by the applicant as part of the amended proposal details that the proposed production rates are consistent with the maximums used to model the original proposal as part of the SAT deliberations in approving the initial application.

Strategen notes that "*acceptable dust impacts were predicted from the dust modelling which considered a maximum of 500m³/day with a typical production of 135m³/day.*

Noise modelling showed compliance with assigned noise levels for 500m³ per day production (further comments below). DER typically takes advice from predicted air quality and noise impact in Works Approval submissions, which are lined to a production rate. The Applicant has committed to a maximum 500m³/day production rate and the worst case modelling has been conducted for that rate. Therefore it is reasonable to expect a DER limit of 500m³/day would be imposed in the Works Approval and Licence."

The City's solicitors have advised that the capacity is considered not to be a key issue provided the operators comply with the environmental conditions of the planning approval imposed by the SAT which in turns limits the production rates and the undue impact on the surrounding area. Should the plant breach a condition of planning approval, the corporation may be fined up to $1,000,000, with a daily penalty of up to $25,000 in accordance with the *Planning and Development Act 2005* and the *Sentencing Act 1995.*

Amenity
The applicant has advised that the amended application proposes to enclose the plant with the exception of the wash bay, and that the wash bay will not generate dust (**Attachment 7**).

The City's environmental consultant considers that amended proposal will have a lesser environmental impact than the plant originally approved by the SAT. The amended plans illustrate the wet-mix plant will be mostly enclosed and by this, will substantially decrease risks of noise and dust emissions. The environmental report supplied by the applicant states:

"Since the 2013 study was performed, a number of changes have been made to the proposed CBP design. The key design changes include:

- *97.7% reduction in Front End Loader movement;*
- *79.7% reduction in aggregate delivery times;*
- *80% reduction in material bin areas exposed to wind erosion;*
- *18% reduction in haul road length for aggregate delivery;*
- *10% increase in haul road length for cement transfer; and*
- *8% reduction in haul road length for agitator truck movements within the site."*

Traffic
The additional information provided by the applicant notes that on an average day the traffic movements from the plant will increase traffic on Collier Road by 0.002%. Should the plant reach its expected maximum capacity of 500m³ per day, which is considered a rarity, the plant will increase traffic on Collier Road by 0.007%.

The NorthLink WA project will modify the intersection of Collier Road and Tonkin Highway. The applicant and the City have provided ongoing input to Main Roads regarding the project to ensure the link provides better access to Tonkin Highway and reduce impacts on surrounding residential areas.

Collier Road is a 'district distributor A' road which is defined by Main Roads as "*carry traffic between, industrial, commercial and residential areas and generally connect to the Primary Distributors. These are likely to be truck routes and provide only limited access to adjoining property."* Main Roads criteria states that heavy vehicles are permitted on all roads however not desirable on local distributor roads and where permitted for access roads.
Collier Road and Tonkin Highway are managed by the City and Main Roads respectively, and there are no requirements limiting additional truck movements on the road network given the purpose of 'district distributor A' and 'primary distributor' is to accommodate high traffic volumes including industrial and commercial trucks.

The City's Technical Services has an objection to the projected additional truck movements on the City's and Main Roads road networks. The road networks are designed to carry significant truck movements, particularly Collier Road and Tonkin Highway.

Furthermore, the applicant has advised that all heavy vehicle trucks are likely to use main roads including Collier Road and Tonkin Highway for transportation. The only time the heavy vehicles are likely to use local distributor roads is when concrete is required to a residential lot.

Noise
Initially, the noise modelling identified that a majority of noise generated by the original approved proposal was due to the use of front-end loaders.

One of the key elements of the amended proposal is the re-design of the sand and aggregate delivery systems to a mostly enclosed system. The bins will be fed by a conveyor from the below-ground drive-over delivery bins and fully enclosed within a 12m high building.

The replacement of 13 of the approved open ground bins with overhead aggregate storage bins will reduce the use of a front end loader to transfer aggregate from open ground storage bins by 97.7%. Three smaller open ground bins measuring 8m x 4m with a maximum height of 6m will be retained for emergency storage of sand and aggregate.

Condition 7 of the original SAT approval, restricts noise generation from the site. The applicant is required to install appropriate noise barriers and ensure the operation of the plant is consistent with the environmental management plan.

The City's environmental consultant, Strategen, notes *"the additional information provided… is sufficient to clarify that the predicted noise impacts for operation at 500 m^3/day will comply with assigned noise levels at noise sensitive premises (residences). In saying that, the City should recognise that noise from the batching plant may on occasion be heard at nearby residences during day times when the plant is operating and trucks attend the site. The important consideration is that the noise levels are considered acceptable based on the assigned noise levels calculated for the location".*

Dust
"Strategen considers that the monitoring conditions from SAT 2014 will be sufficient to inform on potential for dust impacts to the residential area to the north of the batching plant site. However, the location of the monitors will not inform on the potential for impacts at the Abel Westchem premises.

The Applicant has agreed to install a fence along the boundary between their premises and the Abel Westchem premises. This will assist to minimise transport of any dust emissions from the batching plant to the Abel Westchem premises. Careful design of the fence is advised to ensure favourable aerodynamics are provided for extreme wind conditions to retain any dust emissions on the batching plant premises."

The matters relating to separation distances and buffers in accordance with the Environmental Protection Agency (EPA) guidelines with respect to the nearby residential area has been address as part of the original SAT approval.
As part of the original SAT process the SAT considered that the 300m-500m could reasonably be varied based on the noise and dust modelling and stringent conditions applied by the SAT.

The adjoining property Abel Westchem was not operational at the time of the initial SAT matter being first heard. As such, the use undertaken by Abel Westchem may be considered a 'sensitive use' in accordance with the EPA separation distance guidelines however is likely to be considered as part of the works approval with the DER.

The City's environmental consultant recommended a wind fence or equivalent barrier along the boundary between the subject property and the Abel Westchem premises, to reduce the potential risk of dust. The applicant has agreed to install this wind fence.

Furthermore, Strategen has advised that *"overall, the information provided by the Applicant and discussions held at mediation serve to support the Applicant's position that the amended design for the proposed concrete batching plant and proposed operating conditions will provide acceptable dust and noise outcomes for the receiving environment. Modelling of dust and noise impacts has suggested that acceptable performance can be achieved, relative to air quality and assigned noise levels at nearest sensitive receptors.*

On that basis, there now appears no impediment from a dust and noise risk perspective to refuse the application for the proposed concrete batching plant.

In reaching that conclusion it is Strategen's opinion that a number of improvements to the proposed reporting of dust monitoring outcomes and the uncertainties in assessment of impacts from the monitoring data, that would assist the City to respond to any issues raised by the community. These are:

- *The Applicant has agreed to provide dust monitoring data from a dust incident to the City upon request. However, unless an incident gives rise of a complaint or complaints to the City, it is unclear how the City would become aware of an incident to generate a request for monitoring data from the Applicant.*
- *As such, Strategen suggest that the Applicant could consider reporting of all dust incidents (as defined as exceedances of the PM10 criteria) as soon as possible to the City, without a request being made by the City.*
- *The use of a 15 minute average PM10 concentration limit of 500 µg/m3 to infer or estimate potential TSP and/or visible dust impacts outside the boundary of the premises presents considerable uncertainty since the exact proportion of PM10 within the TSP/visible dust from the batching plant is not known.*
- *Particle size distribution data that includes <10 micron (PM10) and <50-60 micron (TSP) fractions from raw materials proposed to be used at the premises may serve to reduce the uncertainty associated with the estimation of TSP/visible dust from the PM10 measurements."*

Streetscape
Refer to Item 11.1.10 of the Ordinary Council Meeting held on 26 May 2015 for discussion relating to streetscape.

Amenity of Adjacent Properties
Refer to Item 11.1.10 of the Ordinary Council Meeting held on 26 May 2015 for discussion relating to the impact on the amenity of adjacent properties.

Other Non-Planning Matters
Refer to Item 11.1.10 of the Ordinary Council Meeting held on 26 May 2015 for discussion relating to other non-planning matters.
The officer's recommendation has been amended in light of the additional information provided by the applicant and the City's environmental consultant, Strategen.

OPTIONS

The following options are available to Council:

OPTION		ESTIMATED COST ($)	BENEFIT	RISK
1.	Council approves the amended plans to the approved concrete batching plant with or without conditions.	$0	Nil legal costs for appeal/review associated with the approval. A potential reduction in resources and costs required to ensure compliance with conditions of approval given the proposal demonstrates an improved design to mitigate against identified dust and noise concerns.	Resources and costs involved to ensure compliance with the conditions of approval.
2.	Council refuses the amended plans to the approved concrete batching plant, and substantiates its decision to SAT.	Potentially up to $140,000	Significant cost to defend the Council's decision.	Greater resources and costs involved to ensure compliance with the conditions of the original SAT approval. The City needs to substantiate its decision or the City may be at risk of having costs awarded against it by the SAT.

CONCLUSION

Despite Council's opposition and refusal of a concrete batching plant at the subject site, the SAT has approved this use at the site. This approval is still valid, and the applicant can still proceed with the concrete batching plant accordingly.

The current proposal is an amended design to the approved concrete batching plant, and the SAT is seeking Council's reconsideration of the amended design and not the appropriateness of a concrete batching plant at the site, as this use has already been approved by SAT.

The SAT at its directions hearing held on 31 July 2015 indicated that Council would need to genuinely consider the subject application on its merits or the City may be liable for costs in accordance with Section 87(4)(b) of the *State Administrative Tribunal Act 2004* (WA).

The proposed alterations are considered to improve the applicant's ability to manage dust and noise emissions from the site, given the plant will be mostly enclosed. The amended plans will essentially eliminate the consistent use of front-end loaders which is considered to substantially lower any potential noise impacts.

The original approved SAT application and the amended plans are for a wet-mix plant which is considered to pose less of a risk relating to dust emissions when compared to a dry-mix concrete batching plant. Not only is a wet-mix batching plant considerably better at reducing dust emission than a conventional plant, the amended proposal includes mostly enclosed areas of the process as part of the amended plans. The environmental consultant has advised this process and associated amendments are considered to dramatically reduce impacts relating to dust generation.

The City's officers have considered the additional comments provided by the City's solicitors and environmental consultant and the applicant, and are of the technical view that the amended approval (that complies with applicable conditions) will not have an undue impact on the visual amenity of the surrounding area.

Given the above, it is recommended that Council reconsiders its decision and approves the amended application, subject to appropriate conditions.

FINANCIAL IMPLICATIONS

The financial implications are as noted above.

STRATEGIC LINK

In accordance with the City of Bayswater Strategic Community Plan 2013-2023, the following applies:

Theme: Our Built Environment
Aspiration: We have a well-connected mix of business, residential and community areas, which are high quality and support our thriving community.
Outcome B1: Streetscapes which allow for community interaction in an urban environment.
Outcome B3: High quality built form.

COUNCIL POLICY AND LEGISLATIVE IMPLICATIONS

- *State Administrative Tribunal Act 2004 (WA)*; and
- City of Bayswater Town Planning Scheme No. 24.

VOTING REQUIREMENTS

Simple Majority Required.

ATTACHMENTS

1. Plans for Development - Approved by the SAT on 15 July 2014
2. Plans for Development - Amended
3. Plans for Development - Approved and Amended Overlay
4. Plans for Development - Landscaping
5. Plans - Demonstrating the Enclosed Plant
6. Main Roads NorthLink WA Plan
7. Report on Proposed Concrete Batching Plant (Amended Design) from Environmental Consultant Strategen dated 9 September 2015
8. Submission Tabled 14.9.2015 (Confidential)

OFFICER'S RECOMMENDATION

That Council, in consideration of the additional information provided by the applicant and environmental consultant, approves the revised plans dated 29 January 2015 in relation to the planning approval granted by the State Administrative Tribunal on 15 July 2015 for the proposed concrete batching plant at Lot 2, Nos. 277-279 Collier Road, Bayswater, subject to all conditions and requirements detailed on the previous approval granted 15 July 2014 and the following amended and additional planning conditions:

Additional Conditions

1. Revised plan(s) addressing the following matters to the satisfaction of the City of Bayswater shall be submitted to and approved by the City prior to the lodgement of a building permit application:
   (a) The relocation of the bin store to behind the front setback line.
   (b) The provision of a minimum of 12 truck parking bays.
   (c) The provision of a wind fence along the side boundary adjoining 273-275 Collier Road, Bayswater, with a view of reducing airborne dust particles to the adjoining lot.
2. The wind fence referred to in condition 1(c) shall be constructed prior to commencement of operations and therefore maintained to the satisfaction of the City of Bayswater.
3. Redundant vehicle crossover(s) to be removed and the kerbing, verge and footpath (where relevant) reinstated with grass or landscaping to the satisfaction of the City of Bayswater.
4. All dust emission controls including bag filters on the building ventilation systems, water sprays and sprinklers shall be well maintained to ensure optimal performance at all times.
5. The cement silo filters shall be well maintained to ensure optimal performance at all times.
6. All conveyors and transfer stations are to be covered and belt cleaners maintained to ensure no escape of materials and dust from conveyors.
7. Any stored aggregate or sand outside the building is to be either wetted at all times or covered to prevent wind driven dust erosion.
8. Any material spills outside the buildings are to be immediately wetted prior to removal of the materials.
9. Continuous monitoring of ambient dust levels and wind conditions at the site as per specifications from the SAT (2014) is required for reactive dust management.
10. Landscaping and reticulation shall be completed in accordance with the approved detailed landscape plan prior to occupation of the development and thereafter maintained to the satisfaction of the City of Bayswater.

Amended Conditions

1. Condition 7(i) of the conditions of the State Administrative Tribunal's approval be amended to include the following dot-point:
   - The Environmental Management Plan (EMP) shall include a clause requiring the proponent to report all dust incidents that exceed the PM10 criteria to the City of Bayswater within 24 hours of the incident, including a complete remediation report.
2. Condition 24 be amended as follows:
   24. Operating hours are to be restricted to 6:00am to 6:00pm Monday to Saturday (public holidays excluded), however no front end loader or truck deliveries may operate prior to 7:00am.

3. Condition 26 be amended as follows:

   26. The owner, of the applicant on behalf of the owner, shall comply with the City of Bayswater policy relating to Percent for Public Art, and provide an art project for a minimum value of one per cent ($60,000) of the estimated total cost of the development ($6,000,000). Prior to the lodgement of a building permit application, the owner/applicant shall submit details to the City, including plans of the artwork, its cost and construction, and other matters relating to the artwork's on-going maintenance and acknowledgements in accordance with the City's Percent for Public Art Policy. Upon the City receiving this information, the art project shall be presented to council for its consideration and determination. The approved public art shall be installed prior to the submission of an Occupancy Permit for the subject development, and thereafter maintained at the cost of the owner/applicant.

Advice Notes

1. All other conditions and requirements detailed on the pervious approval granted by the State Administrative Tribunal on 15 July 2015 shall remain unless altered by the application.

COMMITTEE RECOMMENDATION TO COUNCIL
That this item be deferred to the Ordinary Council Meeting.

ADDENDUM - ORDINARY COUNCIL MEETING - 22 SEPTEMBER 2015

Additional Information
A query has been received as to whether the City has recourse to the Supreme Court in terms of the State Administrative Tribunal's (SAT) approval of the original application and the amended plans in the event approval is issued for the concrete batching plant.

The City obtained advice from its solicitors and the following information is provided:

Right of Appeal
- *An appeal against a decision by the SAT can only be brought on a question of law in accordance with section 105(2) of the State Administrative Tribunal Act 2004.*
- *The original SAT approval was considered and determined on a range of matters including orderly and proper planning, impact on amenity, buffer distances, health impacts and the 'precautionary principle'.*
- *It is considered that the SAT review and approval did not generate a question of law, which an appeal to the Supreme Court could be based.*

Time Limit
- *In the event an appeal was pursued to the Supreme Court, the applicant is required to lodge such action within 28 days of the date on which the SAT's decision was given that is by 25 February 2014.*
- *An extension of time may be given by the Supreme Court, however it is considered that there is no likelihood of this appeal period being extended given the delay of nearly 19 months is considered too great and there is no arguable question of law.*

Cost of Appeal
- *Generally the minimum cost of a Supreme Court appeal is approximately $25,000 and can scale to approximately $100,000 depending on the type of issues, the length of any hearing and whether Senior Counsel is required.*

- *Within the Supreme Court, the costs are almost inevitably ordered to a successful party, and costs to be awarded are based on a scale which could be a recovery of 50% - 75% of the other party's legal costs associated with the appeal.*

Other Legal Remedies

- *The Supreme Court can determine other legal remedies such as a prerogative writ (for example a writ of certiorari or mandamus) or an injunction.*
- *A writ of certiorari may be sought to quash a decision made by the SAT should the decision not be made within its jurisdiction or in accordance with principles of procedural fairness.*
- *An injunction may be sought for very unusual cases such as, to prevent the SAT from making a decision where it may affect other legal rights.*
- *Prerogative writs involving the SAT are rare.*
- *It is considered that there is no basis for either a prerogative writ or injunction against the SAT's approval. Furthermore, there is a 6 month limitation period relating to the making of a prerogative writ.*

Current Proceeding

- *There is currently no right of appeal with the SAT for the amended application given the application is yet to be determined.*
- *It is considered that there is currently no legal issue which may arise which would result in a right of appeal, prerogative writ or injunction.*

Recommendation Implications
In light of the above, the officer's recommendation remains unchanged.

COUNCIL RESOLUTION

That Council, in consideration of the additional information provided by the applicant and environmental consultant, refuses the revised plans dated 29 January 2015 in relation to the planning approval granted by the State Administrative Tribunal on 15 July 2015 for the proposed concrete batching plant at Lot 2, 277-279 Collier Road, Bayswater, for the following reasons:

1. **The amended proposal does not provide sufficient information demonstrating satisfactory control of dust emissions to not unduly impact the surrounding residential area and Joan Rycroft reserve, in relation to the following matters:**
   - **(a) The controls and maintenance of the cement silo filters.**
   - **(b) The control and maintenance of the building ventilation systems, water sprays and sprinklers.**
   - **(c) The process of ensuring the stored aggregate and sand outside the building is wetted or covered at all times to prevent wind driven dust erosion.**
   - **(d) The reporting of dust incidents as soon as possible to the City of Bayswater and associated remediation works.**
2. **The amended proposal is considered to be generally not consistent with clause 3.6 of the City of Bayswater Town Planning Scheme No. 24 relating to matters to be considered by the City on planning application, more specifically:**
   - **(a) Clause 3.6(i) - *the compatibility of a use or development with its setting*.**
   - **(b) Clause 3.6(n) - *the preservation of the amenity of the locality*.**
   - **(c) Clause 3.6 (y) - *any relevant submissions received on the application*.**

3. **The amended proposal is considered to be not consistent with clause 1.6(b) objective of the City of Bayswater Town Planning Scheme No. 24 t*o "secure the amenity, health and convenience of the Scheme Area and inhabitants thereof*'.**
4. **The amended proposal will unduly impact on the amenity of the locality.**
5. **The amended proposal will unduly impact on the operations of adjoining businesses.**
6. **The amended proposal is not consistent with proper and orderly planning of the locality.**

CR TERRY KENYON, JP MOVED, CR CHRIS CORNISH SECONDED

CARRIED: 6/3

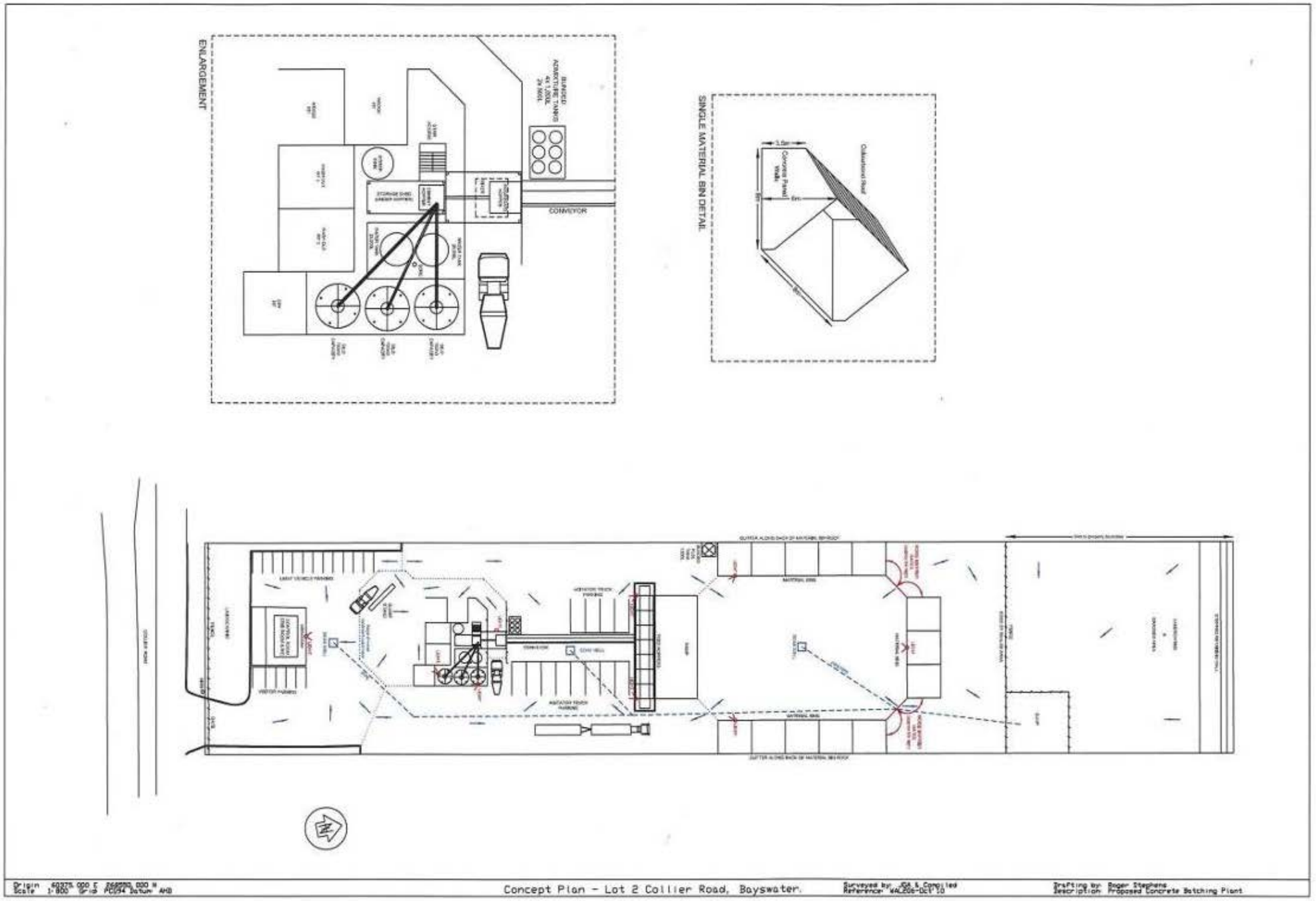
FOR VOTE ***Cr Terry Kenyon JP, Cr Barry McKenna, Cr Martin Toldo, JP, Cr Mike Anderton, JP, Cr Chris Cornish, and Cr Alan Radford.***

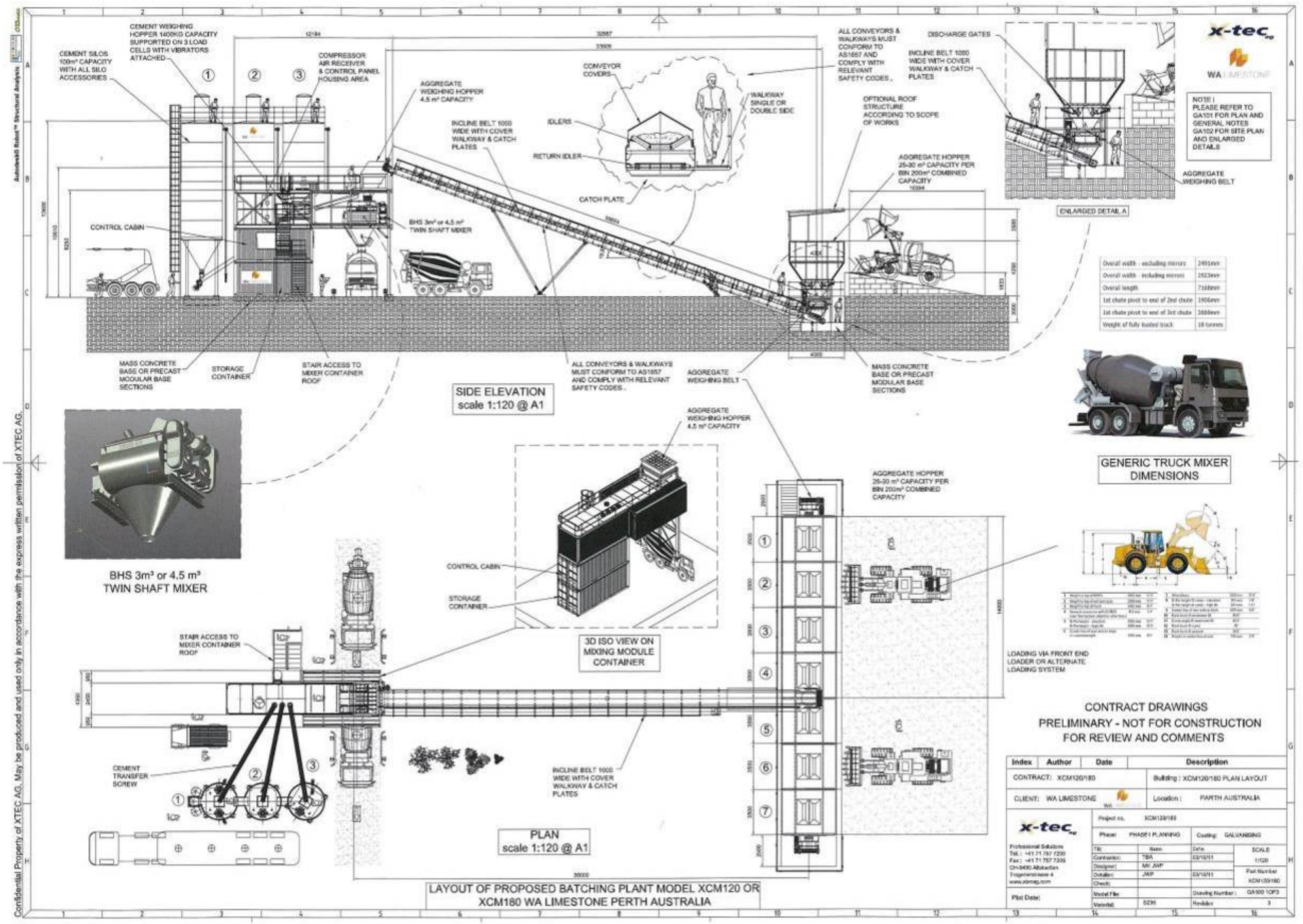
AGAINST VOTE - ***Cr Sylvan Albert, Cr Stephanie Coates, and Cr Michelle Sutherland.***

At 8:49pm, Cr Mike Sabatino returned to the meeting.

Attachment 1

Plans for Development - Approved by the SAT on 15 July 2014




CEMENT WEIGHING HOPPER 1400KG CAPACITY SUPPORTED ON 3 LOAD CELLS WITH VIBRATORS ATTACHED
CEMENT SILOS 100m³ CAPACITY WITH ALL SILO ACCESSORIES
COMPRESSOR AIR RECEIVER & CONTROL PANEL HOUSING AREA
AGGREGATE WEIGHING HOPPER 4.5 m³ CAPACITY
INCLINE BELT 1000 WIDE WITH COVER WALKWAY & CATCH PLATES
CONVEYOR COVERS
IDLERS
RETURN IDLER
CATCH PLATE
WALKWAY SINGLE OR DOUBLE SIDE
ALL CONVEYORS & WALKWAYS MUST CONFORM TO AS1657 AND COMPLY WITH RELEVANT SAFETY CODES.
DISCHARGE GATES
INCLINE BELT 1000 WIDE WITH COVER WALKWAY & CATCH PLATES
OPTIONAL ROOF STRUCTURE ACCORDING TO SCOPE OF WORKS
AGGREGATE HOPPER 25-30 m³ CAPACITY PER BIN 200m³ COMBINED CAPACITY
AGGREGATE WEIGHING BELT
ENLARGED DETAIL A
NOTE ! PLEASE REFER TO GA101 FOR PLAN AND GENERAL NOTES GA102 FOR SITE PLAN AND ENLARGED DETAILS
CONTROL CABIN
BHS 3m³ or 4.5 m³ TWIN SHAFT MIXER
MASS CONCRETE BASE OR PRECAST MODULAR BASE SECTIONS
STORAGE CONTAINER
STAIR ACCESS TO MIXER CONTAINER ROOF
ALL CONVEYORS & WALKWAYS MUST CONFORM TO AS1657 AND COMPLY WITH RELEVANT SAFETY CODES.
AGGREGATE WEIGHING BELT
MASS CONCRETE BASE OR PRECAST MODULAR BASE SECTIONS
SIDE ELEVATION scale 1:120 @ A1
Overall width - excluding mirrors 2481mm
Overall width - including mirrors 2523mm
Overal length 7168mm
1st chute pivot to end of 2nd chute 1906mm
1st chute pivot to end of 3rd chute 3686mm
Weight of fully loaded truck 18 tonnes
GENERIC TRUCK MIXER DIMENSIONS
BHS 3m³ or 4.5 m³ TWIN SHAFT MIXER
AGGREGATE WEIGHING HOPPER 4.5 m³ CAPACITY
CONTROL CABIN
STORAGE CONTAINER
3D ISO VIEW ON MIXING MODULE CONTAINER
AGGREGATE HOPPER 25-30 m³ CAPACITY PER BIN 200m³ COMBINED CAPACITY
LOADING VIA FRONT END LOADER OR ALTERNATE LOADING SYSTEM
STAIR ACCESS TO MIXER CONTAINER ROOF
CEMENT TRANSFER SCREW
INCLINE BELT 1000 WIDE WITH COVER WALKWAY & CATCH PLATES
PLAN scale 1:120 @ A1
LAYOUT OF PROPOSED BATCHING PLANT MODEL XCM120 OR XCM180 WA LIMESTONE PERTH AUSTRALIA
CONTRACT DRAWINGS
PRELIMINARY - NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENTS
Index Author Date Description
CONTRACT: XCM120/180
Building : XCM120/180 PLAN LAYOUT
CLIENT: WA LIMESTONE
Location : PERTH AUSTRALIA
Project no. XCM120/180
Phase: PHASE1 PLANNING
Coating: GALVANISING
Professional Solutions
Tel.: +41 71 757 7200
Fax.: +41 71 757 7209
CH-9400 Altstaetten
Triggenriedstrasse 4
www.xtecag.com
Title
Name
Date
SCALE 1:120
Contractor: TBA 03/10/11
Designer: MK JWP
Detailer: JWP 03/10/11
Check:
Part Number XCM120/180
Plot Date:
Model File:
Drawing Number: GA100 10P3
Version: 5236
Revision 3
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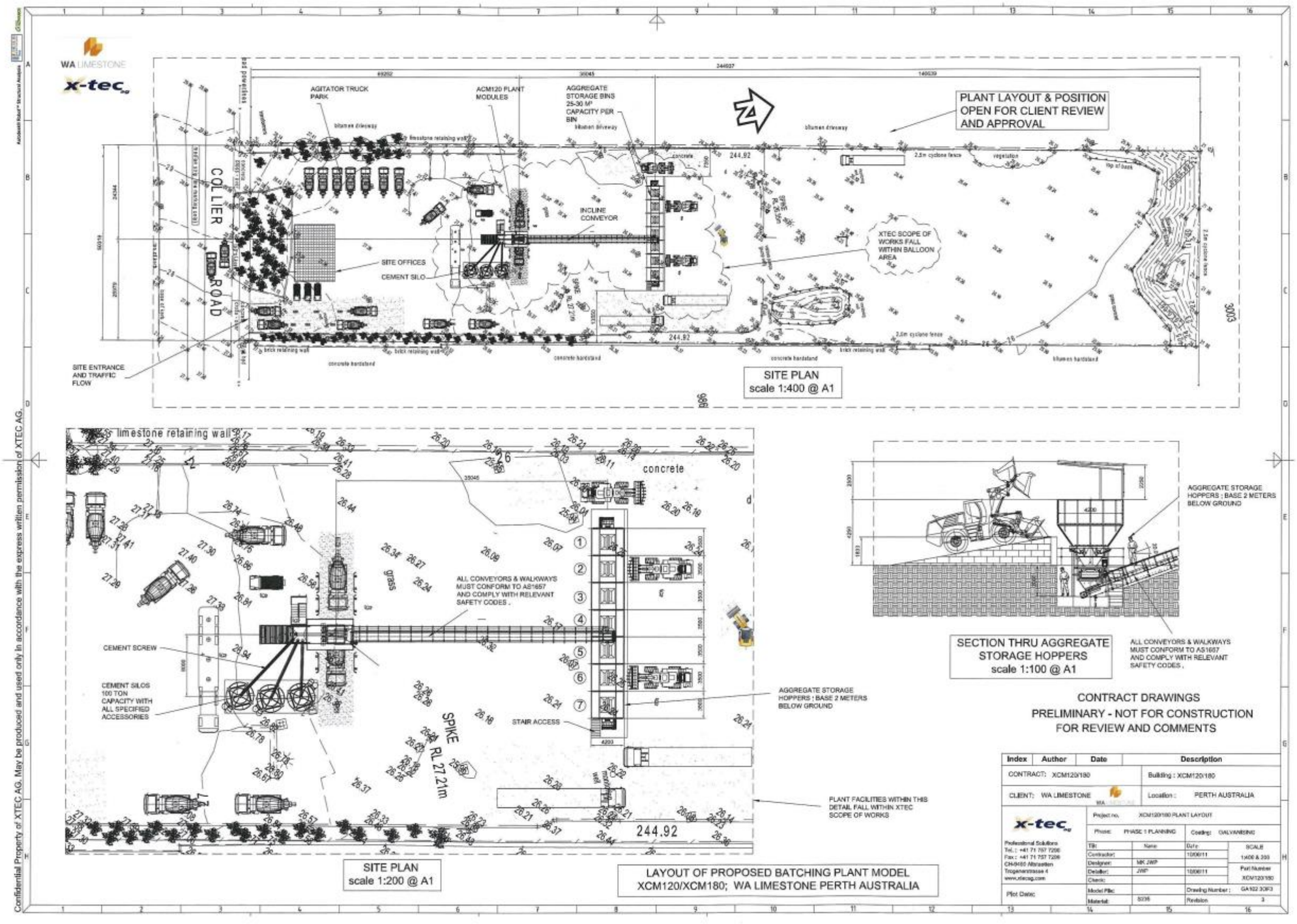
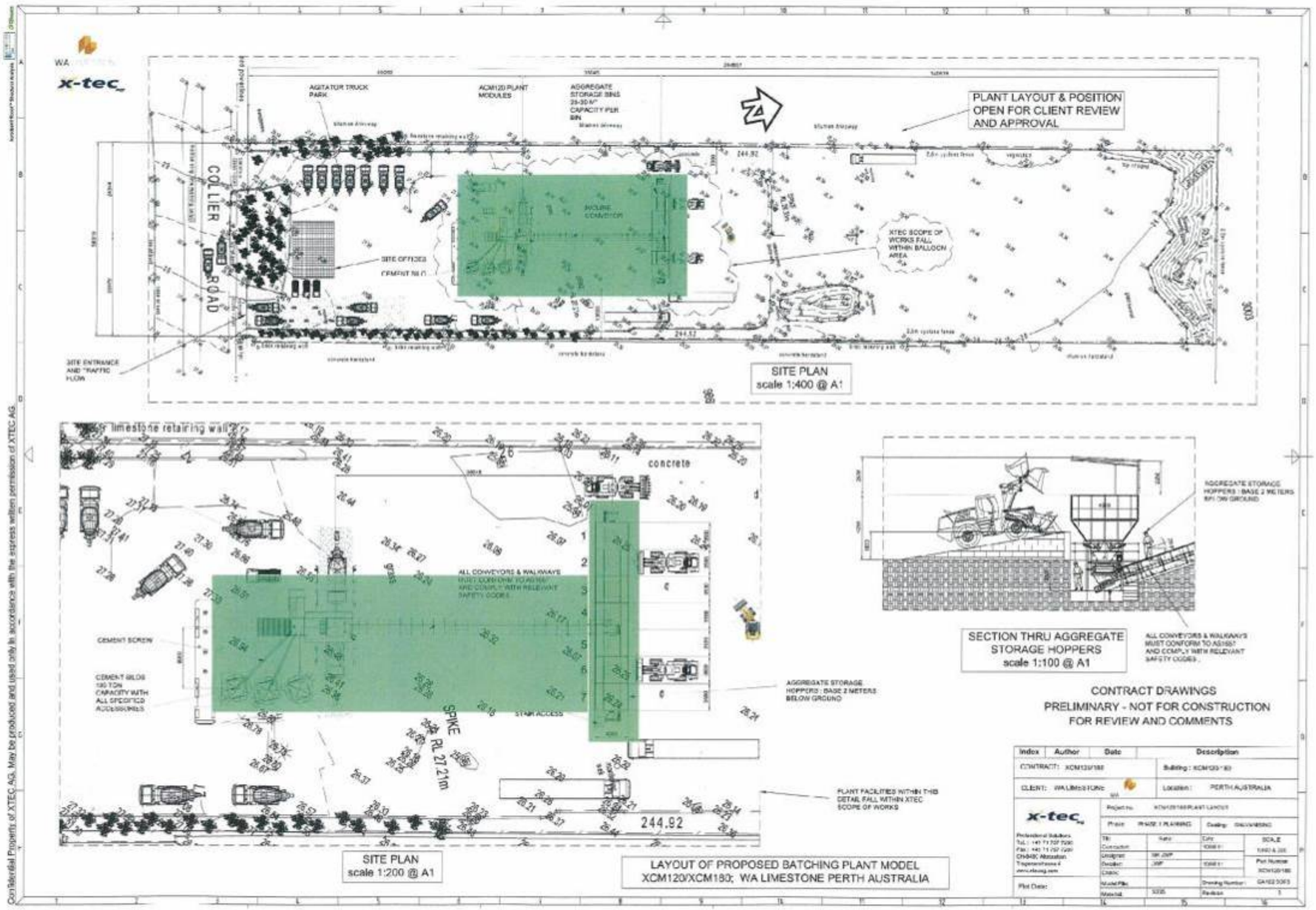
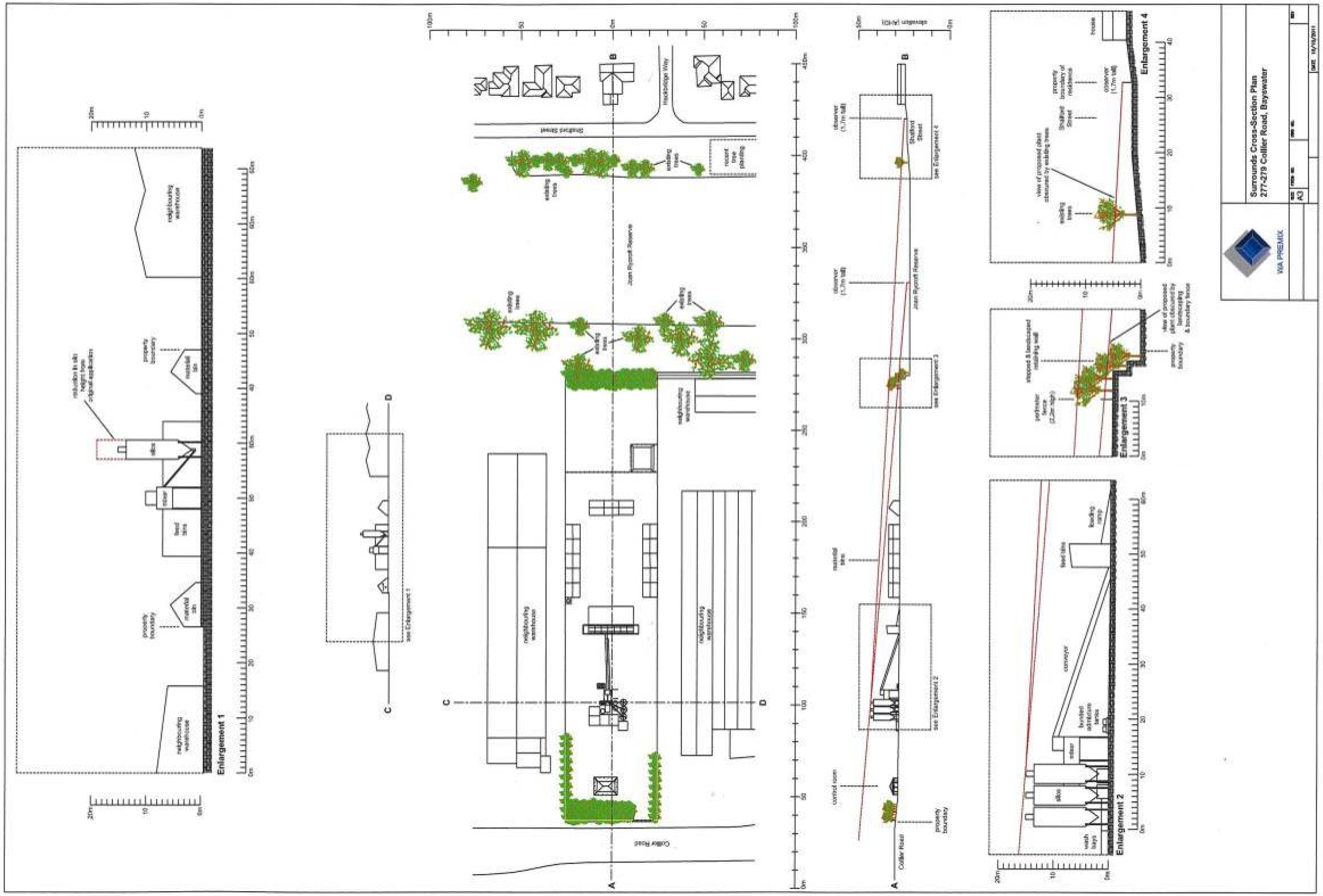
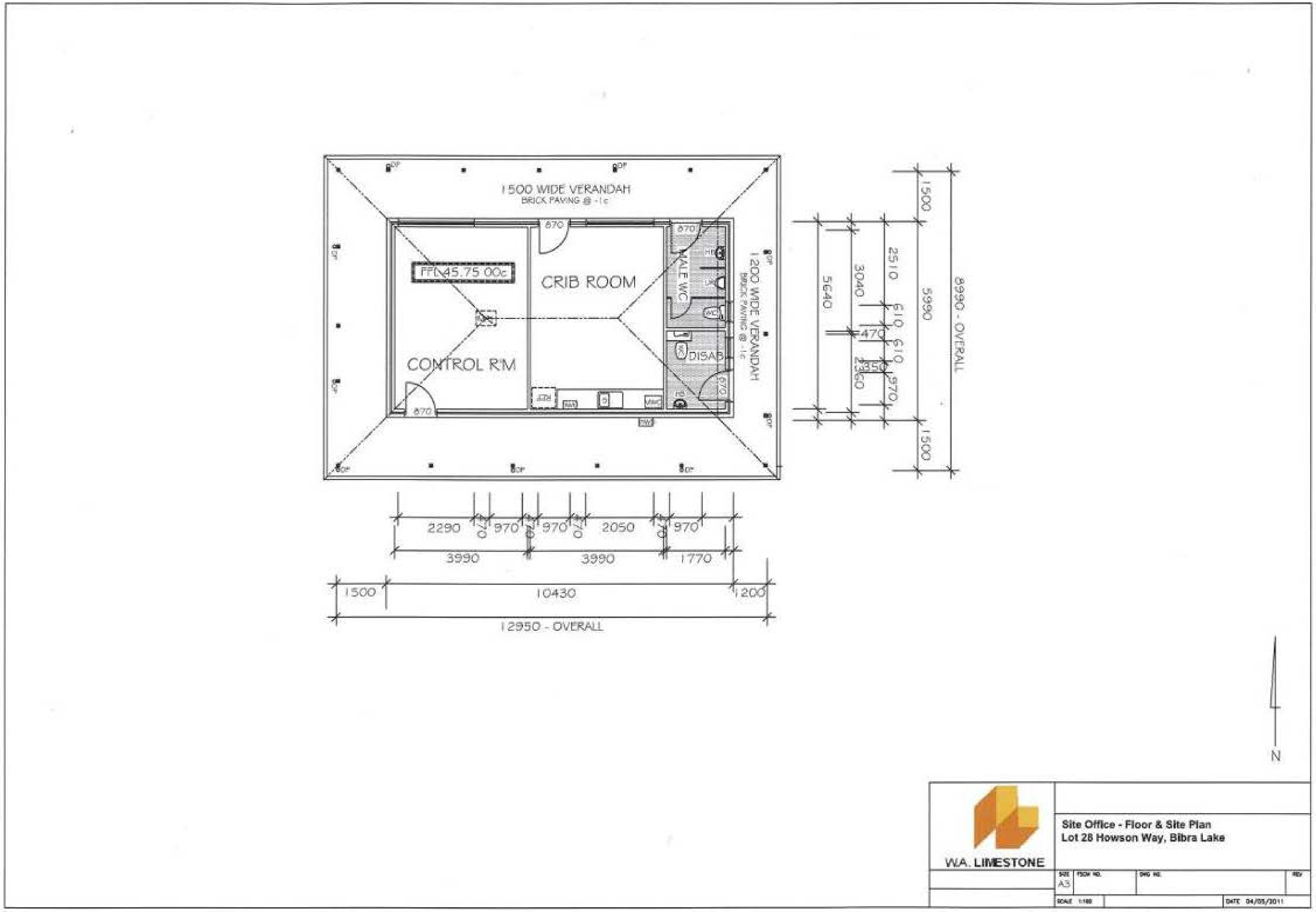
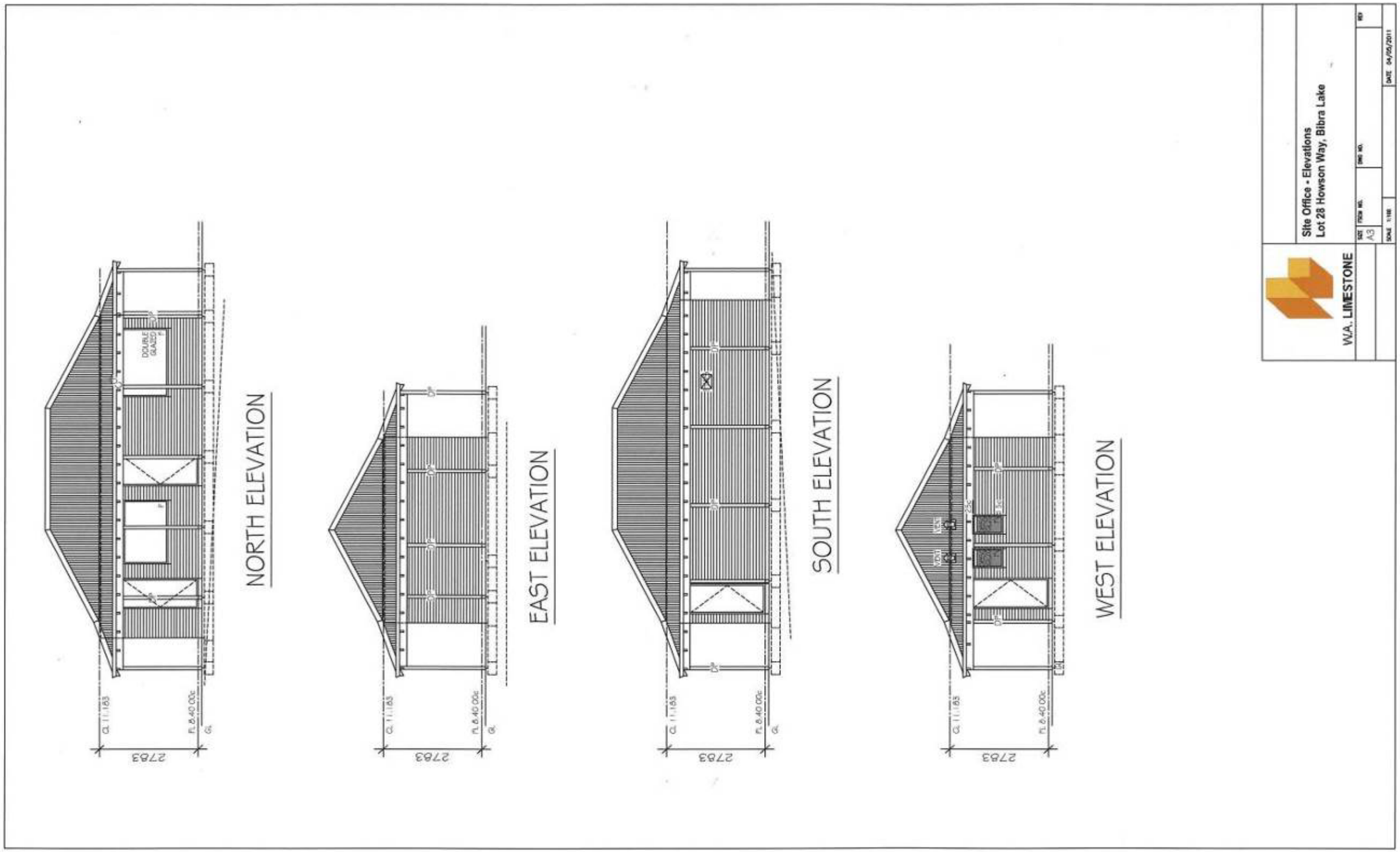

WA LIMESTONE
x-tec
AGITATOR TRUCK PARK
ACM120 PLANT MODULES
AGGREGATE STORAGE BINS 25-30 M³ CAPACITY PER BIN
PLANT LAYOUT & POSITION OPEN FOR CLIENT REVIEW AND APPROVAL
COLLIER ROAD
INCLINE CONVEYOR
SITE OFFICES
CEMENT SILO
XTEC SCOPE OF WORKS FALL WITHIN BALLOON AREA
SITE ENTRANCE AND TRAFFIC FLOW
SITE PLAN
scale 1:400 @ A1
limestone retaining wall
concrete
ALL CONVEYORS & WALKWAYS MUST CONFORM TO AS1657 AND COMPLY WITH RELEVANT SAFETY CODES .
CEMENT SCREW
CEMENT SILOS 100 TON CAPACITY WITH ALL SPECIFIED ACCESSORIES
SPIKE RL 27.21m
STAIR ACCESS
AGGREGATE STORAGE HOPPERS : BASE 2 METERS BELOW GROUND
PLANT FACILITIES WITHIN THIS DETAIL FALL WITHIN XTEC SCOPE OF WORKS
244.92
SECTION THRU AGGREGATE STORAGE HOPPERS
scale 1:100 @ A1
CONTRACT DRAWINGS
PRELIMINARY - NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENTS
Index Author Date Description
CONTRACT: XCM120/180
Building : XCM120/180
CLIENT: WA LIMESTONE
Location : PERTH AUSTRALIA
Project no. XCM120/180 PLANT LAYOUT
Phase: PHASE 1 PLANNING
Coating: GALVANISING
SCALE 1:400 & 200
Part Number XCM120/180
Drawing Number : GA122 30F3
Revision 3
LAYOUT OF PROPOSED BATCHING PLANT MODEL XCM120/XCM180; WA LIMESTONE PERTH AUSTRALIA
Confidential Property of XTEC AG. May be produced and used only in accordance with the express written permission of XTEC AG.


PLANT LAYOUT & POSITION OPEN FOR CLIENT REVIEW AND APPROVAL
AGITATOR TRUCK PARK
ACM120 PLANT MODULES
AGGREGATE STORAGE BINS 20-30 M³ CAPACITY PER BIN
COLLIER ROAD
INCLINE CONVEYOR
SITE OFFICES
CEMENT silo
XTEC SCOPE OF WORKS FALL WITHIN BALLOON AREA
SITE ENTRANCE AND TRAFFIC FLOW
SITE PLAN
scale 1:400 @ A1
limestone retaining wall
concrete
ALL CONVEYORS & WALKWAYS MUST CONFORM TO AS1557 AND COMPLY WITH RELEVANT SAFETY CODES
CEMENT SCREW
CEMENT SILOS 180 TON CAPACITY WITH ALL SPECIFIED AUGERS/VALVES
AGGREGATE STORAGE HOPPERS : BASE 2 METERS BELOW GROUND
STAIR ACCESS
SPIKE RL 27.21m
244.92
PLANT FACILITIES WITHIN THIS DETAIL FALL WITHIN XTEC SCOPE OF WORKS
SITE PLAN
scale 1:200 @ A1
AGGREGATE STORAGE HOPPERS : BASE 2 METERS BELOW GROUND
SECTION THRU AGGREGATE STORAGE HOPPERS
scale 1:100 @ A1
ALL CONVEYORS & WALKWAYS MUST CONFORM TO AS1557 AND COMPLY WITH RELEVANT SAFETY CODES.
CONTRACT DRAWINGS
PRELIMINARY - NOT FOR CONSTRUCTION
FOR REVIEW AND COMMENTS
Index
Author
Date
Description
CONTRACT: XCM120/180
Building : XCM120/180
CLIENT: WA LIMESTONE
Location : PERTH AUSTRALIA
x-tec
LAYOUT OF PROPOSED BATCHING PLANT MODEL XCM120/XCM180; WA LIMESTONE PERTH AUSTRALIA
Considered Property of XTEC AG. May be produced and used only in accordance with the express written permission of XTEC AG

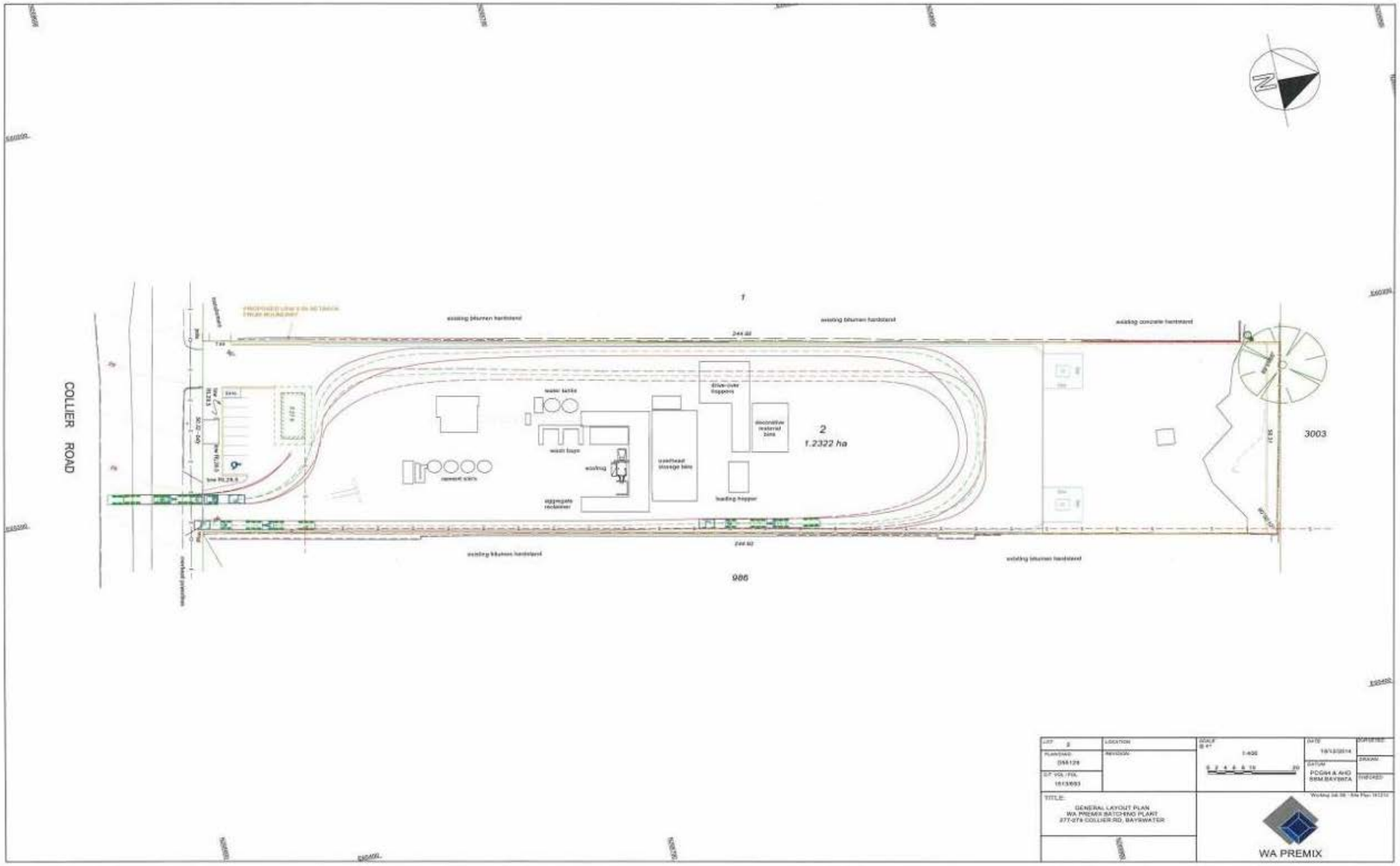

Surrounds Cross-Section Plan
277-279 Collier Road, Bayswater
WA PREMIX
Enlargement 1
Enlargement 2
Enlargement 3
Enlargement 4
Joan Rycroft Reserve
Collier Road
Shalford Street
Hackbridge Way
neighbouring warehouse

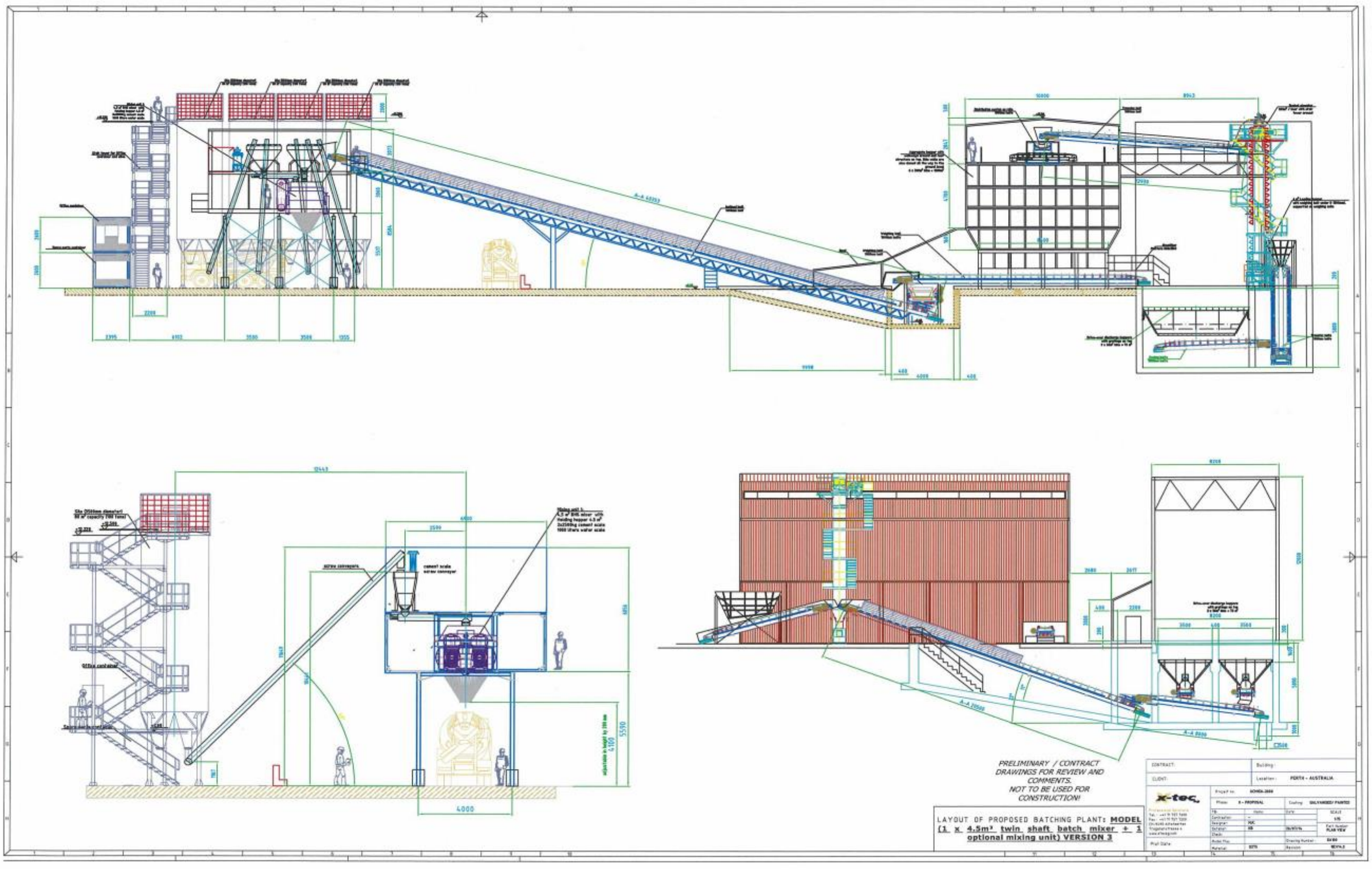

1500 WIDE VERANDAH
BRICK PAVING @ -1c
CRIB ROOM
CONTROL R'M
MALE WC
DISAB
1200 WIDE VERANDAH
12950 - OVERALL
8990 - OVERALL
N
W.A. LIMESTONE
Site Office - Floor & Site Plan
Lot 28 Howson Way, Bibra Lake

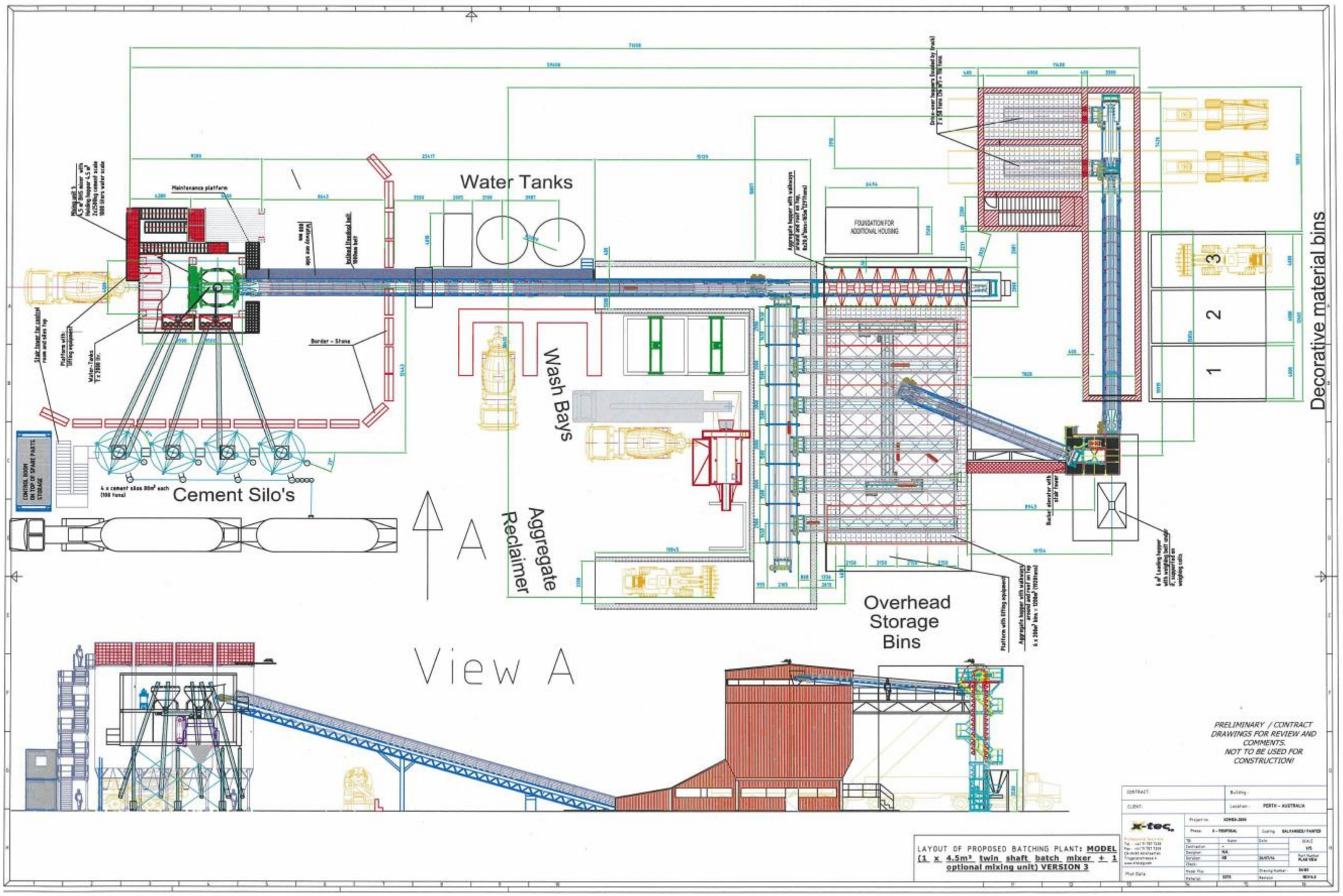

Site Office - Elevations
Lot 28 Howson Way, Bibra Lake
W.A. LIMESTONE
SIZE A3
SCALE 1:100
DATE 04/05/2011
NORTH ELEVATION
EAST ELEVATION
SOUTH ELEVATION
WEST ELEVATION
DOUBLE GLAZED
2783

Attachment 2

Plans for Development - Amended

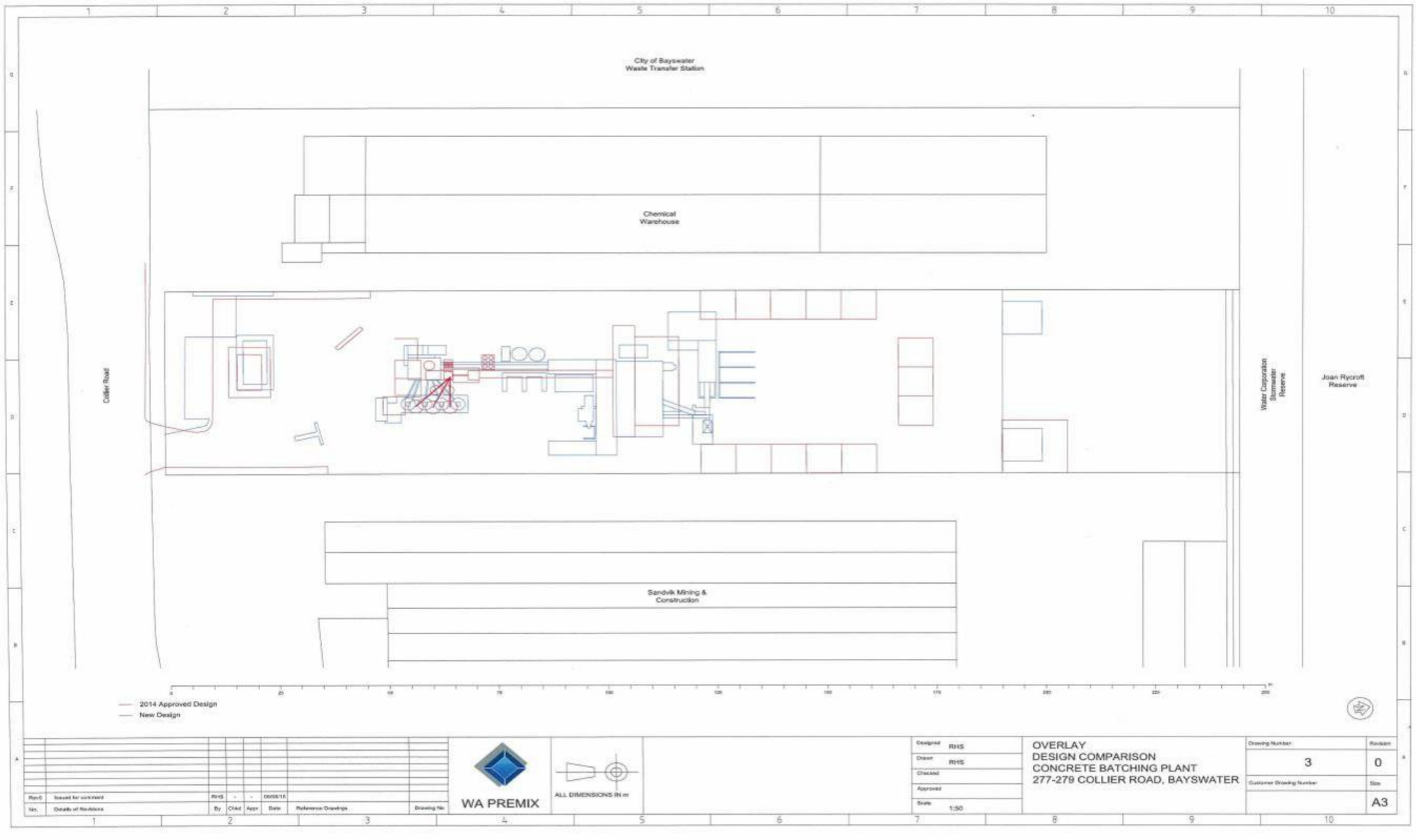


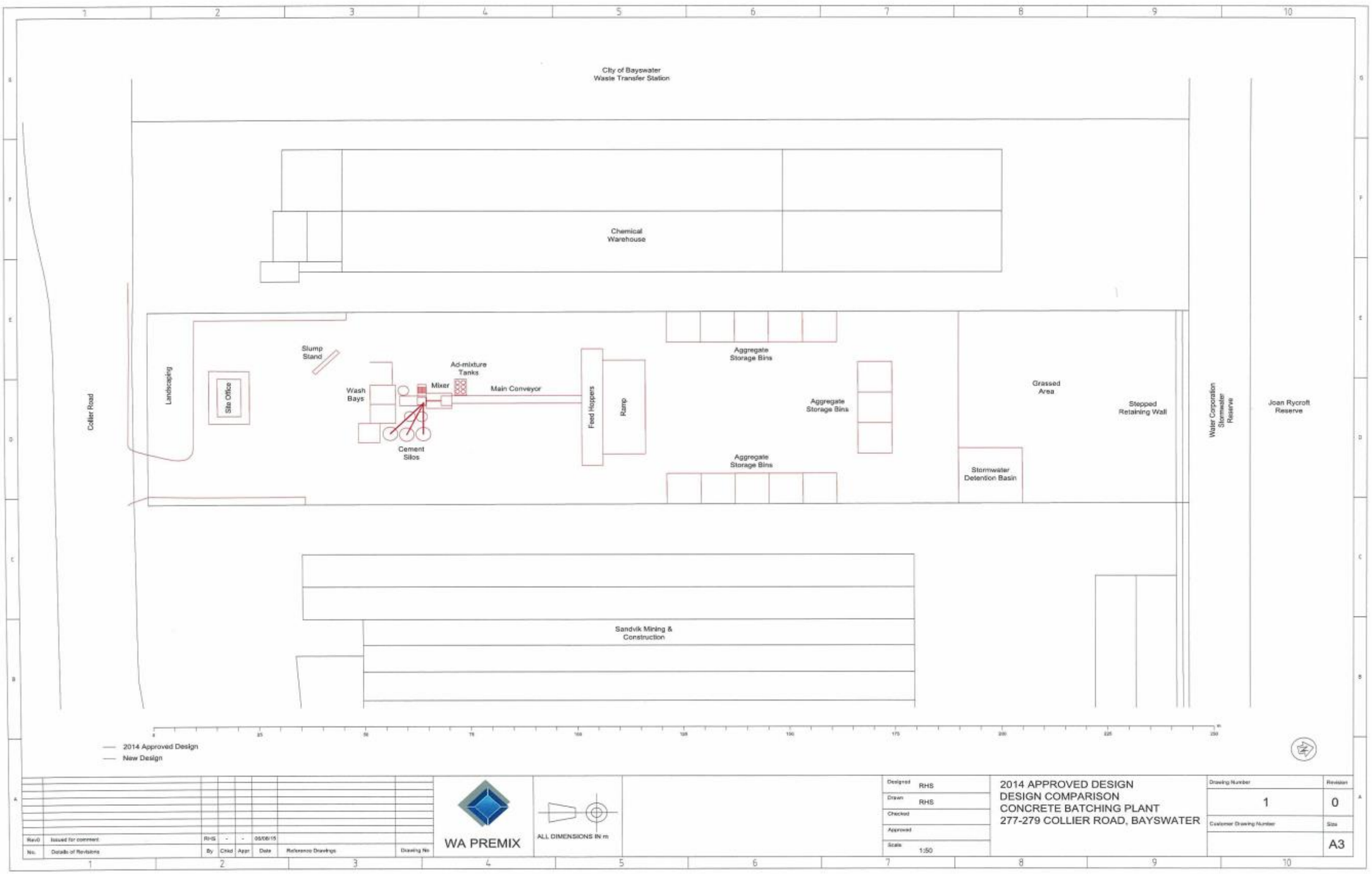

PRELIMINARY / CONTRACT DRAWINGS FOR REVIEW AND COMMENTS. NOT TO BE USED FOR CONSTRUCTION!
LAYOUT OF PROPOSED BATCHING PLANT: MODEL (1 x 4.5m³ twin shaft batch mixer + 1 optional mixing unit) VERSION 3
PERTH - AUSTRALIA
x-tec

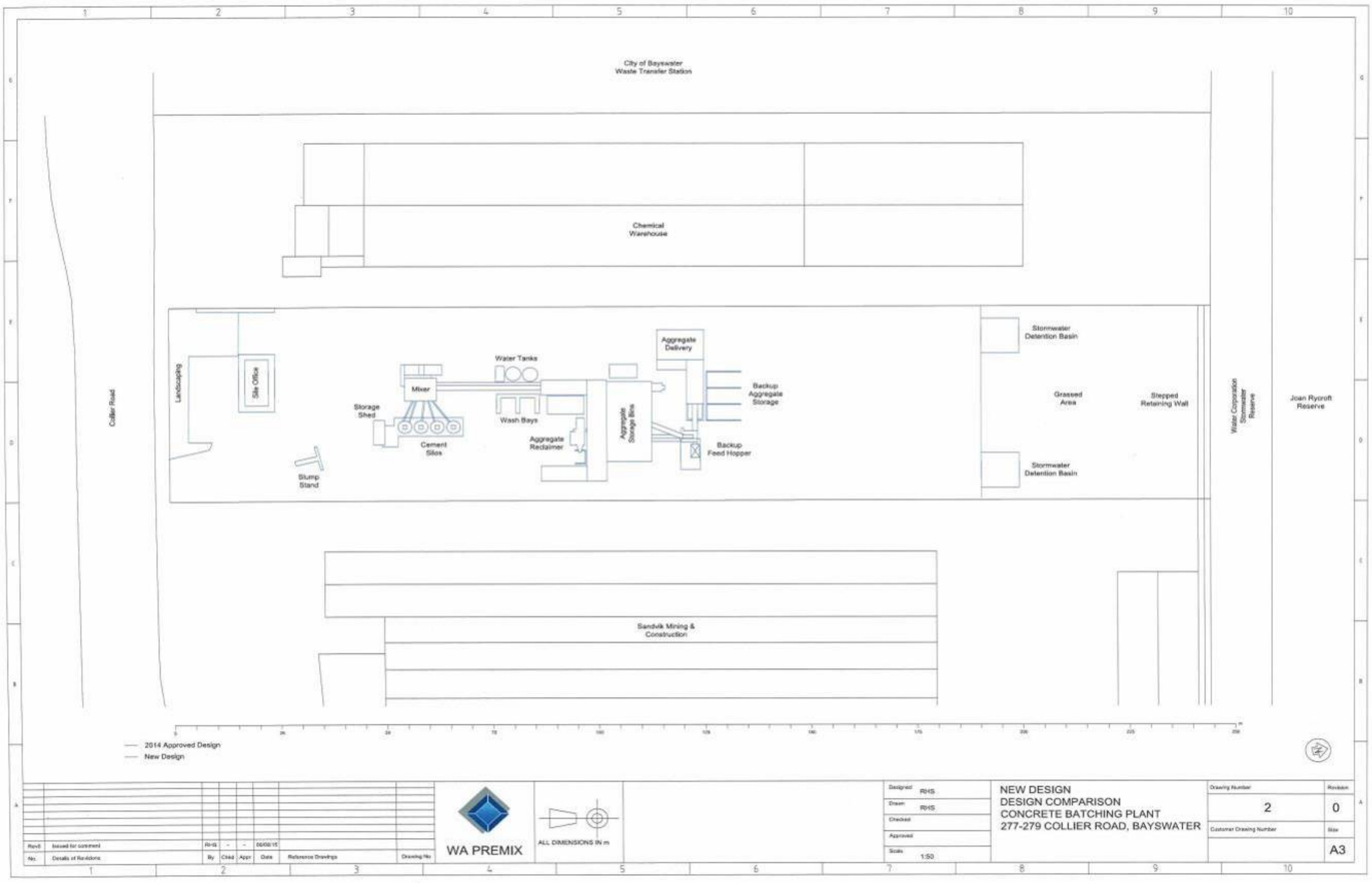

Water Tanks
Maintenance platform
Border - Stone
Wash Bays
Aggregate Reclaimer
FOUNDATION FOR ADDITIONAL HOUSING
Decorative material bins
1
2
3
Cement Silo's
Overhead Storage Bins
A
View A
PRELIMINARY / CONTRACT DRAWINGS FOR REVIEW AND COMMENTS. NOT TO BE USED FOR CONSTRUCTION!
LAYOUT OF PROPOSED BATCHING PLANT: MODEL (1 x 4.5m³ twin shaft batch mixer + 1 optional mixing unit) VERSION 3

Attachment 3

Plans for Development - Approved and Amended
Overlay




City of Bayswater
Waste Transfer Station
Chemical
Warehouse
Collier Road
Landscaping
Site Office
Slump
Stand
Wash
Bays
Ad-mixture
Tanks
Mixer
Main Conveyor
Cement
Silos
Feed Hoppers
Ramp
Aggregate
Storage Bins
Aggregate
Storage Bins
Aggregate
Storage Bins
Grassed
Area
Stepped
Retaining Wall
Stormwater
Detention Basin
Water Corporation
Stormwater
Reserve
Joan Rycroft
Reserve
Sandvik Mining &
Construction
2014 Approved Design
New Design
WA PREMIX
ALL DIMENSIONS IN m
Designed RHS
Drawn RHS
Checked
Approved
Scale 1:50
2014 APPROVED DESIGN
DESIGN COMPARISON
CONCRETE BATCHING PLANT
277-279 COLLIER ROAD, BAYSWATER
Drawing Number 1
Revision 0
Customer Drawing Number
Size A3
Rev0 Issued for comment RHS - - 05/08/15
No. Details of Revisions By Chkd Appr Date Reference Drawings Drawing No


City of Bayswater
Waste Transfer Station
Chemical
Warehouse
Collier Road
Landscaping
Site Office
Mixer
Storage
Shed
Cement
Silos
Water Tanks
Wash Bays
Aggregate
Reclaimer
Aggregate
Storage Bins
Aggregate
Delivery
Backup
Aggregate
Storage
Backup
Feed Hopper
Slump
Stand
Stormwater
Detention Basin
Grassed
Area
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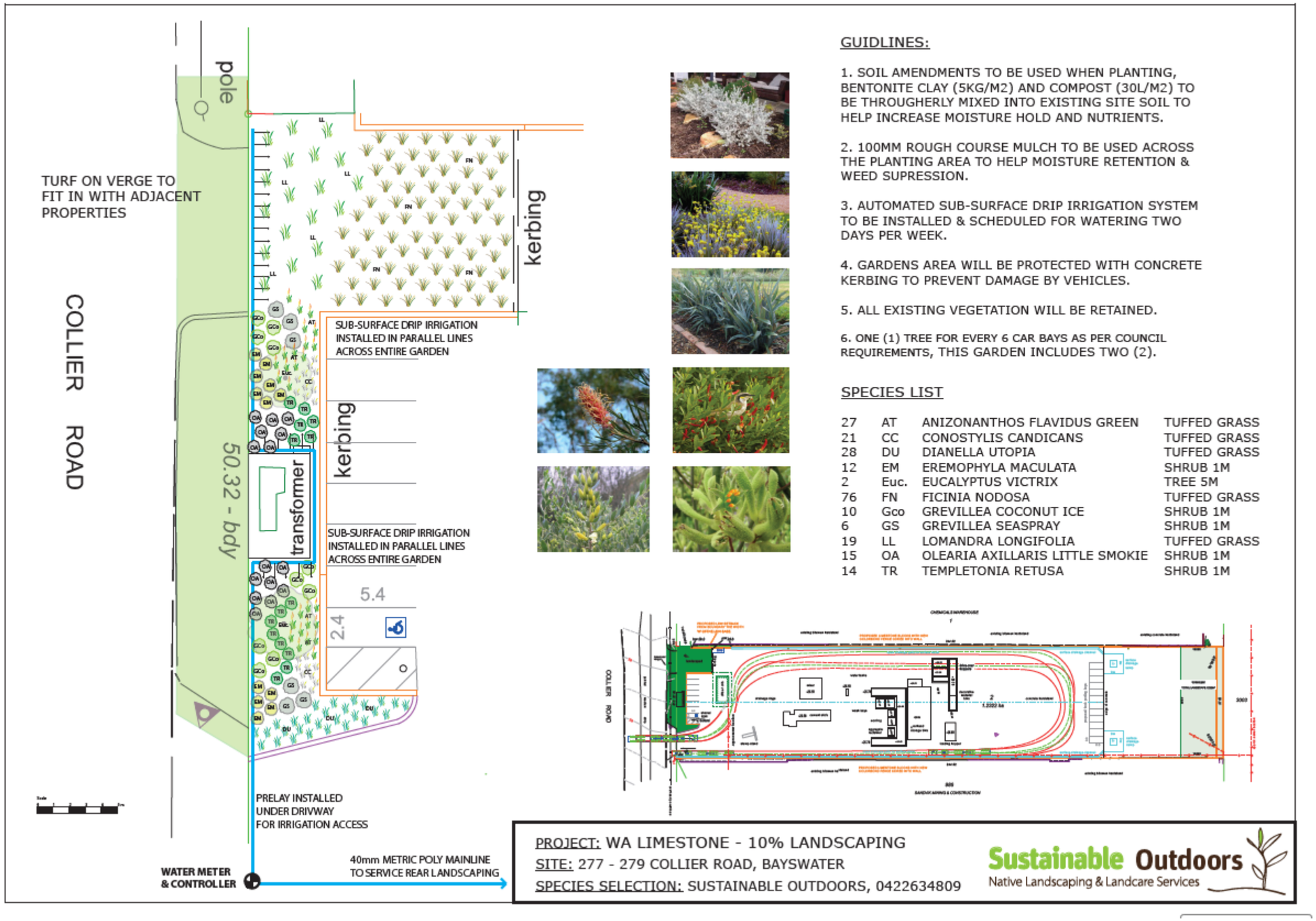
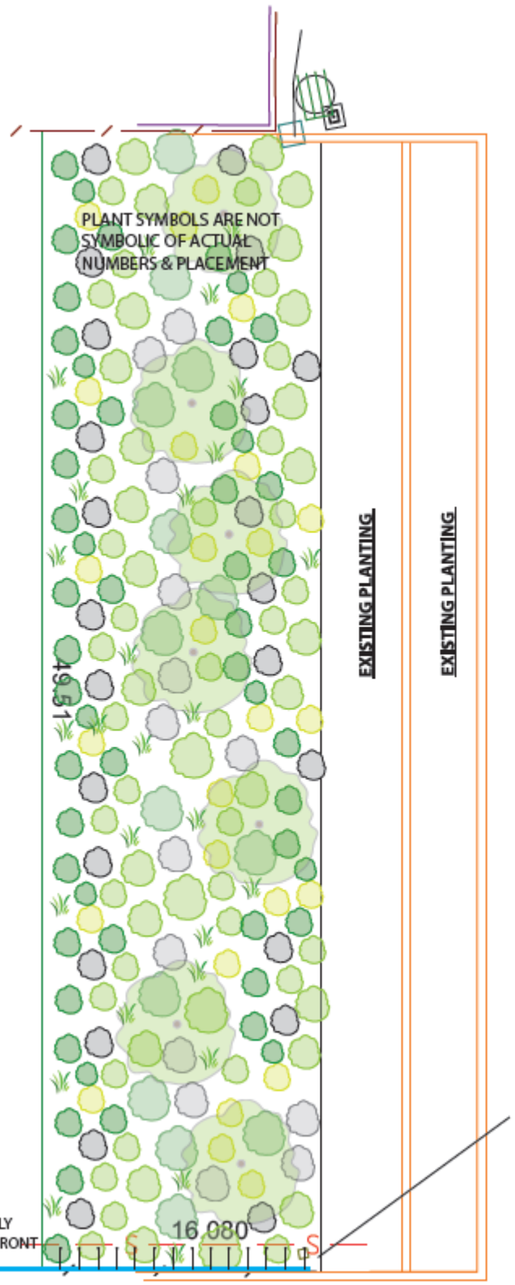
2014 Approved Design
New Design
WA PREMIX
ALL DIMENSIONS IN m
Designed RHS
Drawn RHS
Checked
Approved
Scale 1:50
NEW DESIGN
DESIGN COMPARISON
CONCRETE BATCHING PLANT
277-279 COLLIER ROAD, BAYSWATER
Drawing Number 2
Revision 0
Customer Drawing Number
Size A3
Rev0 Issued for comment
No. Details of Revisions

Attachment 4 Landscaping





GUIDLINES:

1. SOIL AMENDMENTS TO BE USED AROUND NEW SEEDLINGS, BENTONITE CLAY (5KG/M2) AND SOIL IMPROVER (30L/M2) TO BE MIXED INTO EXISTING SITE SOIL TO HELP INCREASE THE SUCCESS RATE.

2. 100MM ROUGH COURSE MULCH TO BE USED ACROSS THE PLANTING AREA TO INCREASE MOISTURE RETENTION & WEED SUPRESSION.

3. AUTOMATED SUB-SURFACE DRIP IRRIGATION SYSTEM TO BE INSTALLED & SCHEDULED FOR WATERING TWO DAYS PER WEEK UNTIL PLANT ESTABLISHED.

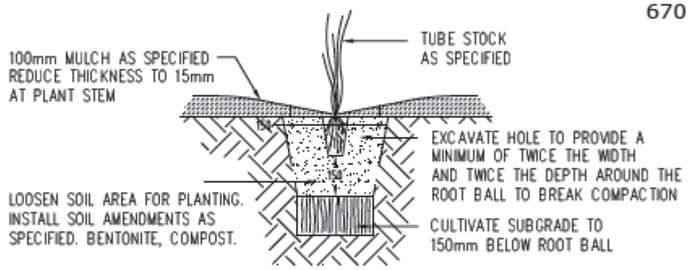
4. PLANTING TO BE IN ACCORDANCE TO THE TYPICAL TUBE STOCK PLANTING DETAIL BELOW, SPECIES MIXED THROUGHOUT PLANTING AREA.

5. ALL EXISTING VEGETATION WILL BE RETAINED.

SPECIES LIST REVEGETATION STYLE PLANTING:

50	ANIGOZANTHOS FLAVIDUS GREEN
50	CALOTHAMNUS QUADRIFIDUS
50	CONOSTYLIS CANDICANS
10	CORYMBIA MARGINATA
50	EREMOPHYLA MACULATA
10	EUCALYPTUS FICIFOLIA
50	FICINIA NODOSA
50	GREVILLEA SEASPRAY
50	GUICHENOTIA MACRANTHA
50	HAKEA PROSTRATA
50	HYPOCALYMMA AUGUSTIFOLIUM
50	KUNZEA BAXTERI
50	LEPTOSPERMUM GLADIATUM
50	OLEARIA AXILARIS
50	TEMPLETONIA RETUSA

670 Total TUBE STOCK Plants

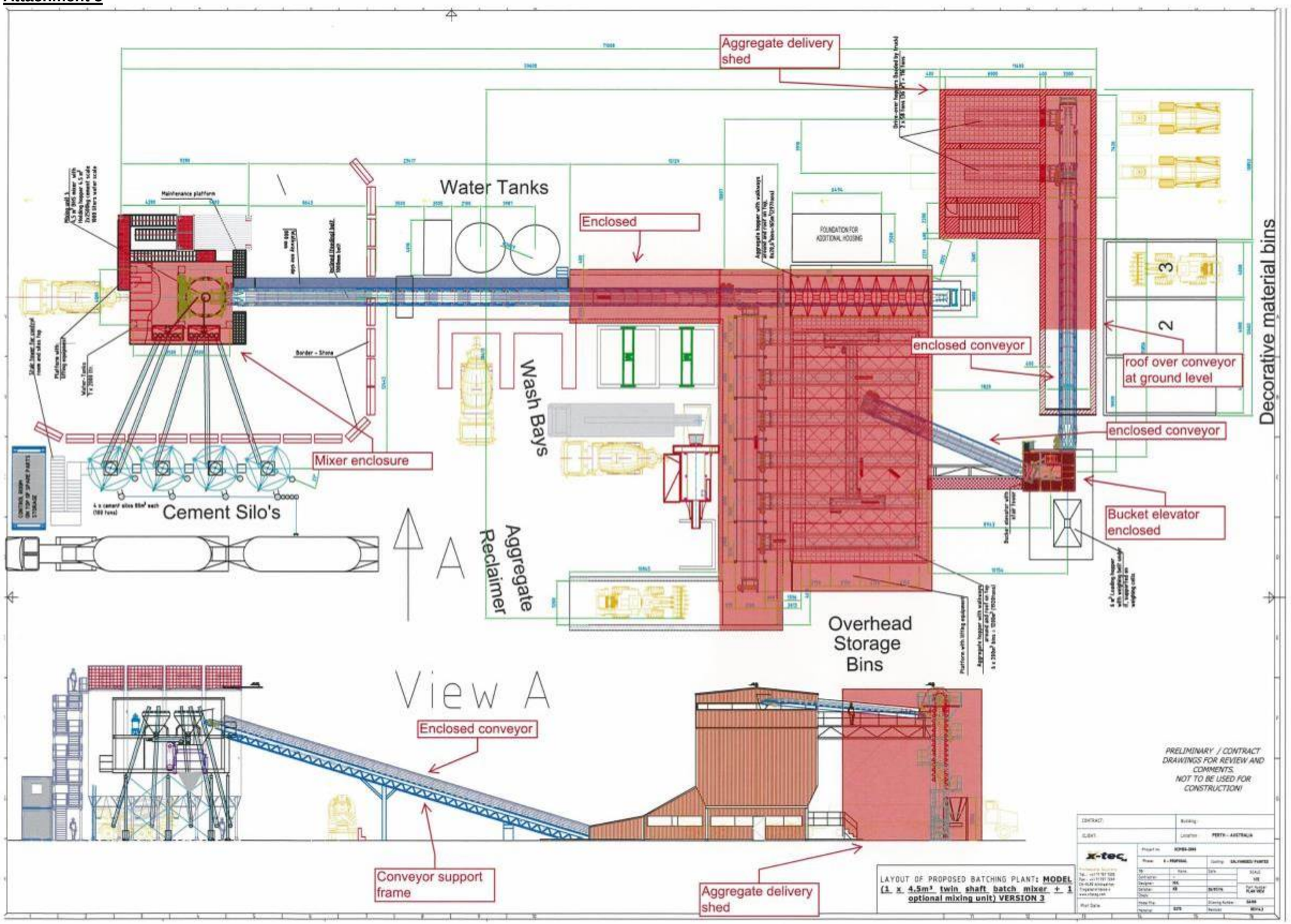


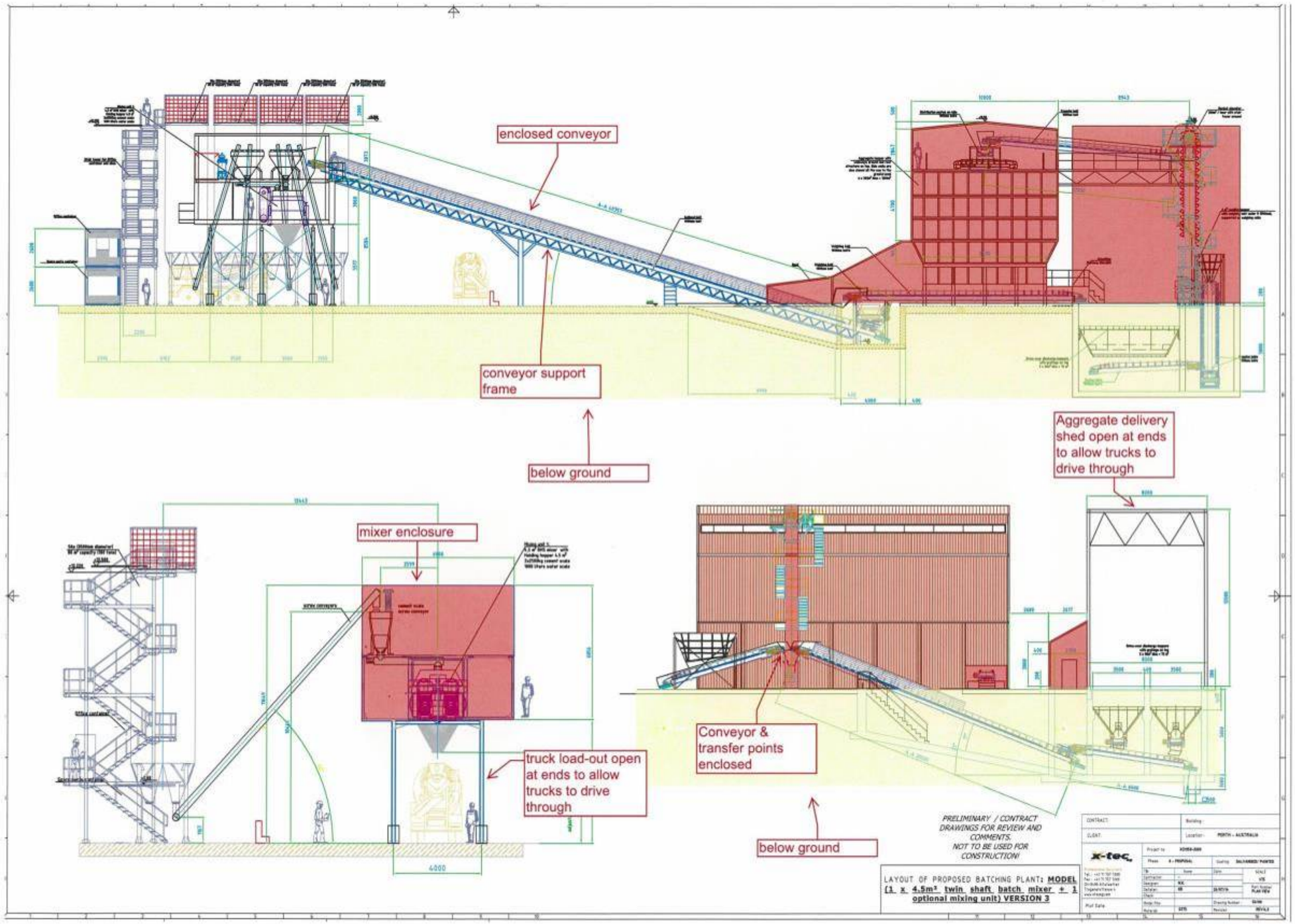
TYPICAL TUBESTOCK PLANTING DETAIL

PROJECT: WA LIMESTONE - 10% LANDSCAPING
SITE: 277 - 279 COLLIER ROAD, BAYSWATER
SPECIES SELECTION: SUSTAINABLE OUTDOORS, 0422634809

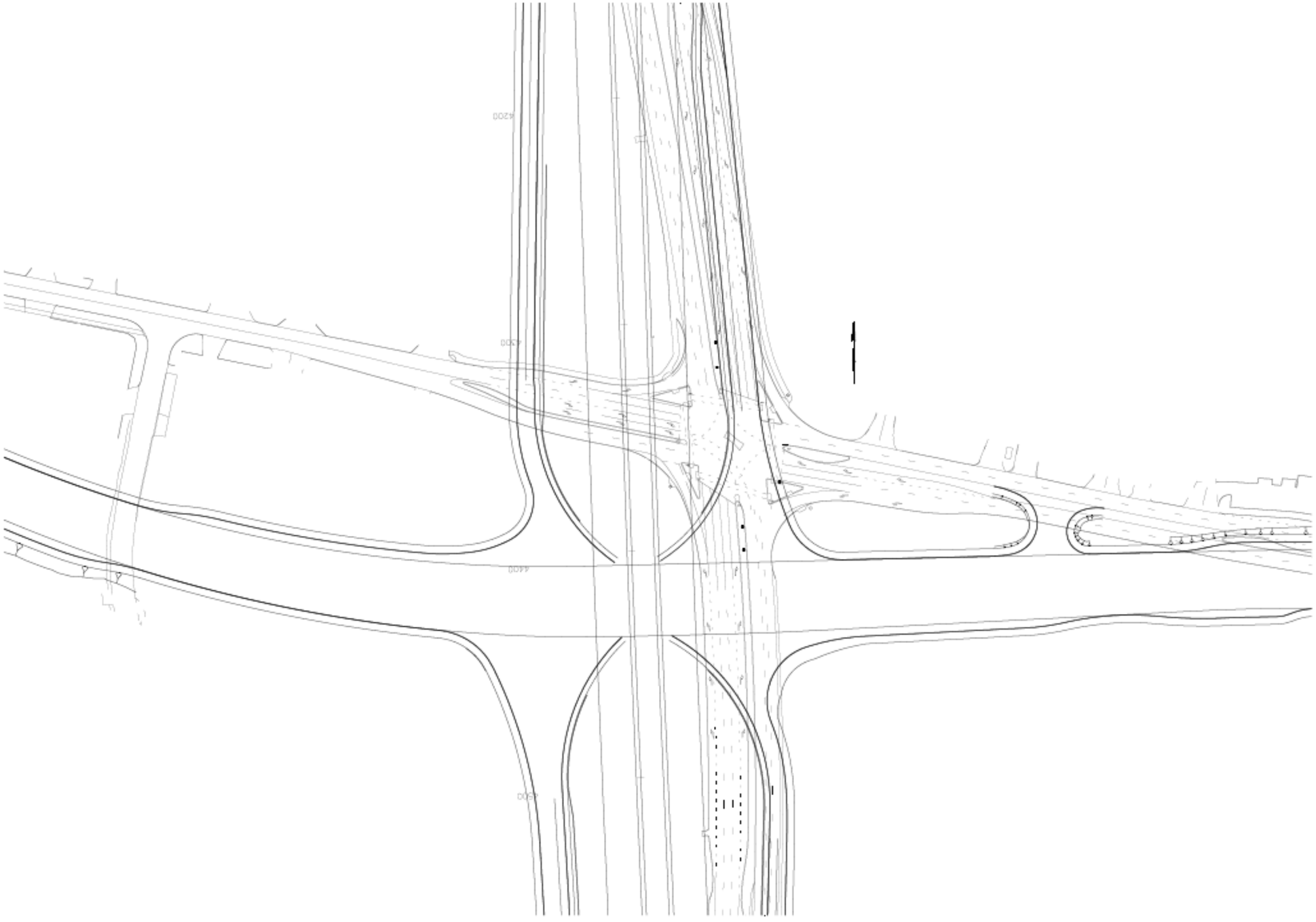
Sustainable Outdoors
Native Landscaping & Landcare Services

Attachment 5




enclosed conveyor
conveyor support frame
below ground
Aggregate delivery shed open at ends to allow trucks to drive through
mixer enclosure
truck load-out open at ends to allow trucks to drive through
Conveyor & transfer points enclosed
below ground
PRELIMINARY / CONTRACT DRAWINGS FOR REVIEW AND COMMENTS. NOT TO BE USED FOR CONSTRUCTION!
LAYOUT OF PROPOSED BATCHING PLANT: MODEL (1 x 4.5m³ twin shaft batch mixer + 1 optional mixing unit) VERSION 3

Attachment 6



Attachment 7

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177 Spencer Street Bunbury WA 6230 PO Box 287 Bunbury WA 6231
Phone (08) 9792 4797 Fax (08) 9792 4708

To: Helen Smith
Company: City of Bayswater
Fax/email: helen.smith@bayswater.wa.gov.au

Date: 8 September 2015
Project No: CBY15261.01
Inquiries: Peter Forster

Proposed concrete batching plant - WA Premix
SAT mediation - updated advice on environmental risks

1. Overview

A mediation meeting for the SAT matter Ransberg Pty Ltd (the Applicant) v City of Bayswater (the Respondent) in relation to a proposed concrete batching plant was held on 2 September 2015. Additional information was provided at that meeting by Mr Roger Stephens from WA Premix (a representative of the Applicant) in response to (a) issues raised by the Strategen in our recent memo (2015), (b) questions posed by councillors and officers of the City and (c) additional questions from Strategen's Dr Peter Forster in response to some of the information provided by Mr Stephens at the meeting. Subsequent to the mediation meeting, the Applicant's solicitor Mr Craig Wallace (Lavan Legal) forwarded a letter (dated 4 September 2015) which details the Applicants position after mediation. Mr Stephens also provided information direct to the Ms Helen Smith (Manager Planning Services, City of Bayswater) via email on 4 September 2015 in response to discussions held at mediation.

Strategen has been requested by the City's solicitor Mr Craig Slarke (McLeods Barristers and Solicitors) to provide further advice in respect of environmental risks from the proposed concrete batching plant in light of the information provided and discussions held at mediation and subsequent to that meeting. To that end, this memo provides an overview of the issues, responses and information provided by all parties and a re-assessment of potential environmental impacts from the proposed facility as a consequence of those responses and information.

2. Issues discussed and environmental risks

The issues discussed at mediation and the outcomes from Strategen's re-assessment of environmental risks in light of the information provided and discussions held at mediation are summarised in

Table 1: Issues and re-assessment of environmental risks

Issue	Uncertainty to be addressed	Strategen's original comment or concern	Information discussed at SAT mediation or thereafter between parties	Strategen's additional comment	Environmental risk
Plant capacity and proposed production rate	Typical and maximum concrete production rates	Nil	Nameplate capacity is 150 m^3/h, concern raised by the Respondent that this could lead to annual production of 325,000 m^3, which may be a substantially different proposal to that approved by SAT Applicant has advised that production will be between 135 m^3 to 500 m^3 per day	Acceptable dust impacts were predicted from the dust modelling which considered a maximum of 500 m^3/day with a typical production of 135 m^3/day Noise modelling showed compliance with assigned noise levels for 500 m^3 per day production (further comments below) DER typically takes advice from predicted air quality and noise impacts in Works Approval submissions, which are linked to a production rate. The Applicant has committed to a maximum 500 m^3/day production rate and the worst case modelling has been conducted for that rate. Therefore it is reasonable to expect a DER limit of 500 m^3/day would be imposed in the Works Approval and Licence	Low
Operating hours	Confirm operating hours in light of noise assessment	Nil	Applicant confirmed operating hours to be as modelled in the noise impact assessment (6 am to 6 pm Monday to Friday and 6 am to 3 pm on Saturdays) This includes a restriction on truck movements/deliveries to commence after 7 am to ensure compliance with night time assigned noise levels	The noise modelling assumes no truck movements will occur overnight (from 7 pm to 7 am) The proposed operating hours and 7 am restriction on early morning truck movements are predicted to facilitate compliance with assigned noise levels at night times hours	Low
Enclosed buildings	Design of extraction system to minimise dust emissions from doorways and other openings	Essential that any dust emissions within the building are captured by the ventilation system and exhaust air passed through filter, including times when doorways and openings are opened for vehicle and personnel access.	Aggregate storage and batching buildings will be fitted with extraction systems and dust filters but not full negative pressure extraction Conveyors are to be covered Materials weighing station and mixer are enclosed in a separate chamber with extraction and filtration of exhaust air, with that chamber installed in the batching building Wet batching process, each agitator truck is loaded within 45 to 90 seconds	Enclosed aggregate building design with filtered exhaust from extraction system will assist to reduce potential for escape of any dust emissions to atmosphere Covered conveyors will assist to minimise wind driven dust emissions during transfer from the storage building to the batching building. Batching plant dust emissions appear well controlled by the equipment and building design Wet batching essentially eliminates the potential for dust emissions during agitator truck loading	Low

Issue	Uncertainty to be addressed	Strategen's original comment or concern	Information discussed at SAT mediation or thereafter between parties	Strategen's additional comment	Environmental risk
Aggregate and sand delivery	Design of extraction system to minimise dust emissions from doorways and other openings	Essential that any dust emissions are captured by the ventilation system and exhaust air passed through filter	Building is open at both ends, no ventilation system proposed Rear tipping trucks discharge materials to floor grate and underground conveyer Water sprays to be installed and operated during delivery to minimise dust emissions from unloading WA Premix to ensure raw materials are moistened at the quarries before shipment to the batching plant, using covered trays on the trucks	The moistening of raw materials at the quarries will assist to reduce potential for dust emissions, with the extent of that reduction dependent on the uniformity of moistening throughout the materials Covers on the loads will assist to minimise the loss of moisture during transport The use of water sprays during unloading will assist to reduce dust emissions from portions of the materials that are not well moistened at the quarry as they are discharged from the truck tray to the underground hopper and conveyor Some optimisation of the spray properties (droplet size and volume of water) is likely to be required as part of commissioning of the facility	Low
Emergency aggregate and sand storage, with water sprays	Operational aspects of use of water sprays	Essential that any materials stored in this area are constantly moistened	Design includes hard stand, concrete walls on 3 sides and colour bond roof over storage bays Water sprays to operate at all times when risk of wind driven emissions is high (hot weather and strong winds)	The importance that any materials stored in this area are constantly moistened is restated. The proposed measures appear sufficient to minimise risk of wind driven dust emissions from the emergency aggregate and sand storage area	Low
Recovery of materials from emergency storage	Management of emissions from FEL movement of materials	Essential that any materials stored in this area are constantly moistened.	Location of emergency storage bins and operation of FELs for reclaiming of materials was described by Mr Stephens	Likelihood of dust emissions from deliveries to the stockpiles and from FEL reclaiming of materials is significant if materials are delivered with non-uniform moisture level. Water sprays are operated to maintain sufficient moisture levels at the surface of the stockpiles which will be sufficient to prevent fugitive dust emissions from the stockpiles. However dry materials within the stockpile will be disturbed by the FEL unless additional water is sprayed over the materials in the FEL bucket when loading. The risk of dust impacts is considered low due to the low frequency of deliveries to and reclaiming from the emergency stockpile. In addition, the Applicant must ensure compliance with the dust monitoring concentration criteria, so it is logical that additional efforts would be taken to manage risk of dust emissions during deliveries and reclaiming from the emergency stockpiles	Low
Truck wash down	Protocols required to ensure all materials washed from trucks is transferred back into the plant	Essential that no dust is allowed to dry out on open areas around truck wash down station	Mr Stephens confirmed that measures prescribed in the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998* in relation to truck wash downs and general dust clean-up and housekeeping	Strict adherence to the Regulations will most likely provide a low risk of dust emissions from truck wash downs, roadways and general operating areas.	Low

Issue	Uncertainty to be addressed	Strategen's original comment or concern	Information discussed at SAT mediation or thereafter between parties	Strategen's additional comment	Environmental risk
Dust monitoring	Real time monitoring of all dust size fractions at all boundaries and on-site wind direction and speed measurements is recommended	Real time decision making protocols required to ensure immediate implementation of corrective actions in the event of higher dust emission risks being identified in monitoring	Mr Stephens advised that dust monitoring would be conducted at the two locations on the site as per the SAT 2014 conditions, which a wind direction and velocity sensor (anemometer) installed at the northern most monitoring location Monitoring would be conducted as per the SAT 2014 conditions	Strategen consider that the monitoring conditions from SAT 2014 will be sufficient to inform on potential for dust impacts to the residential area to the north of the batching plant site. However, the location of the monitors will not inform on the potential for impacts at the Abel Westchem premises The Applicant has agreed to install a fence along the boundary between their premises and the Abel Westchem premises. This will assist to minimise transport of any dust emissions from the batching plant to the Abel Westchem premises. Careful design of the fence is advised to ensure favourable aerodynamics are provided for extreme wind conditions to retain any dust emissions on the batching plant premises	Low for residential area Moderate for Abel Westchem impacts
Dust monitoring reporting	Real time reporting of monitoring data	Recommended real time data be made available to the City	The Applicant advised in the letter from Lavan Legal of 4 September that the quarterly and annual reporting condition from SAT Order of 15 July 2014 would be complied with and real time reporting is not preferred Furthermore, the letter advised that the existing agreed conditions contemplate a mechanism for reporting in relation to an incident as soon as practicable upon request.	Strategen restate the preference for real time reporting of monitoring to the City as a means to ensure continuous acceptable dust performance is achieved and any breaches of the limits are immediately identified and remedial action taken. This also will assist the City to immediately address any concerns or complaints from residents. Strategen has re-examined Condition 10 in the SAT Order to ascertain whether that condition provides sufficient comfort that exceedances of the PM_{10} criteria will be promptly identified to facilitate remedial action. The installation of hardware and software to provide real-time alerts to site management in the event of exceedances will facilitate such an outcome. Condition 10 advises that the data would be provided to the City upon request. However, it is not clear how the City would become aware of dust incidents (exceedances of the criteria) to make a request for the data, unless the Applicant chooses to advise the City of an incident.	Low

Issue	Uncertainty to be addressed	Strategen's original comment or concern	Information discussed at SAT mediation or thereafter between parties	Strategen's additional comment	Environmental risk
Air quality impacts on amenity	Standards for TSP and dust deposition are not protective of short term dust impacts on amenity	Compliance with the TSP and deposition standard will not necessarily mean no impact on amenity. Conservative approach recommended for short term dust amenity assessment	Mr Stephens advised that the 500 µg/m^3, 15 minute average PM_{10} condition from SAT 2014 was intended to be a surrogate for short term TSP and visible dust impacts, on the basis that 50% of TSP and visible dust is PM_{10} Particle size data for raw materials was provided by Lavan Legal in their letter of 4 September 2015. This describes the proportions of < 75 micron particles but does not describe the 10 micron content	The assumption that PM_{10} is 50% of TSP/visible dust appears to have been made from linear regression of ambient TSP and PM_{10} concentrations from the background monitoring conducted in 2012-2013 (SLR 2014). Actual ratios ranged from 30% to 80%. The particle size data provided in letter from the Applicant's solicitor does not identify the actual proportion of 10 micron sized particles to coarse particles (up to nominal 50-60 microns) in raw materials for the batching plant to inform on the potential particle size of dust emissions Assuming that dust generated from the batching plant has a similar range of PM_{10} content, then the 500 µg/m^3 (15 minute average) PM_{10} criterion could be indicative of TSP/visible dust levels in the order of 600 to 1500 µg/m^3. These compare with the Kwinana EPP 15 minute average TSP standard of 1500 µg/m^3 which is considered a measure of dust amenity impacts Overall, the use of the PM_{10} measurement to inform TSP and/or visible dust emissions from the batching plant presents a risk of both over and under-estimating actual TSP/visible dust impacts. Examination of particle size data which shows both 10 and 50-60 micron fractions would provide some indication of the bias in using PM_{10} to determine risks of TSP/visible dust impacts	Low to Moderate
Environmental management plan (EMP)	An EMP has not been prepared by the Applicant at this time	Recommend that an EMP is developed as part of the proposal to demonstrate how the Applicant intends to manage all aspects of dust controls and performance monitoring	The Applicant intends to develop an EMP once a Works Approval has been granted and the exact scope of the works is known The EMP would be developed from consideration of the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998* and conditions agreed from SAT 2014 The SAT 2014 condition is for an EMP to be provided to the City prior to a building permit being issued	The Applicant's position on this matter is acknowledged. Strategen take comfort that the Applicant has a requirement to comply with the Regulations and that a no visible dust condition is provided in the Regulations, along with specific measures to control and minimise dust emissions from a batching plant On that basis the recommendation that an EMP be provided at this time is withdrawn The City will have an opportunity to review the EMP prior to issue of a building permit, to ensure that all aspects of the Regulations, the SAT 2014 conditions and other commitments made by the Applicant are covered in the EMP	Low

Issue	Uncertainty to be addressed	Strategen's original comment or concern	Information discussed at SAT mediation or thereafter between parties	Strategen's additional comment	Environmental risk
Noise modelling	The noise modelling considered less vehicle movements than expected for proposed maximum production rate	Nil	The noise modelling assumed 2 x materials deliveries per day, each of 55 t double B trays driven by a prime mover and 14 agitator truck movements per day Subsequent to mediation meeting, Mr Stephens advised predicted vehicle movements of 31 agitator trucks, 4.5 sand and aggregate delivery trucks, and 0.8 cement truck movements per day for average production day (135 m^3) and 100 agitator trucks, 16.6 sand/aggregate trucks and 2.8 cement truck movements per day for the maximum 500 m^3 per day production In response, the Applicant's acoustic consultant Mr Paul Daley (Herring Storer Acoustics) has advised that the noise modelling was sufficiently conservative and allows diversity in the operations, such as the additional truck movements as detailed above. Further conservatism is provided from the assumption that all truck movements were considered as being present greater than 10% of the time, hence assessed under the L_{A10} criteria. It is likely that the material truck delivery movements would represent less than 10% of the assessable period, hence would be considered under the L_{A1} criteria, which has a higher assigned noise level	The additional information provided by Mr Daley is sufficient to clarify that the predicted noise impacts for operation at 500 m^3/day will comply with assigned noise levels at noise sensitive premises (residences) In saying that, the City should recognise that noise from the batching plant may on occasion be heard at nearby residences during day times when the plant is operating and trucks attend the site. The important consideration is that the noise levels are considered acceptable based on the assigned noise levels calculated for the location	Low

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. This summary includes the issues as previously identified by Strategen (2015) and issues raised by others at mediation in relation to environmental impacts from the proposed concrete batching plant. Revised risk ratings and comments have been provided to assist the City in their consideration of the risks of environmental harm from the proposed facility with the advantage of the discussions held at mediation and additional information provided thereafter by the Applicant.

Table 1: Issues and re-assessment of environmental risks

Issue	Uncertainty to be addressed	Strategen's original comment or concern	Information discussed at SAT mediation or thereafter between parties	Strategen's additional comment	Environmental risk
Plant capacity and proposed production rate	Typical and maximum concrete production rates	Nil	Nameplate capacity is 150 m^3/h, concern raised by the Respondent that this could lead to annual production of 325,000 m^3, which may be a substantially different proposal to that approved by SAT Applicant has advised that production will be between 135 m^3 to 500 m^3 per day	Acceptable dust impacts were predicted from the dust modelling which considered a maximum of 500 m^3/day with a typical production of 135 m^3/day Noise modelling showed compliance with assigned noise levels for 500 m^3 per day production (further comments below) DER typically takes advice from predicted air quality and noise impacts in Works Approval submissions, which are linked to a production rate. The Applicant has committed to a maximum 500 m^3/day production rate and the worst case modelling has been conducted for that rate. Therefore it is reasonable to expect a DER limit of 500 m^3/day would be imposed in the Works Approval and Licence	Low
Operating hours	Confirm operating hours in light of noise assessment	Nil	Applicant confirmed operating hours to be as modelled in the noise impact assessment (6 am to 6 pm Monday to Friday and 6 am to 3 pm on Saturdays) This includes a restriction on truck movements/deliveries to commence after 7 am to ensure compliance with night time assigned noise levels	The noise modelling assumes no truck movements will occur overnight (from 7 pm to 7 am) The proposed operating hours and 7 am restriction on early morning truck movements are predicted to facilitate compliance with assigned noise levels at night times hours	Low
Enclosed buildings	Design of extraction system to minimise dust emissions from doorways and other openings	Essential that any dust emissions within the building are captured by the ventilation system and exhaust air passed through filter, including times when doorways and openings are opened for vehicle and personnel access.	Aggregate storage and batching buildings will be fitted with extraction systems and dust filters but not full negative pressure extraction Conveyors are to be covered Materials weighing station and mixer are enclosed in a separate chamber with extraction and filtration of exhaust air, with that chamber installed in the batching building Wet batching process, each agitator truck is loaded within 45 to 90 seconds	Enclosed aggregate building design with filtered exhaust from extraction system will assist to reduce potential for escape of any dust emissions to atmosphere Covered conveyors will assist to minimise wind driven dust emissions during transfer from the storage building to the batching building. Batching plant dust emissions appear well controlled by the equipment and building design Wet batching essentially eliminates the potential for dust emissions during agitator truck loading	Low

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Emergency aggregate and sand storage, with water sprays	Operational aspects of use of water sprays	Essential that any materials stored in this area are constantly moistened	Design includes hard stand, concrete walls on 3 sides and colour bond roof over storage bays Water sprays to operate at all times when risk of wind driven emissions is high (hot weather and strong winds)	The importance that any materials stored in this area are constantly moistened is restated. The proposed measures appear sufficient to minimise risk of wind driven dust emissions from the emergency aggregate and sand storage area	Low
Recovery of materials from emergency storage	Management of emissions from FEL movement of materials	Essential that any materials stored in this area are constantly moistened.	Location of emergency storage bins and operation of FELs for reclaiming of materials was described by Mr Stephens	Likelihood of dust emissions from deliveries to the stockpiles and from FEL reclaiming of materials is significant if materials are delivered with non-uniform moisture level. Water sprays are operated to maintain sufficient moisture levels at the surface of the stockpiles which will be sufficient to prevent fugitive dust emissions from the stockpiles. However dry materials within the stockpile will be disturbed by the FEL unless additional water is sprayed over the materials in the FEL bucket when loading. The risk of dust impacts is considered low due to the low frequency of deliveries to and reclaiming from the emergency stockpile. In addition, the Applicant must ensure compliance with the dust monitoring concentration criteria, so it is logical that additional efforts would be taken to manage risk of dust emissions during deliveries and reclaiming from the emergency stockpiles	Low
Truck wash down	Protocols required to ensure all materials washed from trucks is transferred back into the plant	Essential that no dust is allowed to dry out on open areas around truck wash down station	Mr Stephens confirmed that measures prescribed in the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998* in relation to truck wash downs and general dust clean-up and housekeeping	Strict adherence to the Regulations will most likely provide a low risk of dust emissions from truck wash downs, roadways and general operating areas.	Low

Issue	Uncertainty to be addressed	Strategen's original comment or concern	Information discussed at SAT mediation or thereafter between parties	Strategen's additional comment	Environmental risk
Dust monitoring	Real time monitoring of all dust size fractions at all boundaries and on-site wind direction and speed measurements is recommended	Real time decision making protocols required to ensure immediate implementation of corrective actions in the event of higher dust emission risks being identified in monitoring	Mr Stephens advised that dust monitoring would be conducted at the two locations on the site as per the SAT 2014 conditions, which a wind direction and velocity sensor (anemometer) installed at the northern most monitoring location Monitoring would be conducted as per the SAT 2014 conditions	Strategen consider that the monitoring conditions from SAT 2014 will be sufficient to inform on potential for dust impacts to the residential area to the north of the batching plant site. However, the location of the monitors will not inform on the potential for impacts at the Abel Westchem premises The Applicant has agreed to install a fence along the boundary between their premises and the Abel Westchem premises. This will assist to minimise transport of any dust emissions from the batching plant to the Abel Westchem premises. Careful design of the fence is advised to ensure favourable aerodynamics are provided for extreme wind conditions to retain any dust emissions on the batching plant premises	Low for residential area Moderate for Abel Westchem impacts
Dust monitoring reporting	Real time reporting of monitoring data	Recommended real time data be made available to the City	The Applicant advised in the letter from Lavan Legal of 4 September that the quarterly and annual reporting condition from SAT Order of 15 July 2014 would be complied with and real time reporting is not preferred Furthermore, the letter advised that the existing agreed conditions contemplate a mechanism for reporting in relation to an incident as soon as practicable upon request.	Strategen restate the preference for real time reporting of monitoring to the City as a means to ensure continuous acceptable dust performance is achieved and any breaches of the limits are immediately identified and remedial action taken. This also will assist the City to immediately address any concerns or complaints from residents. Strategen has re-examined Condition 10 in the SAT Order to ascertain whether that condition provides sufficient comfort that exceedances of the PM_{10} criteria will be promptly identified to facilitate remedial action. The installation of hardware and software to provide real-time alerts to site management in the event of exceedances will facilitate such an outcome. Condition 10 advises that the data would be provided to the City upon request. However, it is not clear how the City would become aware of dust incidents (exceedances of the criteria) to make a request for the data, unless the Applicant chooses to advise the City of an incident.	Low

Issue	Uncertainty to be addressed	Strategen's original comment or concern	Information discussed at SAT mediation or thereafter between parties	Strategen's additional comment	Environmental risk
Air quality impacts on amenity	Standards for TSP and dust deposition are not protective of short term dust impacts on amenity	Compliance with the TSP and deposition standard will not necessarily mean no impact on amenity. Conservative approach recommended for short term dust amenity assessment	Mr Stephens advised that the 500 µg/m^3, 15 minute average PM_{10} condition from SAT 2014 was intended to be a surrogate for short term TSP and visible dust impacts, on the basis that 50% of TSP and visible dust is PM_{10} Particle size data for raw materials was provided by Lavan Legal in their letter of 4 September 2015. This describes the proportions of < 75 micron particles but does not describe the 10 micron content	The assumption that PM_{10} is 50% of TSP/visible dust appears to have been made from linear regression of ambient TSP and PM_{10} concentrations from the background monitoring conducted in 2012-2013 (SLR 2014). Actual ratios ranged from 30% to 80%. The particle size data provided in letter from the Applicant's solicitor does not identify the actual proportion of 10 micron sized particles to coarse particles (up to nominal 50-60 microns) in raw materials for the batching plant to inform on the potential particle size of dust emissions Assuming that dust generated from the batching plant has a similar range of PM_{10} content, then the 500 µg/m^3 (15 minute average) PM_{10} criterion could be indicative of TSP/visible dust levels in the order of 600 to 1500 µg/m^3. These compare with the Kwinana EPP 15 minute average TSP standard of 1500 µg/m^3 which is considered a measure of dust amenity impacts Overall, the use of the PM_{10} measurement to inform TSP and/or visible dust emissions from the batching plant presents a risk of both over and under-estimating actual TSP/visible dust impacts. Examination of particle size data which shows both 10 and 50-60 micron fractions would provide some indication of the bias in using PM_{10} to determine risks of TSP/visible dust impacts	Low to Moderate
Environmental management plan (EMP)	An EMP has not been prepared by the Applicant at this time	Recommend that an EMP is developed as part of the proposal to demonstrate how the Applicant intends to manage all aspects of dust controls and performance monitoring	The Applicant intends to develop an EMP once a Works Approval has been granted and the exact scope of the works is known The EMP would be developed from consideration of the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998* and conditions agreed from SAT 2014 The SAT 2014 condition is for an EMP to be provided to the City prior to a building permit being issued	The Applicant's position on this matter is acknowledged. Strategen take comfort that the Applicant has a requirement to comply with the Regulations and that a no visible dust condition is provided in the Regulations, along with specific measures to control and minimise dust emissions from a batching plant On that basis the recommendation that an EMP be provided at this time is withdrawn The City will have an opportunity to review the EMP prior to issue of a building permit, to ensure that all aspects of the Regulations, the SAT 2014 conditions and other commitments made by the Applicant are covered in the EMP	Low

Issue	Uncertainty to be addressed	Strategen's original comment or concern	Information discussed at SAT mediation or thereafter between parties	Strategen's additional comment	Environmental risk
Noise modelling	The noise modelling considered less vehicle movements than expected for proposed maximum production rate	Nil	The noise modelling assumed 2 x materials deliveries per day, each of 55 t double B trays driven by a prime mover and 14 agitator truck movements per day Subsequent to mediation meeting, Mr Stephens advised predicted vehicle movements of 31 agitator trucks, 4.5 sand and aggregate delivery trucks, and 0.8 cement truck movements per day for average production day (135 m^3) and 100 agitator trucks, 16.6 sand/aggregate trucks and 2.8 cement truck movements per day for the maximum 500 m^3 per day production In response, the Applicant's acoustic consultant Mr Paul Daley (Herring Storer Acoustics) has advised that the noise modelling was sufficiently conservative and allows diversity in the operations, such as the additional truck movements as detailed above. Further conservatism is provided from the assumption that all truck movements were considered as being present greater than 10% of the time, hence assessed under the L_{A10} criteria. It is likely that the material truck delivery movements would represent less than 10% of the assessable period, hence would be considered under the L_{A1} criteria, which has a higher assigned noise level	The additional information provided by Mr Daley is sufficient to clarify that the predicted noise impacts for operation at 500 m^3/day will comply with assigned noise levels at noise sensitive premises (residences) In saying that, the City should recognise that noise from the batching plant may on occasion be heard at nearby residences during day times when the plant is operating and trucks attend the site. The important consideration is that the noise levels are considered acceptable based on the assigned noise levels calculated for the location	Low

strategen ENVIRONMENTAL
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3. Conclusions

Overall, the information provided by the Applicant and discussions held at mediation serve to support the Applicant's position that the amended design for the proposed concrete batching plant and proposed operating conditions will provide acceptable dust and noise outcomes for the receiving environment. Modelling of dust and noise impacts has suggested that acceptable performance can be achieved, relative to air quality and assigned noise levels at nearest sensitive receptors. On that basis, there now appears no impediment from a dust and noise risk perspective to refuse the application for the proposed concrete batching plant.

In reaching that conclusion it is Strategen's opinion that a number of improvements to the proposed reporting of dust monitoring outcomes and the uncertainties in assessment of impacts from the monitoring data, that would assist the City to respond to any issues raised by the community. These are:

- The Applicant has agreed to provide dust monitoring data from a dust incident to the City upon request. However, unless an incident gives rise of a complaint or complaints to the City, it is unclear how the City would become aware of an incident to generate a request for monitoring data from the Applicant
- As such, Strategen suggest that the Applicant could consider reporting of all dust incidents (as defined as exceedances of the PM_{10} criteria) as soon as possible to the City, without a request being made by the City
- The use of a 15 minute average PM_{10} concentration limit of 500 $\mu g/m^3$ to infer or estimate potential TSP and/or visible dust impacts outside the boundary of the premises presents considerable uncertainty since the exact proportion of PM_{10} within the TSP/visible dust from the batching plant is not known
- Particle size distribution data that includes <10 micron (PM_{10}) and <50-60 micron (TSP) fractions from raw materials proposed to be used at the premises may serve to reduce the uncertainty associated with the estimation of TSP/visible dust from the PM_{10} measurements

Dr Peter Forster
Affiliate
Strategen Environmental

By Royal Charter

Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2004

This is to certify that:

WA Limestone
WA Premix
WA BlueMetal
401 Spearwood Avenue
BIBRA LAKE WA 6163

Holds Certificate Number: **EMS 620948**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2004 for the accompanying scope.

Provision of Earth Moving, Roading, Quarrying and Civil Infrastructure Services. The Manufacture, Supply and Haulage of construction materials including concrete and asphalt.

For and on behalf of BSI:

Alfred Au, Global Technical Director

Original Registration Date: 23/06/2015
Latest Revision Date: 23/06/2015

Effective Date: 23/06/2015
Expiry Date: 22/06/2018

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Your ref: AC01-2015-0138;2015-1444628747580
SAT ref: DR 196 of 2015
Our ref: BRF:CHW 1150562

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LAVAN LEGAL
Leaders in Law

3 November 2015

Richard Sutherland
Principal Environmental Officer, Mining and Industrial Assessments (South)
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PERTH WA 6000
By Email: richard.sutherland@epa.wa.gov.au

Dear Richard

Response to Notice Requiring Further Information pursuant to S38A of the Environmental Protection Act 1986 - Concrete Batching Plant, Lot 2 277-279 Collier Road Bayswater

1 I refer to your letter to WA Limestone (my client) in relation to the above matter dated 23 October 2015.

2 In response to that letter, please find **attached**, as requested:

2.1 a completed Proponent Referral Form; and

2.2 additional digital spatial data and attachments as requested.

3 As discussed with you last week it is my client's view that the proposed development of a concrete batching plant at lot 2, 277-279 Collier Road, Bayswater (**Land**) does not trigger the threshold for significance warranting referral under section 38 of the *Environmental Protection Act 1986* (WA) (**Act**).

4 The referral of this matter to the EPA may delay the hearing of the planning approval of the matter, which is set to be heard by the State Administrative Tribunal (**SAT**) on 25 and 26 November 2015. As a consequence, any urgent attention in relation to the consideration of the need to assess under section 39A of the Act would be appreciated

5 It is my client's position that the completed proponent referral form and attachments will provide you with the required information to assess the proposal. I note by way of background that the Land is zoned as General Industry under the local planning scheme, and already benefits from approval from the SAT for a concrete batching plant to operate subject to conditions relating to the management of dust, noise and traffic (among others) (see **attached** previous decision).

6 Further, the proposal the subject of this referral is effectively an improvement over the facility already approved and has been amended to largely enclose the plant, utilising the latest best practice wet mix technologies, operating under an ISO 14001 certified EMS and employing real-time dust monitoring. It is this amended proposal that is the subject of review proceedings in the SAT.

7 A copy of the City of Bayswater's without prejudice draft conditions of approval in the SAT matter are also **attached** for reference, to demonstrate the prescriptive nature of the proposed conditions that will be required by the decision making authority should the SAT approve the application.

8 In short, it is my client's view that the amended proposal represents a significantly improved proposal as the wet-mix concrete batching process eliminates dust emissions from agitator truck loading, and the revised material transfer system reduces of front-end loader movements by 97.7%. The proposal has also been the subject of peer-reviewed scientific assessment which have unanimously concluded that the proposal will not cause any significant environmental impact, including considering potential cumulative impacts.

9 Additionally, it is my client's contention that the proposal:

9.1 will constitute a "prescribed premises" under the Act, and require a Part V approval under the Act;

9.2 will also be subject to specific requirements as set out in the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998.*

10 A Works Approval under Part V of the Act is currently with the Department of Environmental Regulation, and it is my understanding that a determination of that approval will occur once the SAT matter has been dealt with.

11 In my client's view, the proposal will have no significant effect on the environment and in any event will be rigorously assessed and regulated under other statutory provisions, including but not limited to:

11.1 The City of Bayswater's Town Planning Scheme:

11.2 Part V of the Act; and

11.3 the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998.*

12 That being the case, the EPA should provide a response to the referral on the basis that it does not warrant assessment, and importantly, provide its response expeditiously, to ensure that the matter can be heard by the Tribunal on 25 and 26 November 2015 as listed.

13 If you have any questions in this regard, please call Brendan Foley or me.

Yours sincerely

Craig Wallace
Partner

Encl

State Administrative Tribunal

PLANNING AND DEVELOPMENT ACT 2005

DR 196 of 2015

BETWEEN:

RANSBERG PTY LTD Applicant

AND

CITY OF BAYSWATER

Respondent

RESPONDENT'S DRAFT "WITHOUT PREJUDICE" CONDITIONS

Date of document: October 2015

Date of filing: October 2015

Filed on behalf of: The Respondent

Prepared by:

McLeods
Barristers & Solicitors
220-222 Stirling Highway
CLAREMONT WA 6010

Telephone: 9383 3133
Facsimile: 9383 4935
Reference: CS:KH:BAYS-37763

In this document:

(a) the conditions applied in DR 242 of 2011 are set out first, with amendments proposed by the Respondent highlighted; and

(b) additional conditions proposed by the Respondent are separately identified.

CONDITIONS APPLIED IN DR 242 of 2011

1. The development/use subject of this approval must be SUBSTANTIALLY COMMENCED within a period of two (2) years of the date of this approval

notice. If the development is not substantially commenced within this period, this approval shall lapse and be of no further effect. Where an approval has lapsed, no development/use shall be carried out without the further approval of the City having first been sought and obtained.

2. The development shall be carried out only in accordance with the terms of the application as approved herein, and any approved plan, including any plan approved as a component of the Environmental Management Plan required by condition (7).

3. On completion of construction, all excess articles, equipment, rubbish and materials being removed from the site and the site left in an orderly and tidy condition.

4. All stormwater and drainage runoff produced onsite is to be disposed of onsite via the use of soakwells, approved by the Director of Technical Services. The soakwells must deal with the entire land area and be designed to contain a 24hr storm duration and 100-year ARI.

5. Unless otherwise approved by the City of Bayswater, the ~~vegetated area at the rear of the lot, depicted as "Landscaping and Grassed Area" on the revised concept plan, is not to be used for the storage of materials or vehicles.~~area at the rear of the lot, depicted as 'Grassed Area' on the plan titled 'New Design – Design Comparison Concrete Batching Plant 277-279 Collier Road, Bayswater' (Drawing Number 2) (**Grassed Area**) is not to be used for the storage of materials or vehicles.

6. Activities associated with the use of Lot 2 (Nos. 277-279) Collier Road, Bayswater (**Land**) shall not cause the concentration of particulate matter as PM10 at the location referred to in Condition 7(i), first dot point, to exceed:

   (a) 12.4µg/m³ as a 24-hour average on any day when the ambient concentration (inclusive of the contribution from emissions from the Land) exceeds 50µg/m³ of particulate matter as PM10 as a 24-hour average; or

(b) 500μg/m³ as a 15-minute average.

7. Documentation for a proposed Environmental Management System (EMS) compliant with AS/NZS ISO 14001:1996 shall be submitted to the City for approval prior to the issue of a building permit. The EMS shall incorporate an Environmental Management Plan (EMP). The EMP shall address the following issues to the satisfaction of the City:

(i) Dust and Particulate Management, including:

- The use of a TEOM (PM10) monitor to be located at the previous monitoring location close to the boundary, as the primary monitoring method;
- The use of a Beta Gauge (PM10) monitor at a second location sited in accordance with AS/NZS 3580.1.1 (as far as practical), to allow the incremental PM10 concentrations to be determined;
- The TEOM monitor to be operated in accordance with AS/NZS 3580.9.8;
- The Beta Gauge monitor is to be operated in accordance AS/NZS 3580.9.11;
- The Applicant is to formalise the approach and procedures for:
  - (a) determining any dust emissions from the site;
  - (b) deriving modelled incremental PM10 concentrations at the nearest sensitive premises; and
  - (c) associated thresholds which could trigger site management alerts and responses;
- The TEOM and Beta Gauge monitors are to be maintained by an organisation accredited by the National Association of Testing Authorities (NATA) in respect to the operation of those monitors;

- The use of an anemometer with a 10 metre pole, unless a lower pole is approved by the City;

- PM10 concentrations from the TEOM and Beta Gauge monitors, and wind speed and wind direction from the anemometer, shall be averaged over a time period of not more than 15-minutes and electronically recorded;

- All dust incidents in which a criterion set in condition 6 is exceeded shall be reported to the City of Bayswater within 24 hours after the incident. The report shall explain what action was taken to address the exceedence.

- Summaries of the results of monitoring including each 24-hour average PM10 concentration are to be provided quarterly to the City by no more than 30 days after each quarter. The quarterly summary must identify and highlight the date and time on which the monitoring showed the PM10 concentration exceeded:

  (a) 50µg/m³ as a 24-hour average; and

  (b) 500µg/m³ as a 15-minute average; and

- An annual report prepared by the body carrying out the dust monitoring, which reviews whether the dust received at the nearest sensitive premises has been compliant with the NEPM PM10 standard, the extent to which the development contributed to any exceedences of 24-hour average PM10 concentrations greater than 50µg/m^3, and whether the development has complied with the requirements of Condition 6.

The annual report referred to above, shall be submitted by no more than 30 days after each calendar year to which the data relates.

Dust monitoring shall be continued indefinitely, or until the City is satisfied that the operating experience of cumulative air quality has shown that the risk of exceeding the NEPM standard for annual

particulates has abated. The requirement for continued dust monitoring may be reviewed by the City at the request of the applicant following the provision of an EMS audit required by condition (9).

(ii) Noise management, including the use of appropriate acoustic barriers and low noise front end loaders;

(iii) Surface water management;

(iv) Landscaping;

(v) Visual amenity;

(vi) Waste management;

(vii) Light overspill;

(viii) Traffic management;

(ix) Storage of hazardous and/or dangerous goods;

(x) Complaints management;

(xi) Contingency measures to be adopted in the event of potential or actual unacceptable emissions from the site; and

(xii) Checklists and personnel responsibilities for actions assigned by the EMP.

8. The Environmental Management System (EMS) and Environmental Management Plan (EMP) approved by the City of Bayswater shall be implemented, and the development must at all times comply with the approved EMS and EMP.

9. The Environmental Management System must be audited by an independent appropriate body at least every three (3) years from the anniversary of this approval, and the results of the audit must be provided to the City of Bayswater.

10. The plant is to be equipped with audible and/or visual alarms together with supporting microprocessor hardware and software capable of determining and logging incremental concentrations and background concentrations, utilising the monitoring data collected from the monitoring equipment required by Condition 7(i), such equipment to automatically alert site management in real-time should the PM10 limits in Condition (6) be, or be likely to be exceeded. The logged data shall be made available to the City as soon a practicable upon request.

11. Any portion of the site to be used for movement or parking of vehicles and/or onsite storage of empty bins, must be sealed and drained to the satisfaction of the City of Bayswater.

12. Uncovered parking bays shall be a minimum of 5.5m x 2.5m.

13. Truck parking bays are to conform to the relevant Australian Standards.

14. A bin area is to be provided of not less than 10m2 and with a permanent water supply and drainage facility for washdown. The bin area is to be screened by a gate and brick walls or other suitable material to a height of not less than 1.8m.

15. Bins are to be washed only in the wash-down facility within the bin area, drained to a silt trap and disposal of via the Water Corporation sewer system or if this is not available, a leach drain soakwell system which is separate to the stormwater disposal system, or approved system, to the satisfaction of the City of Bayswater.

16. One (1) driveway shall be permitted onto Collier Road. The driveway shall be constructed to the City of Bayswater standards for commercial driveways.

17. Redundant driveways shall be removed and the verge and its vegetation made good at the applicants cost, prior to the commencement of concrete batching operations.

18. No earthworks shall encroach onto the Collier Road road reserve.

19. No stormwater drainage shall be discharged off-site.

20. The applicant shall make good any damage to the existing verge vegetation within the Collier Road reservation, prior to the commencement of concrete batching operations.

21. No storage of materials outside the approved buildings is permitted.

22. A copy of an approval issued by the Department of Environment and Conservation - Licensing Section for the operation of the facility shall be submitted to the City prior to operations commencing.

23. A truck wash-down area is to be provided in accordance with the requirements of the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998* and in a location approved by the City of Bayswater. Trucks may only be washed down in the approved wash down area.

24. Operating hours are to be restricted to 6:00am to 6:00pm Monday to Saturday (public holidays excluded), however no front end loader may operate, nor may any raw materials be delivered to the site prior to 7:00am.

25. The cement storage silos are to be reduced to a maximum of 12.5m in height. Amended plans showing the reduced height of the silos must be submitted with the application for a building permit.

26. The owner, or the applicant on behalf of the owner, shall comply with the City of Bayswater policy relating to Percent for Public Art, and provide an Art Project for a minimum value of one per cent ($~~1~~560,000) of the estimated total cost of the development ($~~1,5~~6,000,000). Prior to the lodgement of a building permit application, the owner/applicant shall submit details to the City, including plans of the artwork, its cost and construction, and other matters relating to the artwork's on-going maintenance and acknowledgements in accordance with the City's Percent for Public Art Policy. Upon the City receiving this information, the Art Project shall be presented to Council for its consideration and determination. The approved public art shall be installed

prior to the submission of an Occupancy Permit for the subject development, and thereafter maintained at the cost of the owner/applicant.

Additional conditions

27. Revised plan(s) addressing the following matters shall be submitted to the City for approval prior to the lodgement of a building permit application:

    (a) The relocation of the bin store to behind the front setback line.

    (b) The provision of a minimum of 12 truck parking bays.

    (c) The provision of a wind fence along the side boundary adjoining 273-275 Collier Road, Bayswater, for the purpose of reducing the transmission of airborne dust particles to the adjoining lot.

28. The wind fence referred to in the preceding condition shall be constructed prior to commencement of operations and therefore maintained to the satisfaction of the City of Bayswater.

29. The bin store and truck parking bays shall be provided in accordance with the approved plan, and thereafter maintained to the satisfaction of the City of Bayswater.

30. Redundant vehicle crossover(s) to be removed and the kerbing, verge and footpath (where relevant) reinstated with grass or landscaping to the satisfaction of the City of Bayswater.

31. All dust emission controls including bag filters on the building ventilation systems, water sprays and sprinklers shall be well maintained to ensure optimal performance at all times.

32. The cement silo filters shall be well maintained to ensure optimal performance at all times.

33. All conveyors and transfer stations are to be covered and belt cleaners maintained to ensure no escape of materials and dust from conveyors.

34. Any stored aggregate or sand outside the building is to be either wetted at all times or covered to prevent wind driven dust erosion.

35. Any material spills outside the buildings are to be immediately wetted prior to removal of the materials.

36. Continuous monitoring of ambient dust levels and wind conditions in accordance with the approved EMP is required for reactive dust management.

37. Landscaping and reticulation shall be completed in accordance with the approved detailed landscape plan **attached** to this approval prior to occupation of the development and thereafter maintained to the satisfaction of the City of Bayswater.

38. That part of the Grassed Area which is not subject to the approved landscape plan shall be vegetated (grassed) and reticulated, and the vegetation shall be maintained in a healthy and neat condition throughout the life of the development.

JURISDICTION	**:**	STATE ADMINISTRATIVE TRIBUNAL
STREAM	**:**	DEVELOPMENT & RESOURCES
ACT	**:**	PLANNING AND DEVELOPMENT ACT 2005 (WA)
CITATION	**:**	RANSBERG PTY LTD and CITY OF BAYSWATER [2014] WASAT 12
MEMBER	**:**	MR P McNAB (SENIOR MEMBER) MR J JORDAN (MEMBER) MR P CURRY (SENIOR SESSIONAL MEMBER)
HEARD	**:**	29, 30 NOVEMBER AND 1 DECEMBER 2011 AND 8 OCTOBER 2013
DELIVERED	**:**	28 JANUARY 2014
FILE NO/S	**:**	DR 242 of 2011 DR 243 of 2011
BETWEEN	**:**	RANSBERG PTY LTD Applicant AND CITY OF BAYSWATER Respondent

Catchwords:

Town planning - Development application - Concrete batching plant - Industrial zone bordering residential area and recreation area - Dust - Cumulative dust from additional industrial use - Amenity impacts - Whether danger to public health - Plant proposed new wet-mix technology - Wet-mix technology approved by regulators elsewhere in metropolitan area - Significant concurrent regulation of facility by Department of Environmental Regulation - Permissible land use under local planning scheme - Measurement of dust - Lengthy

adjournment of hearing to facilitate accurate dust measurement and modelling - Buffer zones - Whether recommended buffer zone should be adhered to - Significant agreement by environmental experts on potential risks to public health from dust - Evidence suggesting dust exceedences from national standards would be infrequent and generally capable of management - Necessary measures for on-going dust management and temporary cessation of activities - Whether application of precautionary principle justified to warrant refusal of approval - Tribunal permitting development on basis of amended conditions - Words and phrases: 'precautionary principle'

Legislation:

City of Bayswater Town Planning Scheme No 24, cl 1.6, cl 3.3.1, cl 3.3.2, cl 3.6.1, cl 8.3.1.2, Appendix 1
Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998 (WA)
Environmental Protection (Noise) Regulations 1997 (WA)
Environmental Protection Act 1986 (WA), Pt V
Environmental Protection Regulations 1987 (WA), reg 5, Sch 1 Pt 2
Planning and Development Act 2005 (WA)
Metropolitan Region Scheme

Result:

Application for review allowed; conditional approvals given

Summary of Tribunal's decision:

In 2011, Ransberg Pty Ltd applied to the Tribunal for a review of the refusal by the City of Bayswater of an application for planning approval of a wet-mix concrete batching plant and of a related application for retaining walls. The applicant's proposal was in respect of an industrial zoned lot located in Bayswater.

The City of Bayswater refused the planning applications because of concerns about the impact of the proposed development on the locality and whether the development would be inconsistent with orderly and proper planning. A public recreation ground and a significant number of residences were located less than 300 metres from where the proposed plant would be built.

Amenity issues of concern raised by the City of Bayswater included: the proposed plant's visual impact; the level of noise generated by the proposed plant; and, critically, the potential adverse amenity and health impacts of the additional dust that might be generated by the operation of the plant.

Material before the Tribunal indicated significant levels of pre-existing background dust from other industrial operations unrelated to the applicant. Of central concern, therefore, was whether there would be a sufficient buffer or separation distance between the plant and the neighbouring residential areas.

The final hearing initially commenced in November 2011; however, the hearing concluded some 22 months later. A lengthy adjournment was occasioned by reason of the Tribunal requiring accurate data on any impact of pre-existing dust upon air quality in the locality, and for the results of modelling of the potential dust emissions from the plant. The Tribunal also required further information on the alleged benefits of the relatively new technology involved in a wet-mix concrete production process with regard to dust emissions and their control.

Material before the Tribunal, at that point in 2011, suggested that the plant would also require licensing and ongoing regulation by the State's departmental environmental agency, if it were to be proceeded with.

The Tribunal indicated that, on what was then known, a conditional approval may be possible if such further expert material was furnished in relation to the matters identified by the Tribunal, and that the material satisfactorily addressed any environmental or public health issues.

The Tribunal found that certain amendments to the design of the plant and its landscaping would result in an acceptable visual impact on the locality, and that with appropriate conditions, particularly in relation to operating hours, noise could be adequately controlled.

The expert evidence collected in relation to dust was complex. It suggested that exceedances of national standards for daily airborne particulates would be relatively infrequent and that dust could be managed by way of the imposition of appropriately detailed operating conditions. The Tribunal accepted this evidence. Control would include a management plan with conditions requiring the ongoing monitoring of locality air quality and the modelled impact of the plant's dust emissions triggering the temporary cessation of activities on the site if and when this was necessary to maintain daily air quality.

The City of Bayswater had submitted that the 'precautionary principle' should be applied to refuse the development. However, the Tribunal was satisfied that, having regard to the expert evidence, the concessions from the applicant on the design and operation of the plant, and by reason of the imposition of conditions requiring appropriate management practices with respect to the operation of the plant, a refusal on amenity and environmental grounds was not warranted.

The Tribunal further found that it would be consistent with orderly and proper planning to grant conditional approval of the proposed development in the location proposed because, subject to the imposition of the further conditions

to ensure adequate operational responsiveness to the dust issue, the plant would be sufficiently separated from residential areas and would be development otherwise consistent with the planning objectives for industry in the zone.

The Tribunal therefore decided to allow the applications for review, and granted conditional planning approval for the two developments. The Tribunal's approvals were subject to the parties further negotiating and amending the draft conditions already jointly agreed by them. Such conditions were to be consistent with the detailed reasons issued by the Tribunal.

Category: A

Representation:

Counsel:

Applicant	:	Mr M Hardy
Respondent	:	Mr C Slarke

Solicitors:

Applicant	:	Hardy Bowen
Respondent	:	McLeods Barristers & Solicitors

Case(s) referred to in decision(s):

Keysbrook Leucoxene Pty Ltd and Shire of Serpentine-Jarrahdale [2012] WASAT 212

Telstra Corporation Ltd v Hornsby Shire Council [2006] NSWLEC 133; (2006) 146 LGERA 10

Wattleup Road Development Company Pty Ltd and Western Australian Planning Commission [2011] WASAT 160

REASONS FOR DECISION OF THE TRIBUNAL:

Introduction

1 Ransberg Pty Ltd (Ransberg or applicant) sought review under the *Planning and Development Act 2005* (WA) (PD Act) of two refusals by the City of Bayswater (City or respondent) on 29 June 2011. The refused development applications were in respect of the construction and operation of a proposed concrete batching plant on vacant land at Nos 277 - 279 (Lot 2) Collier Road, Bayswater (Lot 2 or site), and a related application in respect of proposed retaining walls at the northern end of Lot 2.

2 The two matters, DR 242 of 2011 and DR 243 of 2011 respectively, were heard concurrently over four days in total in the Tribunal, and included an onsite inspection in the presence of the parties and certain experts. The final day of hearings took place 22 months after an adjournment, for reasons more fully explained below.

3 In short, it may be noted that the adjournment was occasioned by reason of the need for the applicant to provide further substantial material of an environmental nature to address certain issues raised by the Tribunal.

The background to the proposals

4 The following narrative is common ground and is mainly drawn from the parties' respective statements of issues, facts and contentions.

5 Lot 2 Collier Road, Bayswater comprises an area of 12,324m^2 and is currently vacant. To the east, west and south of the site the surrounding land is used for industrial purposes, while to the north the site abuts the Joan Rycroft Reserve (which includes a playground) south of Shalford Street and a Water Corporation drainage reserve. Other industrial premises nearby include a waste concrete recycling plant, a furniture factory and a waste transfer facility. Two other concrete batching plants are located about 800 metres to the south-west of the site.

6 For approximately 32 years, until 2007, the site had been used as a fuel depot and service station, after which soil investigations were undertaken to investigate possible contamination of the site. As a result, remediation works were undertaken, and subsequently, the Department of Environment and Conservation (DEC) (now, the Department of Environment Regulation (DER)), advised the City that the site appeared suitable for continued commercial/industrial use.

7 On 20 October 2010, the City received an application for planning approval in respect of a proposed concrete batching plant. Further documents lodged in support of the application included: a Revised Site Plan; a Dust Management Plan; a Noise Assessment Report; and a Supplementary Noise Assessment Report.

8 Following the respondent's advertising of the development application, 312 separate written submissions and one submission from a ratepayers' delegation were received, all objecting to the proposal.

9 On 1 March 2011, the City received an application for planning approval for retaining walls to be erected at the rear, northern end of Lot 2.

Details of the proposals

10 As originally proposed, the concrete batching plant included three storage silos, each 19 metres in height, accompanied by 16 storage bins. Approximately 8,600m^2 of the site would be sealed with either asphalt or cement, including those portions of the site used for the storage bins and the silos. About 3,600m^2 of the site would be unsealed, resulting in approximately 10% of the site that would require landscaping, with the remainder under grass.

11 The design of the plant was for a wet-mix concrete production facility. This system was, it was submitted, an improvement on existing concrete production techniques. It was uncontested that such wet-mix plant technology, developed in Europe, was relatively new and that there were very few previous examples known to be operating in Western Australia. However, it was understood that there were such plants built in the metropolitan area and on Barrow Island.

12 Production from the proposed plant involves receiving a cement supply which is unloaded to the silos using a sealed system. Cement from a tanker is to be pumped pneumatically via sealed and enclosed air-slides (augers) into steel storage silos which are fitted with reverse pulse air filters to minimise dust release from the air vents. Sand and aggregate are to be delivered in a damp state and stored in partly enclosed product bins fitted with sprinkler systems.

13 To produce concrete, sand and aggregate are transferred from the product bins to the feed bins using a front-end loader (FEL) carrying materials in a single direction only. From these bins, automatically weighed amounts are fed to a hopper via a mechanical conveyor.

Cement is fed from the storage silos and combined internally with sand, aggregate and water before being mechanically conveyed to the cement mixing trucks.

14 The proposed retaining walls are intended to stabilise the rear of the site and prevent further erosion. They would be built along the northern, eastern and western boundaries and would vary in height from 5 metres along the rear (northern) boundary, tapering from that height to zero about 8 metres along the eastern boundary and about 30 metres along the western boundary.

The refusals

15 On 29 June 2011, the City issued refusals for both planning applications.

16 The City refused the planning application for the concrete batching plant for reasons that can be summarised as follows:

- Concern about the proximity of a 'noxious industry' to a residential area.
- Concern about the impact on the amenity of the locality from noise and dust and on the visual amenity of the locality because of the height and appearance of the development.
- The development being inconsistent with orderly and proper planning.

17 The City refused the planning application for the retaining walls because it considered the walls would have an 'undue impact' on the visual amenity of the locality and would also be inconsistent with orderly and proper planning.

18 The two applications for review were then filed with the Tribunal.

Planning and environmental control instruments

19 The site is zoned General Industry under the *City of Bayswater Town Planning Scheme No 24* (TPS 24). The lots adjoining to the east and west of the site, and to the south across Collier Road, are zoned General Industry under TPS 24. Immediately adjacent to the northern boundary of the site is a 15 metre wide reserve for drainage. Between the drainage reserve and Shalford Street to the north, a distance of about 105 metres,

is a reserve for local public open space under TPS 24. This open space is known as Joan Rycroft Reserve. To the north of Shalford Street are single houses within a residential zone.

20 Collier Road and Tonkin Highway - which is approximately 150 metres to the west - are both reserved as primary regional roads under the *Metropolitan Region Scheme* (MRS). The site, adjacent lots, the drain and Joan Rycroft Reserve are all within the Industrial zone of the MRS.

21 The respondent characterised the use as a noxious industry, which is designated as a 'D' use within the General Industry zone under TPS 24. A 'D' use is not permitted unless the local government has exercised its discretion to grant planning approval. In 'Appendix 1 - Interpretations' of TPS 24 it states:

> Industry - Noxious: means an industry which is subject to licensing as 'prescribed premises' under the Environmental Protection Act 1986 (as amended).

22 Concrete batching plants are subject to licensing as a 'prescribed premises' under the *Environmental Protection Act 1986* (WA) (EP Act) and *Environmental Protection Regulations 1987* (WA) (EP Regulations) (reg 5 and Sch 1 Pt 2; Category 77).

23 The objectives of TPS 24 are stated at cl 1.6 and include the following:

> a) To zone the Scheme Area for the purposes described in the Scheme so as to strategically promote the orderly and proper development of land by making suitable provisions for the use of land within the Scheme Area;
>
> b) To secure the amenity, health and convenience of the Scheme Area and the inhabitants thereof …

24 Clause 3.6.1 of TPS 24 provides that, in considering an application for planning approval, due regard must be had to certain matters. The following matters are directly relevant to the proposed development:

> a) The aims and provisions of the Scheme …
>
> b) The requirements of orderly and proper planning …
>
> c) Any approved statement and planning policy of the [Western Australian Planning] Commission;

d) Any approved environmental protection policy under the Environmental Protection Act 1986;

e) Any relevant policy or strategy of the [Western Australian Planning] Commission and any relevant policy adopted by the Government of the State;

…

i) The compatibility of a use or development with its setting;

…

l) The likely effect of the proposal on the natural environment and any means that are proposed to protect or to mitigate impacts on the natural environment;

…

n) The preservation of the amenity of the locality;

o) The relationship of the proposal to the development on adjoining land or on other land in the locality including but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the proposal;

p) Whether the proposed means of access to and egress from the site are adequate and whether adequate provision has been made for the loading, unloading, manoeuvring and parking of vehicles;

…

v) Whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved;

…

(y) Any relevant submissions received on the application;

(z) The comments or submissions received from any local authority consulted under clause 3.5.1;

(aa) Any other planning consideration the local government considers relevant.

25 Clause 8.3.1.2 of TPS 24 provides that:

For the purpose of development within an Industrial or Commercial zone, no person shall construct a building of more than two storeys, being 9.0 metres in wall height and no more than 12.0 metres in height from the

> ground level to the roof pitch, within the Scheme Area unless the Council considers the building will not negatively affect the amenity of the surrounding area.

26 Pursuant to cl 3.3.1 of TPS 24, where an application requires the planning approval of the Council, the Council may give notice of the application to the public inviting submissions in accordance with the provisions of cl 3.3.2. The respondent gave notice of the proposed development, providing interested persons with the opportunity to comment.

27 In May 1997, the Western Australian Planning Commission (Commission) adopted *State Planning Policy No 4.1 'State Industrial Buffer Policy'* (SPP 4.1). SPP 4.1 first sets out 'Background Information', and this provides at clause 1.1:

> … most industries … need to be separated from residential areas and other sensitive uses with a buffer area … to ensure that amenity (environmental quality, health and safety standards) is maintained at acceptable levels.

28 Commencing at page 5 of SPP 4.1 is the 'Policy', and at clause 1 are listed certain corresponding objectives which include:

> (1) To provide a consistent Statewide approach for the definition and securing of buffer areas around industry, infrastructure and some special uses.
>
> (2) To protect industry, infrastructure and special uses from the encroachment of incompatible land uses.
>
> (3) To provide for the safety and amenity of land uses surrounding industry, infrastructure and special uses.
>
> (4) To recognise the interests of existing landowners within buffer areas who may be affected by residual emissions and risks, as well as the interests, needs and economic benefits of existing industry and infrastructure which may be affected by encroaching incompatible land uses.

29 Under the heading 'Principles', SPP 4.1 states, at clause 2(1):

> Industries, infrastructure and special uses requiring off-site buffer areas are an important component of economic growth in Western Australia and are essential for the maintenance of our quality of life. These facilities and associated buffer areas must be planned for.

30 At clause 4.4, under the heading 'How should industry and infrastructure comply with environmental and planning criteria?', SPP 4.1 states:

> Industry and infrastructure normally comply with adopted environmental and planning criteria through a combination of -
>
> - appropriate management practices which should not unreasonably inhibit industry capacity or infrastructure usage; and
>
> - off-site buffer areas.
>
> The size of the buffer area is dependent on the management practices used. …

31 Clause 1.3 of the 'Background Information' in SPP 4.1 includes the sentence:

> The Department of Environmental Protection is in the course of preparing a Generic Industrial Buffer Distance Review, which will form the primary guide to the need for buffers, along with appendices to this Policy.

32 In June 2005, the Environmental Protection Authority (EPA) produced a document 'Separation distances between industrial and sensitive land uses No 3' (Guidance Statement No 3). The listed sensitive uses include 'residential development' and 'playgrounds'. The Table at Schedule 1 of Guidance Statement No 3 stipulates that for 'concrete batching plant or cement products (bricks) manufacture', a generic buffer distance of '300 - 500 [metres is appropriate], depending on [the] size [of the operation]'.

33 Clause 4.4.1 of Guidance Statement No 3 provides that:

> Where the separation distance is less than the generic distance, a scientific study based on site- and industry-specific information must be presented to demonstrate that a lesser distance will not result in unacceptable impacts.
>
> If the distance from the industrial land use to the sensitive land use is less than the recommended separation distance, and it cannot be demonstrated that unacceptable environmental impacts are likely to be avoided, then other options should generally be pursued.
>
> These may include:
>
> - modifying the project to reduce emissions via engineering controls such as process design, process enclosure or other means; and

- pursuing land use planning and management controls (e.g. land acquisition, rezoning) to reduce environmental impacts to acceptable levels.

34 In 2009, the Commission published draft *State Planning Policy 4.1 'State Industrial Buffer (amended)'* (draft SPP 4.1). Draft SPP 4.1 restates (from SPP 4.1) the rationale for an industrial buffer policy and includes at clause 5.2:

> Proposals that satisfy recommended buffer distances in *Guidance for the Assessment of Environmental Factors No 3 Separation distances between industrial and sensitive land uses* (Environmental Protection Authority, June 2005) are deemed to comply with the objectives of this policy and shall form the basis of planning controls adopted by the [Commission] as a basis for local planning.

35 Further provisions of both SPP 4.1 and Guidance Statement No 3 are included in the discussion of the issues below.

36 Thus, to assist in determining whether there would be an acceptable impact on the amenity of the locality, as required by cl 3.6.1 of TPS 24, the proposed development was assessed by the parties having regard to the requirements of:

- the *Environmental Protection (Noise) Regulations 1997* (WA) (Noise Regulations); and
- the *Environmental Protection (Concrete Batching and Cement Produce Manufacturing) Regulations 1998* (WA) (Concrete Batching Regulations).

37 The relevant clauses of these instruments are also referred to in the discussion below.

Issues

38 The issues, as agreed between the parties, were as follows:

1) Is the proposed development consistent with orderly and proper planning, given its classification as a 'noxious industry' and its proximity to an established residential area?

2) Will the proposed concrete batching plant negatively impact upon the amenity of the surrounding area, so as to

preclude a variation of the 12 metre height limit applicable to industrial development, having regard to:

a) potential noise emissions from the operation of the plant;

b) potential dust emissions from the operation of the plant;

c) the visual impact of the plant, particularly the 19 metre high silos; and

d) the separation distance between the plant and residential dwellings?

3) Would approval of the proposed concrete batching plant be inconsistent with the preservation of the amenities of the locality, having regard to the considerations referred to in paragraphs 2(a) - 2(d) (above) inclusive?

4) Does the development, as proposed, allow for a sufficient separation distance to sensitive land uses, as required by the Environmental Protection Authority's *Guidance for the Assessment of Environmental Factors, Separation Distances between Industrial and Sensitive Land Uses* (No 3, June 2005) (Guidance Statement No 3)?

Specifically, with regard to the retaining wall application, the following issues were said to arise:

5) Would the visual impact of the proposed retaining wall along the rear boundary have an unacceptable impact on the amenity of the locality?

6) Would it be contrary to orderly and proper planning to approve the retaining wall on the basis of landscaping to mitigate its visual impact if undertaken on land outside the boundaries of the subject land?

39 The issues agreed between the parties interrelate and overlap; they are addressed in the lengthy discussion below.

40 We observe at this point that the more critical issue is the environmental health consequences of dust emissions from the proposed development. The Tribunal's approach to having the dust issue properly

addressed by the parties, so that the Tribunal could be properly informed, is set out in some detail below.

41 However, we commence with consideration of the expert evidence given in relation to the visual impact of the height of the proposed development.

Visual impact and height of the plant

42 It was agreed by Mr Damien Martin (a planner employed by the City) and Mr Lee Rodda (a planner engaged by the applicant), with input from Mr Walter Lukic, an engineer and batching plant manager employed by the applicant, that the location of the proposed plant and its silos was on a high point relative to Joan Rycroft Reserve and the houses, and that any development on the site would be plainly visible from the north. This is illustrated in the City's contour plan which was provided to the Tribunal.

43 During the course of the hearing, the applicant indicated that it was amenable to amending its application to redesign the cement silos to reduce their height to 12 metres, plus the additional height of their filter units. However, the number of units would have to be increased from three to four to maintain storage capacity. The Tribunal has proceeded to assess the proposal upon that basis.

44 We note, however, that Mr C Slarke, counsel for the City, expressed the reservation that although this height was an improvement on 19 metres, the amended proposal still may not be compliant with the 12 metre roof pitch height found in cl 8.3.1.2 of TPS 24.

45 The City's contour map shows that the lots adjoining the site to both the west and the east are at the same contour as the site. That is, the proposed silos would be at about the same floor level as the large sheds on those adjoining lots.

46 The shed on the lot to the west is 30 metres wide and the shed on the lot to the east is 60 metres wide near the northern boundary. Both sheds are up to 12 metres in height. These sheds are, respectively, 180 metres and 130 metres from Shalford Street. The industrial waste transfer shed two lots to the west is also 60 metres wide adjacent to the northern boundary, but this shed is at a lower contour.

47 The proposed silos are about 3 metres in diameter up to the now proposed 12 metre height, and the filters on top are of a lesser diameter.

The silos would be aligned perpendicular to the northern boundary and the closest silo would be about 300 metres from Shalford Street.

48 We have found that in a locality and landscape dominated by industrial buildings of considerable bulk (which we have set out above), the filter units sitting above the silos, although higher than 12 metres, would 'not negatively impact on the surrounding area', including the area to the north. This is the standard required by cl 8.3.1.2 of TPS 24 in order for discretion to be exercised in respect of extra height.

49 In respect of this issue, our conclusion is that the height of the development as now proposed would not prevent conditional planning approval being granted.

Visual impact of retaining walls and location of landscaping

50 A related issue is the height and presentation of the retaining walls.

51 It was common ground that there are already retaining walls of similar height to what is proposed on adjoining properties to the east. Nevertheless, to improve the visual impact of the proposed retaining walls, Ransberg proposed to plant additional trees within the Water Corporation drainage reserve and on the Joan Rycroft Reserve so as to screen the proposed retaining walls from residential dwellings to the north.

52 A revised design submitted by the applicant for a proposed stepped retaining wall was described by Mr I Rogers, then counsel for the applicant, as involving a visual match with the existing retaining walls on the furniture manufacturing site to the west of Lot 2.

53 In the result, the parties agreed that if the proposal were to be approved, two conditions for the wall design would be necessary, these being, first, an (engineering) certification for the wall, and, secondly, a landscaping design approved by the City.

54 In this regard, we note that with the stepped wall as now proposed, there is potential for planting above and along the terrace that would soften the appearance of the wall. In addition, the photographs taken from Shalford Street supplied by the parties show mature vegetation in the reserve adjacent to the rear boundaries of the lots adjacent to the site that already partially screens those lots. The applicant has offered to provide planting in a similar location. It seems to us that planting with the same potential being established adjacent to the northern boundary of the site

and then handed to the respondent might be a consideration for inclusion in a landscape plan if the proposal proceeds.

55 We next turn to noise control.

Noise emissions

56 Evidence was given by two noise experts, Mr Tim Reynolds, who was engaged by the applicant, and Mr Daniel Lloyd, who was engaged by the respondent, on the findings of both an initial noise assessment in relation to the proposal conducted by Mr Reynold's firm, and with respect to supplementary further information that flowed from plant and operational design modifications (including as to layout, additional screening and noise barrier proposals).

57 The experts agreed that with a wet-mix plant, noise from concrete slumping rarely occurs. On the assumption that at least some operational aspects of concrete batching would begin before 7 am (in accordance with widespread practice at other batching plants), noise emissions from this operation would need to comply with the night period under the Noise Regulations.

58 This would involve a night period LA10 assigned noise level of 35dB, plus an influencing factor and a transport factor, as measured at the critical nearest neighbouring residence. While the two experts disagreed on how the proximity of Collier Road and Tonkin Highway might be interpreted in the influencing transport factor, they agreed that the modelling study indicated that if only one road contributes +2dB to produce a lower overall influencing factor, compliance with the Noise Regulations would require an LA10 of 41dB.

59 The experts agreed that this lower level could still be achieved by reducing noise emissions from the FEL (when the hoppers are being filled) using a directional exhaust modification to the side and away from the direction of the residences.

60 Mr Lloyd pointed out that night-time noise levels in industrial areas can be very low, so some annoyance from night-time operations may eventuate if the area were otherwise quiet.

61 In the result however, the parties reached agreement that if the proposal were approved, no FELs would operate before 7 am.

62 The noise experts having otherwise demonstrated to the satisfaction of the Tribunal that any noise issues could be managed to comply with the

Noise Regulations, the Tribunal has concluded that this issue would also not stand in the way of a conditional approval.

Separation distance from residential areas

63 The next issue to be addressed concerns orderly and proper planning. In this context, the issue of a proper separation distance as regards residential areas (sensitive receptors or sensitive premises) involves not only the preservation of the amenity of the locality, but also issues connected with public health and the environment.

64 Aerial photographs submitted by the respondent showed the recreation facilities of Joan Rycroft Reserve and the residential area adjacent to the site. A radius of 300 metres drawn from the proposed plant's rear hardstand would take in just over 30 dwellings, and a 500 metre radius would include about 111 dwellings.

65 As stated above, SPP 4.1 is directed to avoiding land use conflicts by the use of an appropriate buffer between sensitive uses and industrial development. The generic buffer distance for a concrete batching plant in Guidance Statement No 3 is 300 to 500 metres, depending upon the size of the plant.

66 Mr Slarke referred to the likely buffer distances and submitted that a concrete batching plant should be sited toward the centre of the Industrial zone.

67 Under clause 3 of Guidance Statement No 3, it is stated that:

> The reader should be aware that generic distances do not take into account:
>
> - cumulative impacts;
> - non-typical emissions;
> - …
> - potential health impacts from emissions.

68 As part of comprehensive environmental impact management, the EPA states that it expects that these matters will also be considered and managed as appropriate.

69 In this review, the management of the impact of emissions is critical to the issue of whether the impact on the amenity of the locality

is acceptable. Importantly, in respect of generic buffer distances, Guidance Statement No 3 advises, at clause 4.2, as follows:

> It is not appropriate to use the generic separation distances where the industry involved is very large, utilises non-typical technology, or in some other way the circumstances are not typical.

70 Guidance Statement No 3 further recommends, at clause 4.4.1, that:

> Where the separation distance is less than the generic distance, a scientific study based on site- and industry-specific information must be presented to demonstrate that a lesser distance will not result in unacceptable impacts.

71 Among submissions on the proposals received by the City from statutory authorities and government agencies, in a letter dated 5 May 2011, the DEC provided the following advice in relation to any prospective variation of the generic separation distances required under Guidance Statement No 3:

> In accordance with draft [SPP 4.1], DEC does not believe that an adequate buffer could be accommodated if the Concrete batching plant is established on the subject lot. A proponent or responsible authority wishing to deviate from the advice in the Guidance Statement would be expected to put a well-researched, robust and clear justification arguing the need for that deviation. DEC recommends that the City refuse to grant this development application until the proponent has adequately addressed the above issue.

72 Mr Slarke, counsel for the respondent, said it was the City's contention that with the current proposal at the edge of the Industrial zone, there were effectively sensitive receptors very close to the site boundary. Immediately north of the site boundary there would be people using the recreation facilities on Joan Rycroft Reserve. Therefore, a facility for a noxious industry should be sited towards the centre of the Industrial zone.

73 The applicant argued that the technology used in the batching plant is different from that commonly used, and site-specific studies support a buffer distance less than the generic distance of Guidance Statement No 3.

74 Mr Rogers, Ransberg's then counsel, in his opening address highlighted examples of metropolitan concrete batching plants operating successfully with separation distances much less than 300 metres. He contended that this industry was highly regulated, requiring both works approval and licensing by the DER under the EP Act, as prescribed premises under Category No 77 of the EP Regulations. Moreover, the

industry was also subject to the Concrete Batching Regulations, as well as industry guidelines for the operation of batching plants.

75 Ransberg had submitted with its development application a table of proposed compliance details under the Concrete Batching Regulations.

76 Further, acknowledging community concerns about the toxicity of fly-ash as a concrete ingredient, Mr Lukic said that no fly-ash would be used at this plant.

77 Importantly, it was a matter of agreement between the environmental experts, Mr Andrew Mack (engaged by the respondent), and Mr David Ross (engaged by the applicant), that although neither had prior experience of wet-mix operations, and relied on the literature for their understanding of such matters, it appeared that the technology for concrete batching plants had progressed since the time when Guidance Statement No 3 was issued. And, overall, the experts shared the view that the proposed plant's design and operating system would enable industry best practice for environmental management to be implemented.

78 We accept their view notwithstanding that in later evidence given by Mr David Pitt (an expert on dust and engaged by the respondent), it was suggested that, in regard to concrete materials handling facilities situated very close to sensitive premises, 'best practice' now involves the enclosure of such facilities in order to minimise noise and fugitive dust: see also our conclusions on wet-mix operations, below.

79 The Tribunal concluded that because of the use of what is currently 'non-typical' (wet-mix) technology and the opportunity for scientific study based on site specific information, the development should not be refused as a matter of course because of non-compliance with the generic buffer distance of Guidance Statement No3.

80 The course adopted by the Tribunal to obtain necessary information to properly determine whether the proposed development might be allowed in the location proposed is set out in the discussion below.

81 As was noted above, the critical issue in the review is the amount of dust that would be produced by the concrete batching operation and whether design and management measures could control the environmental impact of the dust.

82 We turn first, however, to the issue of *pre-existing* dust levels.

Is there a pre-existing dust problem at the proposed site?

83 In the first round of hearings, the expert planning witnesses, Mr Martin and Mr Rodda, told the Tribunal they both understood that an unrelated building waste concrete-crushing facility on the corner of Jackson Street (immediately to the south of the subject land) operated as a 'prescribed premises' under both an EPA works approval and applicable environmental regulations because of the amount of dust it produced.

84 Under cross-examination, both experts agreed that this plant was located much closer than the 1,000 metres minimum generic buffer distance from sensitive premises given by Guidance Statement No 3 for building waste concrete-crushing facilities. Mr Martin said the plant had operated since about 2004 but remained a problematic operation for the City in terms of compliance with control measures for its fugitive cement dust emissions.

85 Neither of the two environmental experts, Mr Mack and Mr Ross, knew of any relevant prior studies on the characteristics or quality of the local airshed. Mr Mack said that he had worked on considerations of potential cumulative contributions to dust by neighbouring industries and that he considered that the public submissions on the proposals indicated that there was a perceived and perhaps an actual dust problem in the residential area in question.

86 In evidence submitted by the City, witness statements from nearby residents included observations about dust, and expressed concerns as regards its impact upon air quality and community health, including the wellbeing of those believed to be most vulnerable to health conditions related to dust. Such concerns were also repeatedly reflected in the large number of submissions arising from the advertising of the proposal. Residents north of Joan Rycroft Reserve reported their suburb and their families as already being adversely impacted upon by visible dust, the source of which was mostly attributed to the industrial area to the south. A related concern was the proximity and recreational use of Joan Rycroft Reserve itself, which included a children's playground.

87 At this stage of the proceedings, the environmental experts agreed that:

1) the proposal could be regarded as a large concrete batching plant and that there was a risk, or potential for, a new industry to contribute to a cumulative impact on air quality;

2) the local airshed's characteristics were unknown, as were its current air quality, including the quantity and nature of the particulates; and

3) satisfactory air quality baseline monitoring was desirable before operations began, and that no reliance should be placed on effective regulation in the absence of such data.

88 Mr Mack expressed the concern that without such *baseline* monitoring, it was not known whether further industrial development would 'nudge' the levels of particulates over acceptable levels.

89 Mr Ross expressed the view that in such circumstances, any future *operational* monitoring should not be relied upon if background air quality had not been established. He said that it would be unfair if the burden of air pollution compliance should fall alone upon a new industry with a small potential contribution to what might be a cumulative problem.

90 While it was clear that improved management of nearby industries and facilities could result in improving future background air quality, under questioning from the Tribunal, the environmental experts conceded that it was also possible that over time, due to other local cumulative impacts, air quality could deteriorate to a point where management would be unable to make improvements by the 'fine-tuning' of the operation.

91 The Tribunal formed the view that obtaining the relevant 'baseline' data was necessary if the Tribunal was to be sufficiently informed on what additional impact the proposed development would have on any dust problems in the locality: see below on the steps taken by the parties in this regard following the Tribunal's announcement of its 'interim' position as at December 2011.

Dust standards

92 It was common ground amongst all of the environmental experts that the appropriate standard for airborne particulates, as a health-based criterion, is the National Environmental Protection (Ambient Air Quality) Measure (or NEPM). NEPM has been adopted by the DER in conjunction with the Department of Health, at least as an interim measure ahead of any legislated standard.

93 NEPM refers to the invisible fraction of suspended particles with an aerodynamic diameter smaller than 10 micrometres, known as the PM10

level, and stipulates a maximum of 50 micrograms of particles per cubic metre of air ($\mu g/m^3$), measured continuously and averaged over 24 hours, and an annual overall daily average not to exceed $30\mu g/m^3$. The NEPM reporting standard also allows for up to five individual daily averages to exceed $50\mu g/m^3$. (The latest version of NEPM may be found in The National Environmental Protection Council's 2010 discussion paper reviewing NEPM.)

94 Mr Ross noted that cement was a source of respirable dust, to which Mr Mack added that crystalline silica was a listed component of cement and is a known carcinogen.

95 These two experts did not disagree with Mr Slarke when he put to them that there did not appear to be any mechanism under Pt V of the EP Act that would apply NEPM for particulates as a regulatory standard for air quality.

96 At the resumed hearing, the Tribunal also drew the parties' attention to the World Health Organisation (WHO) Fact Sheet No 313 (updated September 2011) which re-stated 2005 Air Quality Guidelines with interim targets for outdoor air pollution, including an annual mean PM10 value of 20 micrograms per cubic metre. WHO also stated, under the heading 'Particulate matter - Guideline values', that:

> … As no threshold for PM has been identified below which no damage to health is observed, the recommended value should represent an acceptable and achievable objective to minimize health effects in the context of local constraints, capabilities and public health priorities.

97 The Tribunal will return to material concerning these dust standards below when dealing with the precautionary principle. There is also discussion of appropriate dust standards in our discussion of the experts' views on background dust monitoring (see below).

The Tribunal's interim position as at December 2011

98 Shortly after closing addresses on 1 December 2011, the Tribunal briefly deliberated on the state of the written and oral evidence then before the Tribunal. The Presiding Member (Mr McNab) stated the Tribunal's general and provisional position, based upon this material, as follows:

> From our consideration of the evidence to date, we have formed the view that if the evidence currently before us [were to be] supplemented in two critical respects … then subject to our consideration of that evidence[,]

> informed by expert advice, we can see no reason why the [proposal] should not be granted conditional approval …
>
> First [we would need] sufficient technical and environmental information on the wet mix operation, such as, and this is for example, the Barrow Island environmental assessments of the engineering design of the wet mix proposal [there] and any other similar authoritative assessments from elsewhere such as would justify or verify the claims of the applicant as to the superior performance characteristics of this system. …
>
> [S]econd[ly] [we would need] supplementary site specific studies which include[d] the following information: (a) information on baseline air quality; and (b) modelling to show the dispersion characteristics as regards any relevant dust discharges. …

99 This process is broadly similar to what occurred in another major environmental case in the Tribunal, namely ***Keysbrook Leucoxene Pty Ltd and Shire of Serpentine-Jarrahdale*** [2012] WASAT 212 (***Keysbrook Leucoxene***) (cf at [7] - [8]).

100 The proceedings were then adjourned in order for the parties to consider these matters.

Terms of reference for further investigations and their implementation

101 In a letter to the Tribunal dated 8 December 2011, the solicitors for the applicant summarised what they understood was the Tribunal's provisional position as follows:

> We refer to the Tribunal's comments at the conclusion of the hearing in this matter on Thursday, 1 December 2011, namely that, on the evidence received, there was no basis for refusing an approval (i.e. a conditional approval could be granted) provided the evidence was supplemented to the Tribunal's satisfaction in the following two critical areas:
>
> (a) Sufficient technical and environmental information on the wet mix concrete batching operations including those used at Barrow Island and authoritative assessments of the use of similar facilities that justify and support our contentions that wet mix concrete batching is superior in terms of processes and environmental issues (i.e. dust emissions); and
>
> (b) The provision of site specific information or a study showing:
>
> (i) information on baseline air quality; and
>
> (ii) modelling to show the dispersion characteristics of dust.
>
> …

102 The letter then went on to outline Ransberg's response, the key parts of which were as follows:

> The Applicant confirms that it will supplement the evidence as required.
>
> In this regard the Applicant advises as follows:
>
> **Technology Review**
>
> 1. The Applicant will provide additional data, diagrams and photographs of concrete batching technology, with particular focus on the Western Australian context and environmental benefits of the 'wet-mix' batching process. In reviewing the environmental benefits of the proposed plant, the plant should be considered in the context of the existing concrete batching plants within Western Australia, rather than a comparison of solely the 'wet-mix' and 'dry-mix' batching processes. The review shall consider the two recently commissioned 'wet-mix' plants on Barrow Island. The additional innovations in overall plant design and layout, separate to the mixing process, provide tangible environmental and operational benefits and must also be considered as part of the review.
>
> **Dust Assessment**
>
> ***Stage 1 - Dust Dispersion Modelling***
>
> 2. This stage involves the predictive modelling of emissions from the proposed plant.
>
> 3. The Applicant will:
>
> (a) engage independent air quality consultants to assess and quantify the potential emissions for each potential emission source of the proposed plant; and
>
> (b) request historical dust monitoring records from the City for the locality (as described in the evidence of Mr Martin).
>
> 4. The independent consultants are to review and analyse available historical dust monitoring records and prepare a report of the findings of their analysis of the data.
>
> 5. The independent consultants are to conduct modelling of predicted emissions of the proposed plant and any likely addition to the locality area.
>
> …

15. It is expected that this stage 1 modelling will be completed mid January 2012 and a decision can be made on the requirements of stage 2 monitoring and modelling.

16. The stage 1 modelling will provide a sound indication of the potential for dust impacts on the residences to the north.

Stage 2 - Site Baseline Monitoring and Modelling

17. Stage 2 is on site and pre-construction monitoring and running the stage 1 model again, within a defined period after monitoring.

18. If the predicted modelling under stage 1 shows that no emissions reach the residential area to the north the utility in proceeding with stage 2 modelling is questionable as the proposed plant would not be increasing emissions at the residential area.

19. If however the results show that the proposed plant may influence emissions at the residential area then the level of predicted impact will be used to determine what level of baseline assessment needs to be done.

20. Should an investigation be required it would involve a program of monitoring, analysing the results and then using an interpolation model to predict results for areas that were not physically sampled (i.e. the residences).

…

103 At subsequent directions hearings on 9 December 2011 and 6 February 2012, it was agreed that this letter, speaking generally, set an agenda for further defining the investigations that would be needed following the Tribunal's expression of its provisional views.

104 The Tribunal granted a request by then counsel for the applicant, Mr Hardy, for a two month adjournment to enable Ransberg to plan to best effect the required baseline monitoring of air quality.

105 At a further directions hearing held on 17 July 2012, the Tribunal was informed that the dust experts appointed by each party had reached agreement on how the baseline monitoring was to be undertaken, and that in fact a three month period of monitoring had been accomplished, ending in early July 2012. Work on technology verification and the dispersion modelling was also underway.

106 On 25 September 2012, then counsel for the respondent, Mr Nicholson, informed the Tribunal that the City, having had time to review the results of the three month dust monitoring in a report supplied

by Ransberg, had concluded that because certain monitoring data were missing from the record of monitoring so far, existing concerns over air quality had not been allayed. While the City did not agree with the applicant that data substitution could overcome the monitoring report's alleged deficiencies, the City had no issue with Ransberg proceeding to complete the predictive modelling report.

107 The parties, sensibly, consented to one of the Tribunal's panel members, Mr Curry, mediating any technical issues between the dust experts while remaining on the hearing panel. (A similar practice was followed in ***Keysbrook Leucoxene***, at [10]).

108 Following two mediations at a subsequent directions hearing on 5 February 2013 we were informed that Ransberg had extended the baseline monitoring period so as to make data substitution unnecessary, and that five sets of reports and data had been supplied to the City. The matter was again adjourned into mediation after which programming orders were made for the resumed final hearing. This was held in October 2013.

Background dust monitoring

109 At the resumed final hearing, the Tribunal turned first to the issue of the background dust monitoring.

110 The Tribunal heard evidence from two expert witnesses on air quality and dust, Mr Gary Graham (engaged on behalf of the applicant), and Mr David Pitt, previously mentioned, engaged by the respondent.

111 Mr Graham addressed the results of the two baseline air quality monitoring programs which had been conducted at the subject land and which covered the period from 6 April 2012 to 6 April 2013. As is set out above, the purpose of the monitoring was to collect site-specific data to assist with the quantification of baseline conditions at the site for use in subsequent studies.

112 The experts agreed that the 12 months of onsite ambient (background) air quality monitoring had been collected at an air quality monitoring station established on the site. Data were collected on background dust conditions in terms of total suspended particles (TSP); PM10 particles (see above) measured via a Tapered Element Oscillating Microbalance (TEOM); monthly dust deposition rates; and local wind conditions from an onsite weather station. It was also agreed by the

experts that the monitoring had been properly conducted to meet the required technical standards.

113 Under questioning from the Tribunal, the experts confirmed that throughout the 12 month monitoring period there had been, with respect to the critical measurement, no PM10 24 hour averages exceeding the 50μg/m^3 NEPM standard. This was despite measured daily averages reaching between 40 and 50μg/m^3 on nine days over summer, three days in autumn and one day in the spring months. The mean 24 hour average PM10 for the whole year was 23.1μg/m^3 which compares with the NEPM standard of 30μg/m^3 for a whole year.

114 The monitoring results for summer measurements (December to February) also demonstrated that winds at the site were either from the south-east or south south-east during the majority of the hours when background PM10 levels rose above the level of 25μg/m^3. Accordingly, at times of relatively poor air quality, any fugitive dust from the subject land would be likely to be carried towards the sensitive residential premises.

115 In his witness statement, Mr Pitt observed that the background PM10 concentrations measured at the site were approximately 43% higher than those measured over the same period at the DER's Caversham monitoring site, north-east of Perth and the site. The highest daily levels of particulates in Caversham were generally associated with smoke received from fires or burning off elsewhere in the south-west region. The experts agreed that this site would be the nearest site for comparison of airborne particulates. Mr Pitt also stated that the long term record from Caversham showed significant between-year variations in ambient air quality, which meant that any one year's background monitoring results had a limited capacity to predict another year's results.

Dust dispersion modelling

116 The second air quality issue is in relation to the modelling of dust dispersion from the site of the proposed plant. As this issue is particularly critical as to whether or not the proposal ought to be approved, it is necessary to closely examine the detail of the modelling and its underlying assumptions.

117 Mr Graham explained to the Tribunal that likely dust emissions from the proposed plant had formed the basis of an Air Quality Impact Assessment (AQIA). This study used the AUSPLUME method of atmospheric dispersion modelling, applying a range of input data required

to predict fugitive emissions and the anticipated air quality impacts of the proposed batching plant's operation.

118 The experts agreed that it was very difficult to predict actual operational emissions. During the past year, the two experts had jointly designed sensitivity tests on possible sources of dust with the aim of reducing these uncertainties. In addition to meteorological data, input data for the modelling included the identification and description of emission sources from the operation, applicable emissions controls, details of local topography, and the location of the five closest sensitive receptors among the residences to the north and north-east.

119 Six main emission sources were identified in the study:

1) trucks dumping aggregates and sand;

2) FEL operations in relation to aggregates and sand;

3) miscellaneous transfer points (including the pneumatic conveyor);

4) mixer loading;

5) road haulage; and

6) aggregates and sand storage piles in the bins.

120 Modelling 'scenario 1' was designed to represent a maximum daily production rate of 500m^3, while 'scenario 2' represented a typical daily production rate of 135m^3.

121 In Mr Pitt's view, the higher figure for scenario 1 would be closer to 400m^3 per day as the claimed annual capacity of the plant was 120,000m^3. This was the figure likely to be assessed by the DER for licensing purposes.

122 The experts agreed that the USA's Environmental Protection Agency's Handbook AP-42 specified updated emissions factors for concrete batching plants. These were the factors that were used and documented in the AQIA and better reflected more recent technological advances in the industry. These emissions factors were less conservative than the older comparable emissions factors taken from the Australian National Pollution Inventory (NPI) emissions factor handbook for estimating emissions from concrete batching plants.

123 The experts also agreed that an Environmental Management System that incorporated an Environmental Management Plan (EMP) and an ambient dust monitoring system would provide an ongoing mechanism to minimise the potential for adverse dust impacts.

124 The experts noted that the applicant's submitted dust management plan assumes a continuously high standard of 'housekeeping' for the yard area on the site and relied heavily upon water sprays and wash-down control of site dust. An overall dust control factor of 50% was assumed for modelling of emission factor controls to be achieved by watering. Mr Graham stated that some emissions sources had no water control factor applied, such as that from the FEL operation, other than the periodic wash-down of spillages.

125 It was uncontested that the average dust deposition rate for the project site was measured at 2.7 grams per square metre per month during the March to July period. This figure was used for modelling purposes. Importantly, the additional (incremental) dust deposition predicted by the model to result from the project was below 0.1 grams per square metre per month.

126 The experts further agreed that the AQIA demonstrates that the anticipated ground level impacts at the closest residential receptor locations would comply with the relevant assessment criteria for PM10, for both scenarios of concrete production referred to above. For scenario 1, for the higher throughput, two days of exceedances of the PM10 24 hour NEPM standard of 50 micrograms are predicted at one of the receptors, with one exceedance predicted at three of the other receptors. Under scenario 2, two exceedances are still predicted for one receptor, but (only by very narrow margins) none at the other four.

127 However, the experts' joint statement cautioned that:

> 1.1 … as with all modelling studies, there are inevitably a wide range of uncertainties that may result in model under- or over-prediction, and demonstration of compliance through dispersion modelling does not necessarily indicate that the ambient air quality criteria will be achieved in reality if the plant was operational.

128 Importantly, Mr Graham was of the view that in any future operational context, actual compliance with the NEPM criteria for PM10 at the sensitive premises would need to be monitored. Both experts agreed that there were interstate precedents for planning approval

conditions that would control the incremental contribution a facility made to 24 hour average PM10 levels at sensitive receptors.

129 They further agreed that the modelling study and subsequent AQIA conducted for this proposal predicted the worst case scenario for dust dispersion from any plant emissions to that received at the nearest residential housing. The numerical relationship between the worst case scenario for particulates travelling downwind to the sensitive receptors compared with onsite air quality, impacted by operational emission sources at the plant, had been established by the modelling. That numerical relationship could be used as a quantitative basis for setting allowable limits to operational emissions and their impact on PM10 levels.

130 In practical terms, implementing such limits could be facilitated by ongoing monitoring involving retention of the established TEOM (PM10) monitor located near the site's northern boundary, and installing a nearby second TEOM off the site, in accordance with measurement standards.

131 Mr Pitt's view was that any such demonstration of compliance could not be achieved in less than approximately three years of operations, by which time the facility might reasonably be expected to have reached maximum throughput, with the associated dust emissions and impacts becoming established.

The design and technology of wet-mix concrete plants

132 The related issue raised by the Tribunal and addressed by the applicant related to the need to demonstrate 'authoritative assessments from elsewhere such as would justify or verify the claims of the applicant as to the superior performance characteristics of [the wet-mix] system' in relation to dust control.

133 For Ransberg, its counsel, Mr Hardy, submitted, as an over-arching consideration, that it was possible to distinguish between what was 'best practice' and what was 'best' in relation to the design of such a plant. While it was theoretically possible to design and construct a completely enclosed concrete batching plant with virtual exclusion of dust emissions, this was not an economic proposition for this site in its planning and commercial context, and for which continuous night-time production was not contemplated.

134 Uncontested documentary evidence provided by Mr Lukic (for the applicant) indicated that the DEC had conducted an Environmental

Assessment Report in 2010 (Assessment Report) on a proposal for the construction of a wet-mix concrete batching plant at Lot 201 Miguel Road, Bibra Lake. The Assessment Report cited a premises throughput capacity of concrete production of 135,000 tonnes per year. The Assessment Report's 'Location of Premises' noted that:

> Lot 201 Miguel Road, Bibra Lake is surrounded by industrial and commercial land uses on neighbouring properties. The closest residential area to the proposed premises is the suburb of Yangebup, located approximately 300 m south east from the proposed premises at its closest residential point …

135 The DEC's 'Proposal Description' records that:

> The concrete batching plant works using fresh, wet cement in its process … aggregate materials are fed into the hopper bins using a front end loader. A conveyor system then feeds the aggregates into the electric powered batching plant, where they are mixed with water for transfer into waiting concrete trucks. Mixing is undertaken through a fully automated process, and plant mixes for different concrete blends are controlled through the inputs into the system by the Plant Manager at the computer console …

136 In DEC's documented risk assessment, in acknowledging that there was the potential for dust emissions during construction and then operation of the plant, it was said that these emissions will be managed under the Concrete Batching Regulations.

137 Mr Lukic told the Tribunal that this facility was now undergoing commissioning, and that there was another wet-mix plant operating on Barrow Island.

138 In the above 'interim' position (as of December 2011), the Tribunal indicated that it would need to be satisfied that there was independently assessed evidence (or equivalent) that the proposal's new technology and operating system was not likely to generate a problematic level of fugitive dust, under sustained year-in/year-out maximum levels of production throughput. Both normal operating conditions (and those involving contingencies - for example, any component failures say, as regards dust filters, or accidents) would be relevant to establishing such justification. A suitable line of evidence might arise from one year or more of dust monitoring in relation to the performance assessment of a plant similar to that presently contemplated.

139 The applicant was unable to offer any such evidence; but, on the other hand, nor was there evidence refuting the applicant's claims.

The Tribunal accepts the broad evidence of technological improvements inherent in the design of the technology but, in the absence of any quantified independent record, the Tribunal must regard the environmental performance of wet-mix technology in limiting dust emissions as being, at this stage, unconfirmed.

140 It is indeed curious, given the applicant's sustained efforts at base line monitoring and general engagement on the environmental aspects of the proposal, that such data could not be located. Nevertheless, for the reasons given below, such defects have not been in the end fatal to the applicant's case.

Should the precautionary principle be invoked to justify refusal?

141 In relation to dust issues and their possible impacts upon health and amenity, in ***Wattleup Road Development Company Pty Ltd and Western Australian Planning Commission*** [2011] WASAT 160 (***Wattleup Road***) the Tribunal had applied the 'precautionary principle' to refuse certain development. See ***Wattleup Road***, at [46] - [71]. Mr Slarke, for the respondent, submitted that the application of this principle would justify refusal of the proposal.

142 This principle arises, in part, from the objectives of the PD Act and *State Planning Policy No 1 - State Planning Framework Policy* (SPP 1). At clause 3 of SPP 1 it is stated that:

> The protection of environmental assets and the wise use and management of resources are essential to encourage more ecologically sustainable land use and development. Planning should contribute to a more sustainable future by:
>
> …
>
> iv. adopting a risk-management approach which aims to avoid or minimise environmental degradation and hazards;
>
> …

143 In ***Wattleup Road***, at [65], the Tribunal cited with approval ***Telstra Corporation Ltd v Hornsby Shire Council*** [2006] NSWLEC 133; (2006) 146 LGERA 10 (***Telstra***). In ***Telstra***, Preston CJ said, at [128]:

> The application of the precautionary principle and the concomitant need to take precautionary measures is triggered by the satisfaction of two conditions precedent or thresholds: a threat of serious or irreversible environmental damage and scientific uncertainty as to the environmental damage. These conditions or thresholds are cumulative. Once both of

> these conditions or thresholds are satisfied, a precautionary measure may be taken to avert the anticipated threat of environmental damage, but it should be proportionate: N de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules*, Oxford University Press, 2005 at 155.

144 In *Environmental and Planning Law in New South Wales* (Federation Press: 3rd ed, 2012) the learned authors say of this decision, at 26:

> This is an important judgment, as it not only analyses the precautionary principle and identifies the process for its application, but also emphasises that the principle operates to shift the evidentiary burden of proof. Consequently, once a threat of serious or irreversible harm has been established, the precautionary principle operates to create the assumption that the threat is certain, requiring action on the part of the decision-maker.

145 The Tribunal accepted the following expert evidence in ***Wattleup Road***, at [51]:

> Health professionals and scientists are most concerned with particles small enough to be inhaled by humans. Particles larger than PM10 … are usually caught in the nose and throat and expelled[,] while PM10 and smaller particles may lodge throughout the lungs. … [P]articles 2.5 microns and less in diameter have a greater capacity to penetrate the alveoli [gas exchange cells] of the lungs and travel across the cellular membrane.
>
> The health effects that result from exposure to high levels of dust generally tend to be specific to the cardio-pulmonary system … [a]nyone can be affected by high levels of dust but the risk is greatest for individuals with clinical respiratory and cardiovascular disease, the elderly, babies and young children.
>
> Substantial evidence exists demonstrating the link between exposure to PM and increased risk of cardiac and respiratory disorders …
>
> Current research has not been able to determine a concentration level below which PM does not affect cardiopulmonary health … it is not possible to define a scientific valid 'safe' level at which the majority of the population will be spared adverse health effects.

146 The Tribunal's view in ***Wattleup Road***, at [68] and [71], was that:

> There is a threat of serious or irreversible environmental damage for residents of the proposed subdivision in relation to dust from the [Residue Drying/Disposal/Storage Area] and the sand quarry to the south and south-east of the site. Furthermore, there is scientific uncertainty as to the environmental damage. Conditions precedent to the satisfaction of the

> precautionary principle are therefore established. Consequently, a precautionary measure may be taken to avert the anticipated threat of environmental damage, provided that it is proportionate to the threat, appropriate and cost-effective. Adequate air quality monitoring requires prior consultation with the DEC, monitoring for a period of at least 12 months and assessment and reporting in relation to relevant standards for PM10 and TSP and chemical composition of dust.
>
> …
>
> Balancing the planning considerations, the Tribunal considers that, in the circumstances of this case, the precautionary principle warrants refusal of the proposed subdivision, unless and until adequate air quality monitoring is undertaken and reviewed in relation to the site demonstrating that the proposed subdivision would be acceptable in relation to the health and amenity impacts of dust.

147 Mr Slarke argued that for similar reasons, refusal of the proposal was the correct and preferable decision in this review.

148 In terms of 'serious environmental damage', Mr Hardy did acknowledge how little 'headroom' there was in terms of meeting NEPM health standards for particulates and that exceedances could result in his client not being able to continue operations. Operational responsiveness is a matter to which the Tribunal will return below. In any case, Mr Hardy argued that by reason of:

- the baseline monitoring which had been undertaken;
- the nature of the plant;
- the manner in which draft conditions were formulated; and
- the way in which it was anticipated that the EMP could be developed and implemented under the operator's Environmental Management System,

there would be no 'irreversible environmental damage'.

149 We accept that it is appropriate to apply the precautionary principle here. However, we think that the concessions given by Ransberg in the light of the experts' evidence and the measures proposed will mean that refusal is not warranted.

150 In particular, the Tribunal is satisfied that a full and proper 12 months of background monitoring of PM10 and TSP has been carried

out at the site, and that the likely dispersion emissions from the proposed facility have been properly modelled. Hence, the scientific uncertainties are fewer than in ***Wattleup Road*** and the combined effect of this with the capacity for onsite control of emissions (including shut downs) significantly lowers the potential risk to public health arising out of the operation of a wet-mix plant.

151 We turn to discuss what further measures ought to apply to the proposed development in the light of the potential risk to public health. These matters must go into the mix of conditions.

Further measures

152 The results of a year's monitoring for background particulates demonstrate compliance with the NEPM. Modelling the emissions on the proposed operations of the plant indicates that particulates can be managed to meet the NEPM, although only marginally so, and a small number of exceedances of the NEPM for daily average PM10 levels are predicted to occur at the nearest residences.

153 Uncertainties remain, however, regarding both background PM10 (such as from inter-annual weather differences) and PM10 levels at sensitive premises due to error factors in the modelling.

154 Mr Hardy also submitted that it was possible that future external events in background air quality, such as a series of large bushfires or changes in rainfall, could mean air quality standards and the outcomes for particulates, which were properly but imperfectly modelled for the proposal, are not necessarily achieved over any one year. Such circumstances, which would be entirely beyond the control of the applicant should be, he submitted, properly contemplated and pragmatically acted upon.

155 There may also be ongoing regulatory problems with regard to dust emissions from nearby facilities, already the subject of many community complaints and concerns. There appears to be no wider prospect of regulatory control for cumulative PM10 levels at dust-generating sites. The NEPM is a public health standard, not a regulatory criterion for licensing purposes.

156 The Tribunal has therefore not been given any satisfactory assurance that ambient air quality in the locality will necessarily improve over time rather than deteriorate further.

157 The Tribunal accepts the City's contention that it is possible that air quality, measured by PM10 levels at the sensitive premises, may not comply with the NEPM with the plant at full production throughput. Even so, importantly, the experts' evidence suggests that any 'threat of serious or irreversible environmental damage' from Ransberg's proposals could be avoided by proper management of the operation.

158 Any failure to control emissions is very likely to impact upon PM10 levels at sensitive receptors downwind. The Tribunal accepts Ransberg's concession to the effect that the applicant must, and would, carry all the operational risks. To this end, the risk of unacceptable emissions would be further reduced if the plant's operations were subject to conditions that set maximum acceptable onsite dust levels and stipulated when operations would be suspended or shut down. This would occur when continuous monitoring of ongoing emissions and ambient air quality triggered threshold mechanisms.

159 On the related issue of the wet-mix design of the plant, the Ransberg proposal is, as we have seen, for a concrete batching plant with many advanced features of modern wet-mix technology and operational improvements for dust control, albeit in an unenclosed facility. In assessing the benefits arising from wet-mix technology, as has already been indicated, an important underlying area of risk and uncertainty arises from the failure of the applicant to provide the Tribunal with satisfactory evidence, either from Australia or from overseas, of the alleged improvements in dust emission associated with wet-mix batching plants.

160 The Tribunal takes the view that the Assessment Report for a similar wet-mix plant at Bibra Lake, conducted by then DEC for the purposes of licensing under Pt V of the EP Act (see above), indicates that, at least for some regulatory purposes, the design and technology has been evaluated and has been found to be acceptable in relation to a new concrete batching plant to be constructed to operate at a metropolitan location.

161 The applicant had initially proposed that, if approval were to be given, the period of operational monitoring needed to characterise and validate the plant's operation would be one year of data. The respondent's dust expert, Mr Pitt, had argued that more than one year would be needed, because it was desirable to give the plant's operators the opportunity to fine-tune their procedures and then to gauge emissions over at least one year under full production throughput. This would probably necessitate three years' monitoring. Arguably, even a limited application

of the precautionary approach would justify a continuing collection of emissions performance data.

162 The Tribunal prefers Mr Pitt's suggested approach because of the importance of having accurate data in a relatively marginal situation for air quality, such as this, where cumulative dust impact is critical. In other words, there remains a basis for the continuing and indefinite risk that total particulates at sensitive residences may exceed the NEPM, and that continuing monitoring would be required as the evidentiary trigger for an appropriate response or shutdown. A sensible approach requires a condition to be imposed upon the applicant to resource the ongoing independent monitoring of dust emissions and predicting air quality at the key receptors. This should be continued indefinitely or until the City is satisfied that the operating experience of cumulative air quality has shown that the risk of exceeding the NEPM standard for annual particulates has abated.

163 Moreover, the Tribunal agrees with the City, in that the trigger criteria and the component elements of a system capable of responding to problem air quality must be certain at the outset. For example, it must be clear how the key information about the likely circumstances of dust particulates' exceedance, such as on a day of high background concentration, would be conveyed to site management and acted upon. Similarly, it must be clear as to how dust monitoring would connect with site operations. A mechanism capable of prompt and reliable triggering of alerts and shutdown actions, for specific operations or for whole-of-plant, must be outlined. That mechanism, and its resourcing, must be conditioned for approval to be granted and should not, in the Tribunal's view, be left entirely to the future detail of an EMP.

164 Finally, we address the issue of the fairness of an implied cost burden falling on the applicant as the 'last one in' where a potentially significant, if minor, dust source among other industries leads to a cumulative pollution impact. The Tribunal is of the view that this risk or cost should be carried by the applicant as an incident of the proposed land use. Ransberg would be, in effect, using the last possible part of the particulates pollution 'budget' for the locality.

Conclusions on the main issues

DR 243 of 2011 - Retaining walls at the northern end of the site

165 In summary, the Tribunal has concluded that the stepped retaining wall now proposed at the northern end of the site and at the retaining

walls along sections of the respective side boundaries would not have an unacceptable adverse visual impact on the residential area to the north. The rear boundary wall as now proposed would be of less bulk, would be generally consistent with the wall on the adjacent property, and would be softened by the proposed landscaping. The Tribunal has determined that the now proposed rear retaining walls should be approved.

DR 242 of 2011 - Concrete batching plant

166 This review required the Tribunal to determine whether exercising the discretion available under TPS 24 and allowing the proposed noxious industry would be consistent with orderly and proper planning, having regard to all the circumstances, particularly the proximity to the site of an established residential area; that is, in determining the merits of the proposal, the Tribunal was required to give proper consideration to sound town planning principles, any relevant town planning scheme provisions and any relevant policies.

167 TPS 24 requires that particular consideration be given to the preservation of the amenity of the locality.

168 The Tribunal examined the elements of the proposed development that the parties agreed would directly impact on the local amenity. The Tribunal found that noise would be appropriately controlled by the applicant's proposed design modifications and control of operating hours. The Tribunal further found that the proposed modified height of the development would not negatively affect the visual amenity of the surrounding area and therefore could be supported, as provided for under TPS 24. This was because the bulk of the silos were to be reduced to the allowed height of 12 metres, and the limited extension above this height would have limited impact at a distance of over 300 metres from the residences and relative to the bulk of the existing industrial structures on neighbouring lots.

169 Critical to determining whether there would be an amenity impact that would be fatal to the proposed development was the issue of potential dust generated by the operations of the plant and whether there would be sufficient buffer distance between the plant and the neighbouring residential area. Under SPP 4.1, a buffer distance is required between the proposed development and the neighbouring residential area. The related Guidance Statement No 3 stipulated a generic buffer distance of 300 metres, but also provided that this distance could be varied in circumstances of non-typical processing techniques and scientific study based on site and industry-specific information.

170 Determining whether the buffer distance separating the proposed development and the residential area could be, in effect, reduced involved the balancing of the following considerations:

1) The proposal involves a relatively new wet-mix technology which has elsewhere in the Perth metropolitan region been assessed and approved under the EP Act to operate close to sensitive premises. However, in the absence of independent verification of long-term dust emissions from concrete batching plants using this technology, to be confident that actual emissions from such a plant at this site are acceptable when under full production on a year-in, year-out basis, the Tribunal would require an extended operational record of monitored emissions.

2) Jointly designed dust monitoring showed that a year's background monitoring for particulates demonstrates compliance with NEPM. Modelling of emissions from the proposed development indicated that particulates could be managed to meet the NEPM, but a small number of exceedances of the NEPM for daily average PM10 levels are likely to occur at the nearest residences. While acknowledging the predicted modelled exceedences and error factors in the modelling, the Tribunal accepted the experts' evidence that 'any threat of serious or irreversible environmental damage' from Ransberg's proposals could be avoided by proper management of the operation.

3) It was established that on days with high background levels of particulates, any significant dust emissions from the site could cause exceedances of the NEPM standard for PM10 particulates at the closest sensitive premises.

4) The Tribunal concluded that because of: the reduced uncertainty resulting from site-specific studies conducted over a year; the predictive modelling; and the capacity for onsite air quality management, a refusal based on any alleged lack of certainty was not warranted.

5) The Tribunal accepted Ransberg's concession to the effect that it would carry the operational risk of operations being shut down or suspended when continuous

monitoring revealed dust particulate concentrations triggering such action. This is a proper and reasonable concession.

6) Planning conditions are warranted to mandate the operational response mechanisms which would be capable of minimising site emissions at levels liable to compromise the achievement of daily NEPM PM10 levels at nearest sensitive premises. Corresponding conditions are also required for continuous, as well as retrospective monitoring and reporting of background PM10 and site emissions, in real-time, to inform both site operations and the community of particle levels predicted at the nearest sensitive premises, until such time that the background air quality has improved or that the City is satisfied that the dust emissions performance record justifies cessation of monitoring.

171 The Tribunal has therefore concluded that, with conditions requiring appropriate management practices, the modified concrete batching plant now proposed warrants approval. In short, the development would be consistent with orderly and proper planning because, subject to conditions, it would be sufficiently separated from the residential area as required by SPP 4.1, and would be consistent with the planning objectives of TPS 24.

Draft conditions

172 The parties undertook to complete agreed draft conditions for both matters. This document was received by the Tribunal in December 2013 and, for the record, those agreed conditions are reproduced below.

173 The Tribunal will require the parties to negotiate in good faith to bring into the Tribunal, as soon as is practicable, a set of consolidated amended conditions (including amended plans), being conditions not inconsistent with these reasons. With the parties' consent, Mr Curry will be available to assist with this task.

DRAFT CONDITIONS AGREED BY THE PARTIES

…

DR 242 of 2011

1. The development/use subject of this approval must be SUBSTANTIALLY COMMENCED within a period of two (2) years of the date of this approval notice. If the development is not substantially commenced within this period, this approval shall lapse and be of no further effect. Where an approval has lapsed, no development/use shall be carried out without the further approval of the City having first been sought and obtained.

2. The development shall be carried out only in accordance with the terms of the application as approved herein, and any approved plan, including any plan approved as a component of the Environmental Management Plan required by condition (7).

3. On completion of construction, all excess articles, equipment, rubbish and materials being removed from the site and the site left in an orderly and tidy condition.

4. All stormwater and drainage runoff produced onsite is to be disposed of onsite via the use of soakwells, approved by the Director of Technical Services. The soakwells must deal with the entire land area and be designed to contain a 24hr storm duration and 100-year ARI.

5. Unless otherwise approved by the City of Bayswater, the vegetated area at the rear of the lot, depicted as 'Landscaping and Grassed Area' on the revised concept plan, is not to be used for the storage of materials or vehicles.

6. Activities associated with the use of Lot 2 (Nos. 277-279) Collier Road, Bayswater (**Land**) shall not cause the concentration of particulate matter as PM10 at the location referred to in Condition 7(i), first dot point, to exceed:

   (a) $12.4\mu g/m^3$ as a 24-hour average on any day when the ambient concentration (inclusive of the contribution from emissions from the Land) exceeds $50\mu g/m^3$ of particulate matter as PM10 as a 24-hour average; or

   (b) $500\mu g/m^3$ as a 15-minute average.

7. Documentation for a proposed Environmental Management System (EMS) compliant with AS/NZS ISO 14001:1996 shall be submitted to the City for approval prior to the issue of a building permit. The EMS shall incorporate an Environmental Management Plan (EMP).

The EMP shall address the following issues to the satisfaction of the City:

(i) Dust and Particulate Management, including:

- The use of a TEOM (PM10) monitor to be located at the previous monitoring location close to the boundary, as the primary monitoring method;
- The use of a Beta Gauge (PM10) monitor at a second location sited in accordance with AS/NZS 3580.1.1 (as far as practical), to allow the incremental PM10 concentrations to be determined;
- The TEOM monitor to be operated in accordance with AS/NZS 3580.9.8;
- The Beta Gauge monitor is to be operated in accordance [with] AS/NZS 3580.9.11;
- The Applicant is to formalise the approach for determining incremental PM10 concentrations in a procedure prior to implementation;
- The TEOM and Beta Gauge monitors are to be maintained by an organisation accredited by the National Association of Testing Authorities (NATA) in respect to the operation of those monitors;
- The use of an anemometer with a 10 metre pole, unless a lower pole is approved by the City;
- PM10 concentrations from the TEOM and Beta Gauge monitors, and wind speed and wind direction from the anemometer, shall be averaged over a time period of not more than 15-minutes and electronically recorded;
- Summaries of the results of monitoring including each 24-hour average PM10 concentration are to be provided quarterly to the City by no more than 30 days after each quarter. The quarterly summary must identify and highlight the date and time on which the monitoring showed the PM10 concentration exceeded:

  (a) $50\mu g/m^3$ as a 24-hour average; and

  (b) $500\mu g/m^3$ as a 15-minute average; and

- An annual report prepared by the body carrying out the dust monitoring, which reviews whether the dust received at the nearest sensitive premises has been

compliant with the NEPM PM10 standard, the extent to which the development contributed to any exceedences of 24-hour average PM10 concentrations greater than 50µg/m^3, and whether the development has complied with the requirements of Condition 6.

The annual report referred to above, shall be submitted by no more than 30 days after each calendar year to which the data relates.

The requirement for continued dust monitoring may be reviewed by the City at the request of the Applicant following the provision of an EMS audit required by condition (9).

(ii) Noise management, including the use of appropriate acoustic barriers and low noise front end loaders;

(iii) Surface water management;

(iv) Landscaping;

(v) Visual amenity;

(vi) Waste management;

(vii) Light overspill;

(viii) Traffic management;

(ix) Storage of hazardous and/or dangerous goods;

(x) Complaints management;

(xi) Contingency measures to be adopted in the event of potential or actual unacceptable emissions from the site; and

(xii) Checklists and personnel responsibilities for actions assigned by the EMP.

8. The Environmental Management System (EMS) and Environmental Management Plan (EMP) approved by the City of Bayswater shall be implemented, and the development must at all times comply with the approved EMS and EMP.

9. The Environmental Management System must be audited by an independent appropriate body at least every three (3) years from the anniversary of this approval, and the results of the audit must be provided to the City of Bayswater.

10. Any portion of the site to be used for movement or parking of vehicles and/or onsite storage of empty bins, must be sealed and drained to the satisfaction of the City of Bayswater.

11. Uncovered parking bays shall be a minimum of 5.5m x 2.5m.

12. Truck parking bays are to conform to the relevant Australian Standards.

13. A bin area is to be provided of not less than 10m2 and with a permanent water supply and drainage facility for wash-down. The bin area is to be screened by a gate and brick walls or other suitable material to a height of not less than 1.8m.

14. Bins are to be washed only in the wash-down facility within the bin area, drained to a silt trap and disposal of via the Water Corporation sewer system or if this is not available, a leach drain soakwell system which is separate to the stormwater disposal system, or approved system, to the satisfaction of the City of Bayswater.

15. One (1) driveway shall be permitted onto Collier Road. The driveway shall be constructed to the City of Bayswater standards for commercial driveways.

16. Redundant driveways shall be removed and the verge and its vegetation made good at the applicant[']s cost, prior to the commencement of concrete batching operations.

17. No earthworks shall encroach onto the Collier Road road reserve.

18. No stormwater drainage shall be discharged off-site.

19. The applicant shall make good any damage to the existing verge vegetation within the Collier Road reservation, prior to the commencement of concrete batching operations.

20. No storage of materials outside the approved buildings is permitted.

21. A copy of an approval issued by the Department of Environment and Conservation - Licensing Section for the operation of the facility shall be submitted to the City prior to operations commencing.

22. A truck wash-down area is to be provided in accordance with the requirements of the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998* and in a location approved by the City of Bayswater. Trucks may only be washed down in the approved wash down area.

23. Operating hours are to be restricted to 6:00am to 6:00pm Monday to Saturday (public holidays excluded), however no front end loader may operate prior to 7:00am.

24. The cement storage silos are to be reduced to a maximum of 12.5m in height. Amended plans showing the reduced height of the silos must be submitted with the application for a building permit.

25. The owner, or the applicant on behalf of the owner, shall comply with the City of Bayswater policy relating to Percent for Public Art, and provide an Art Project for a minimum value of one per cent ($15,000) of the estimated total cost of the development ($1,500,000). Prior to the lodgement of a building permit application, the owner/applicant shall submit details to the City, including plans of the artwork, its cost and construction, and other matters relating to the artwork's on-going maintenance and acknowledgements in accordance with the City's Percent for Public Art Policy. Upon the City receiving this information, the Art Project shall be presented to Council for its consideration and determination. The approved public art shall be installed prior to the submission of an Occupancy Permit for the subject development, and thereafter maintained at the cost of the owner/applicant.

DR 243 of 2011

1. The development/use subject of this approval must be SUBSTANTIALLY COMMENCED within a period of two (2) years of the date of this approval notice. If the development is not substantially commenced within this period, this approval shall lapse and be of no further effect. Where an approval has lapsed, no development/use shall be carried out without the further approval of the City having first been sought and obtained.

2. Retaining walls exceeding 500mm in height (above natural ground level) are to be designed by a certified practising engineer, to the satisfaction of the City of Bayswater.

3. Revised plans depicting a stepped retaining wall on the rear (northern) boundary of Lot 2 and associated landscaping shall be submitted to and approved by the City of Bayswater prior to the issue of a building permit. The plan for the proposed landscaping shall identify the proposed species, planting rate and location of vegetation, with a view to achieving dense screening vegetation to a minimum height of 3m, but including 5m specimens.

4. On completion of construction, all excess articles, equipment, rubbish and materials being removed form the site and the site left in an orderly and tidy condition.

Orders

174 For the foregoing reasons the orders of the Tribunal are:

1. The applications for review are allowed in accordance with these orders.

2. The decisions under review are set aside and in lieu thereof will be a decision giving planning approval for the proposed developments (as amended), to operate from today, upon draft amended conditions to be negotiated in good faith and approved by the Tribunal, and otherwise not inconsistent with these reasons.

3. The parties are to bring in a new consolidated draft of the conditions, to be attached to the approvals, within 28 days.

4. The matters are to be listed for directions, if needed, on 21 March 2014.

5. The parties have liberty to apply.

I certify that this and the preceding [174] paragraphs comprise the reasons for decision of the State Administrative Tribunal.

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MR P McNAB, SENIOR MEMBER