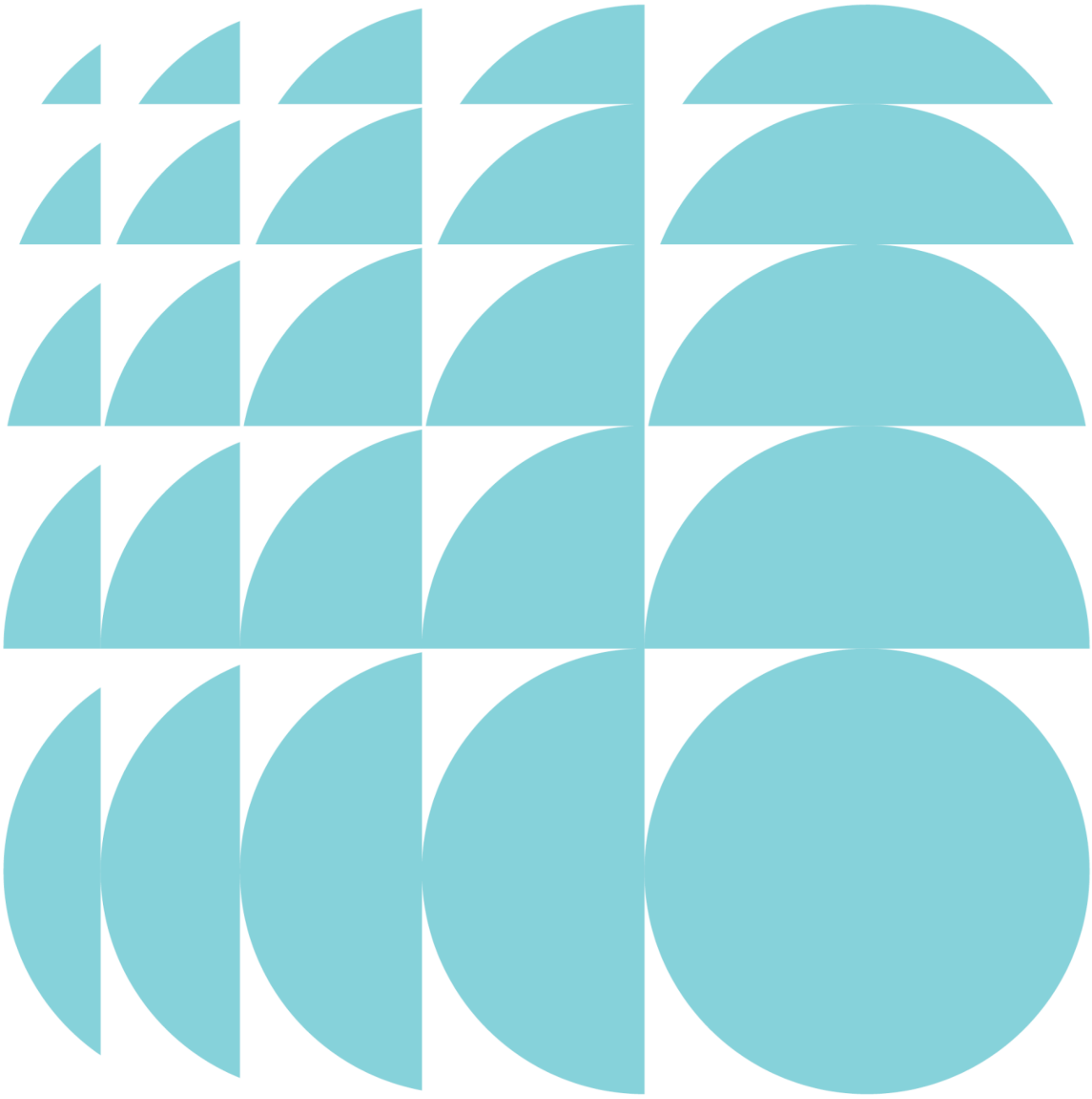
ETHOS URBAN

Response to Submissions Report

21, 31 and 42 Hanson Place, Eastern Creek
Resource Recovery Facility

Submitted to NSW Department of Planning, Industry and Environment
On behalf of Hanson Construction Materials Pty Ltd

2 December 2021 | 218611



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1.0 Introduction

Hanson Construction Materials Pty Ltd (the Applicant) is seeking approval for the construction and use a resource recovery facility at 21, 31 and 42 Hanson Place, Eastern Creek (the site).

Approval for the proposal is sought as State Significant Development (SSD) under Part 4, Division 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

An Environmental Impact Statement (EIS) was prepared by Ethos Urban dated 15 March 2021, as prescribed by Part 4 of the EP&A Act in support of the application for SSD.

The EIS was publicly exhibited, in accordance with clause 9 of Schedule 1 of the EP&A Act and the *Environmental Planning and Assessment Regulations 2000* (EP&A Regulations), between 26 March 2021 to 22 April 2021. During this exhibition period, submissions were invited from all stakeholders including members of the community and government agencies. A total of ten (10) submissions were received, with two (2) from non-government organisations and eight (8) from government agencies. The Applicant's response to these submissions received during the EIS exhibition forms the subject of this report, known as the Response to Submissions Report (RTS).

1.1 Purpose of this Report

The purpose of this RTS is to respond to submissions raised by both community and government stakeholders during the exhibition of the EIS as required by the Planning Secretary in accordance with the EP&A Regulations. Each of the submissions received has been collated, analysed and relevant issues have been addressed.

This RTS also provides a description of design amendments made to the proposal which have been undertaken to address submissions received and also to reduce the overall environmental impact of the proposal. In addition to this amendment description, this RTS provides further environmental assessment to accommodate the change to the proposal and these technical appendices serve as revisions or addenda to the specialist technical assessment reports provided with the EIS.

1.2 Site Location and Context

The site is located at 21, 31 and 42 Hanson Place, Eastern Creek within the Blacktown local government area (LGA). The site is legally described as Lots 3, 4 and 5 DP 1225803. The site is cleared and generally flat. The site has an area of approximately 75,940m^2 and is irregular in shape. The site is located in the southern portion of the broader Hanson site that was the is subject of Concept Plan Approval MP 06_0225, as shown in **Figure 1.**

Prior to the subdivision, the site formed part of the broader Hanson site at Eastern Creek and provided the primary access point to the site. The site will be accessed by Hanson Place. This road was approved, and was provided in accordance with MP 06_0225. The Hanson Place connects to the intersection of Honeycomb Drive and Kangaroo Avenue, providing vehicular access from the site to the broader road network, including the nearby M4 and M7 motorways.

More broadly, the site is located within a wider area zoned for *IN1 General Industrial* under *SEPP (Western Sydney Employment Area) 2009*.

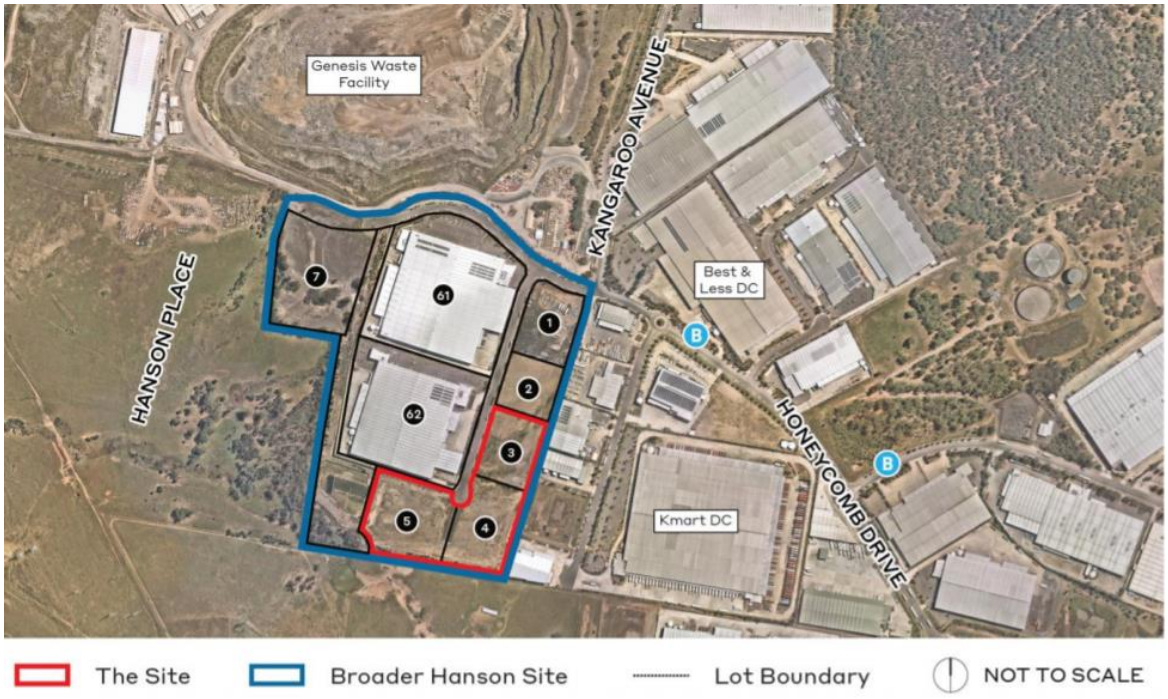

Figure 1 Aerial of the site

Source: Nearmap & Ethos Urban

1.3 Overview of Exhibited Proposal

As set out in the exhibited EIS, this application seeks consent for a resource recovery facility. The resource recovery facility is intended to comprise two components of the Hanson Concrete Production & Recycling Facility (for which Concept Plan Approval was obtained in June 2010 under MP 06_0225), with a total intended capacity to handle up to 136,000 tonnes per annum of recovered aggregate. The proposed use is consistent with the intended use of the site as approved under MP 06_0225.

The proposed operating hours for the facility will be 24 hours per day, 7 days per week. Day shift drivers will arrive to the site in the morning, typically between 5am and 8am to start the shift, leaving the site between 3pm and 6pm in the evening. Night shift workers will arrive to the Site in the afternoon as required by demand. It is not anticipated that a regular night shift will be required by the operation of the site. The operation of the facility during the night will generally be driven by market demand, and limited to receiving loads from 24-hour constructions and making deliveries to 24-hour construction sites. The proposed facility would employ up to 28 employees or contractors.

The facility will comprise of the following main components:

- A sales building and an administration office building;
- An enclosed shed which will comprise of raw feed stockpiles,, processing equipment, and finished product stockpiles; and
- An internal road system, including weighbridges, and car and truck parking facilities.

1.4 Amendments to the Proposed Development

Amendments to the project description have been made to provide greater clarity of the proposal. Fundamentally however, there are no significant changes to the proposed development. Changes to the exhibited proposal include:

- Provision has been made for access to the estate-wide basin, as requested by Blacktown City Council.
- Above ground stormwater tanks have been relocated to the south-west corner of the shed.
- Reconfiguration of the shed layout to include waste, steel and non-recyclable materials bins.

- The description of the weighbridges in Section 3.1.2 of the EIS and Section 2.2.2 the Air Quality and Greenhouse Gas Assessment (at Appendix H of the EIS) is incorrect. Weighbridges for both entering and exiting trucks would be located near the eastern boundary and neither are enclosed.

The SSD Development Application still seeks consent for the construction and use for a resource recovery facility with an intended capacity to handle and produce up to 136,000 tonnes per annum of recovered aggregate.

1.5 Objectives of the Development

The key objectives for the project include:

- Use the facility to primarily recover aggregates that can be reused as building materials –including bricks, asphalt, concrete, and glass, improving resource recovery rates overall.
- Ensure the ongoing processing and recycling of construction waste for the growing demand for recycling building materials associated with the development of Western Sydney (including the Western Sydney Airport and Aerotropolis).
- Contribute to NSW Government's Waste Avoidance and Resource Recovery Strategy 2014-2021 by recycling construction and demolition wastes and diverting waste away from landfill.

It is expected that the facility will take approximately 12 months to construct. If development consent is issued in the first half of 2022, it is anticipated that the facility would be under construction around mid-2022 and would commence operations around mid-2023.

1.6 Further Assessment

In response to the issues raised from submissions received, refinements of the proposal's plans and assessment reports has been undertaken to support the responses made in this RTS. This includes:

- Architectural Plans (refer to **Appendix A**) including a photomontage (see **Appendix B**).
- An addendum to the Air Quality Assessment prepared by ERM (refer to **Appendix C**).
- Amended Concept Drainage Plans (refer to **Appendix D**).
- A revised Water Cycle Management Plan (refer to **Appendix E**).
- The Alex Fraser Group's Tip Head Management Standard (refer to **Appendix F).** .
- A Letter of Response prepared by McLaren Traffic Engineering (refer to **Appendix G**).
- A Noise Impact Assessment by SLR (refer to **Appendix H**).
- A Supplementary Detailed Site Investigation by Martens (refer to **Appendix J**).

1.7 Structure of this Report

The RTS includes the following sections:

- **Section 1 Introduction**: Provides an introduction to the proposal, the site context, and approval process.
- **Section 2 Exhibition and Consultation**: Provides a description of the consultation which has been undertaken for the project to date.
- **Section 3 Overview of Submissions**: Provides an analysis of the submissions received during the exhibition of the EIS and identifies key issues raised. A detailed schedule of all the issues raised within each submission is available at **Appendix H**, including a response to each issue.
- **Section 4 Response to key issues raised**: Provides a response to the key issues received from Government agencies and private organisation submissions and responses.
- **Section 5 Updated Mitigation and Management Measures.**
- **Section 6 Conclusion**.

2.0 Exhibition and Consultation

2.1 Activities prior to EIS exhibition

During the preparation of the EIS, a number of consultation activities with key stakeholders took place in order to create an open dialogue during the design phase.

2.1.1 Community consultation

As provided at 4.1 of the EIS, letters were sent to adjoining landowners on 2 July 2020. No calls were received asking further questions of the project or to organise a meeting with a project team.

2.1.2 Consultation with key stakeholders

Correspondence was forwarded to the relevant local and state authorities inviting further comment and/or discussion in relation to the preparation of the EIS for the proposed project. The relevant local and state authorities contacted, include:

- Blacktown City Council
- Environment Protection Authority
- Office of Environment and Heritage
- Transport for NSW
- NSW Roads and Maritime Services
- NSW Fire and Rescue
- Local community and other stakeholders.

No further comment to that provided in the SEARs was received other than from the Environment Protection Authority (EPA).

Environment Protection Authority

Two meetings were held with EPA on 13 and 28 February 2019. The meetings focussed on the EPA's request that all recycling activities and stockpiling should be carried out within an enclosed shed. The proposal has been amended as a result of this consultation to include all the recycling plant, processing and stockpiling within an enclosed shed.

2.2 Statutory Public Exhibition

The EIS was placed on exhibition by the Department of Planning, Industry and Environment between 26 March 2021 to 22 April 2021 in accordance with clause 9 of Schedule 1 of the EP&A Act and the EP&A Regs.

The EIS (and associated supporting technical studies) was made available to the public in electronic format on the DPIE website via Eastern Creek Resource Recovery Facility | Major Projects - Department of Planning and Environment (nsw.gov.au) during the exhibition period.

3.0 Overview of submissions

A total of 10 submissions have been received as a result of the exhibition of the EIS (between 26 March 2021 to 22 April 2021). These submissions have been received from both government agencies and non-government organisations. The primary objective of this RTS is to collate, analyse and respond to the submissions received during the exhibition of the EIS. A summary of the key issues raised in each submission is provided below, and a detailed schedule of all the issues raised within each submission is available at **Appendix H**.

3.1 Blacktown City Council (BCC)

Key issues raised by Blacktown City Council included:

3.1.1 Planning

- Additional information is requested regarding the size and nature of proposed signage.
- Above-ground stormwater storage tanks are non-compliant with the 7.5m front setback control under the Eastern Creek Precinct Plan (Stage 3) Development Control Plan.
- Justification is to be provided for the proposed 24/7 hours of operation.
- A draft Plan of Management has not been provided as to the emergency actions in the instance where contaminated materials are brought to the facility for processing.
- Photomontages have not been provided as requested.

3.1.2 Engineering

- An Engineering Plan in accordance with Council's Engineering Guide for Development 2005.
- Access to the water quality/OSD basin as approved in the original subdivision is to be illustrated on plans.

3.1.3 Traffic

Council raises concern the proposal will exacerbate traffic delays at the Wonderland Drive and Wallgrove Road intersection. Council also requires consultation with TfNSW to provide comments on the applicant's traffic report to determine if the traffic signals are operating at a satisfactory level.

3.1.4 Environmental health

Additional information is required regarding dust control on-site throughout construction and operational phases to ensure no impact on adjoining uses.

3.1.5 Flooding

An overland flow study is required to demonstrate the proposed development is adequately protected and can cater for an upstream overland flow path through the site.

3.1.6 Drainage

- The concept plans by Martens were unacceptable. Detailed Engineering Hydraulic Plans are required.
- Plans to assume equipment storage areas are paved.
- The number of inlet pits to be increased.
- Trenched grates and pits to be piped to the GPT.
- Combination of trench grates and pits are required for the ramp down from the end of the cul-de-sac. This is to be illustrated on plans.
- Overflow from RWT is to discharge to a stormwater tank if provided, or otherwise directed to the wetland.
- Engineering plans to detail flows discharge from Lots 3, 4 and 5 to the wetland/OSD system.

- Show all pits to be numbered on the plans.
- Show all pit sizes and levels on the engineering plans.
- Drainage plans to be at a suitable scale that is legible at size A3.
- Provide drawing scale and scale bar on the plans.
- Provide suitable RLs across the site surfaces and floor areas on the plans.

3.1.7 Water quality and conservation

- A gross pollutant trap (GPT) is required.
- A minimum of 80% non-potable water reuse is required.
- A MUSIC model required.
- The toilet flushing requirement in the model is to be made through rainwater and not mains water.
- Clarification is required regarding the proposed reuse allocation of water from the wetland is to be split between various lots within the estate. Provide details of legal arrangements to enable utilisation of this resource.
- Details required to verify water from the wetland can be sourced white ensuring the wetland remains viable and healthy from pollutant materials. Review from an experienced wetland ecologist required.
- Detailed survey required of overflow pipe invert levels. The total area of the wetland available for storage is required to establish source volumes.
- If the wetland is viable as a water source, provide a location plan and an offtake pit detail showing a controlled weir inflow.
- Provide details of the proposed pump rate from the wetland, duration of pumping and whether this is to go to a holding tank.
- Consider SWT within Lot 5 to collect surface flows prior to discharge to the wetland to supplement wetland source water.
- Consideration should be given to wastewater recycling.
- For water sourced from the wetland or separate stormwater tank, provide details to Council of what levels of treatment and types are required to ensure water is fit for purpose.
- The water strategy is to demonstrate how the various non-potable water sources will be used for what end uses and integrate together to protect the wetland.
- An amended MUSIC model is required to address the reuse on site.

3.2 NSW Environment Protection Authority

3.2.1 Site activities and waste

Waste Streams and Processes

- The EPA requests that the applicant elaborate on whether waste will be sourced directly from the building and demolition industry, or specifically from the facilities listed above.
- Clarification is required on whether source separated waste will be provided by other resource recovery facilities, or exclusively sourced from Hanson and Visy following processing. This should cover all source separated waste, but particularly glass waste.
- The EPA requires the applicant to provide additional detail for each stream, and flow diagrams for each waste stream.
- Additional detail on how waste will be tracked when being delivered to and from the premises is required.
- The EPA requires details on where non-conforming waste will be stored and managed at the premises.

Tip & Spread Inspection

- The applicant clearly indicate the dedicated tip and spread area on the Floor Plan of the proposed development, and include a description of the tip and spread inspection in accordance with the Standards for Managing Construction Waste in NSW (EPA, 2019).
- The EPA requests that clarification is made on the acceptance/rejection procedures (including verifying classification) proposed (beyond visual conformance assessment proposed) given the EIS states there is potential (albeit small) for receiving non-recyclable materials, or other unexpected finds such as asbestos.

Pugmill
The EPA requires the applicant to provide additional information regarding the construction and operation of the pugmill, particularly in respect to the inputs, processing and outputs of waste.

Wheel wash

- To ensure compliance with licence conditions listed, the EPA recommends that applicants constructing new waste facilities:
    - have concrete or asphalt across roads and working platforms at the premises;
    - have bunded hardstand at the premises;
    - have a mandatory, unavoidable wheel wash for vehicles entering and exiting the premises; and
    - have a water cart employed on roads within and immediately surrounding the premises.
- It is recommended that the applicant reconsider the installation of a wheel wash at the premises or provide more detail on operational controls that will be implemented to ensure compliance with mandatory licence conditions (i.e. no material including sediment tracked from the premises).

Waste storage requirements
The EPA requires that the applicant provide waste storage management details in the EIS in accordance with requirements from the Standards for Managing Construction Waste in NSW (EPA, 2019).

Authorised amount and annual throughput at the premises
The EPA requires clarification of the following:

- The total proposed annual throughput of the facility.
- The maximum amount of waste that will be at the premises at any one time. (Note that this would include any processed, recycled, re-used or recovered substance as per the definition of ‘waste’ in the Protection of the Environment Operations Act 1997.)
- How stockpile heights will be measured and maintained to a maximum of 6 metres height.
- The indicative number and volume of stockpiles within the enclosed shed.

Dust suppression within the shed
The EPA requires more information on how dust suppression within the shed will occur. Additionally, the EPA requests that the applicant confirm operational controls to minimise and prevent dust emissions from the shed (i.e. whether the shed will be closed at all times – with the exception of egress and ingress of trucks).

3.2.2 Contamination

The applicant must provide an updated Detailed Site Investigation which determines the full nature and extent of contamination in different media including, but not limited to soil, groundwater, and surface water media to determine if the site is suitable for the proposed use. This report must contain sufficient information to be read as a stand-alone document. The Detailed Site Investigation must be updated, and the subsequent report/s, must:

- be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand’s Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or

the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme.

- be prepared in accordance with the relevant guidelines made or approved by the EPA under section 105 of the Contaminated Land Management Act 1997.
- provide an adequate summary of the site history and information. Data gaps on past site activities and potential contamination sources between 2006 and the present must be addressed.
- establish robust data quality objectives before further field investigations are undertaken. A map of the current site marked with sampling locations, previous site infrastructure, locations of historic activities or areas of potential concern could be useful to supplement this.
- include an updated conceptual site model.
- provide additional information on surface water and groundwater at the site and provide justification if these environmental media are not sampled.
- include further systematic soil sampling to achieve the sampling densities recommended in the Sampling Design Guidelines (1995) or any subsequent version of this guideline. Justification must be provided if consultants believe that this is not necessary.
- re-evaluate the targeted soil sampling depth or take samples at greater depth to ensure contamination at and under the previous ground surface level are reached. Justification must be provided if consultants believe that this is not necessary.
- test soils for volatile halogenated compounds since previous investigations identified solvents as contaminants of potential concern. Justification must be provided if consultants believe that this is not necessary.
- discuss potential effects of any contaminants identified on human health, (including the health of the proposed future users of the site), and the environment (on and off-site) to determine if the site is suitable for the proposed use.

3.2.3 Noise and Vibration

As opposed to undertaking a Review of Noise Impacts based on the concept and project approvals from 2010, a full noise impact assessment should be provided. The noise impact assessment should include an assessment of construction noise impacts in accordance with the Interim Construction Noise Guideline (EPA, 2009).

3.3 Heritage NSW

Heritage NSW recommends that an Aboriginal Cultural Heritage Assessment Report (ACHAR) be prepared as follows:

- Consultation with Aboriginal stakeholders should be undertaken in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010) in order to document the significance of cultural heritage values for Aboriginal people who have a cultural association with the land.
- A survey should be undertaken by a suitably qualified archaeologist and representatives of the registered Aboriginal parties (RAPs) as identified through the consultation process at 1,, in accordance with Code of Practice for Archaeological Investigation in NSW (DECCW 2010), to ascertain the current condition and location of AHIMS #45-5-0556 and any other Aboriginal sites that may be located in the proposal area. The AHIMS site cards should be updated as necessary.
- Specific protection measures for AHIMS #45-5-0556, as appropriate, should be formulated in discussion with the RAPs and included in the CEMP.
- The heritage provisions in the CEMP should be updated to replace reference to ‘OEH’ with ‘Heritage NSW’.

3.4 Roads and Maritime Service (RMS) and Transport for NSW (TfNSW)

The RMS and TfNSW lodged the same submission which requested that the applicant be conditioned to provide bicycle parking and end of trip facilities in accordance with the Eastern Creek Precinct Plan and Australian Standard AS1742.9:2018 Manual of Uniform Traffic Control Devices - Bicycle Facilities, and Cycling Aspects of Austroads Guides including that bicycle parking and storage facilities are located in secure, convenient, accessible areas close

to the main entries incorporating adequate lighting and passive surveillance and in accordance with Austroads guidelines.

3.5 Sydney Water

Sydney Water request that clarification is provided as to what the correct intended average daily reticulated water demand and reticulated wastewater discharge is proposed to be.

3.6 Environment, Energy and Science Group (EES)

EES reviewed the exhibited Biodiversity Development Assessment Report and did not make any further comment. The EES noted that the site is not impacted by flooding, and as such, a Flood Impact and Risk Assessment is not required.

3.7 Water and the Natural Resources Regulator (NRAR)

Following review of the exhibited documents, NRAR had no comments on the proposal.

3.8 Lite n' Easy

This organisation has concern for contamination and requests an Air Quality Management Plan be prepared, detailing the management of particulate matter and other air pollutants.

Concern is also raised for safety as a result of an increase of truck and large vehicle traffic. A publicly available Traffic Management Plan is requested and should outlined how increased pollution from diesel exhaust and noise pollution will be managed given the operating hours.

3.9 Jacfin Pty Ltd

Jacfin Pty Ltd raise concern for silica dust exposure on human health. A Human Health Risk Assessment is requested to understand the human health risks of the proposal.

3.10 DPIE Summary of Key Issues

With consideration of the above submissions, DPIE requested a RTS be provided, and also requested that the following issues are addressed in the RTS:

3.10.1 Description of Development

- Confirm that existing temporary buildings would be removed or explain how buildings would be repurposed.
- Confirm if any excavation is required e.g. for installing weighbridge and footings.
- Justify why an egress wheel wash is not required given that trucks would travel through areas where there are stockpiles of waste.

3.10.2 Project Need and Justification

- Provide additional detail for the justification for the development including market analysis and the use of recycled glass in blending for final products. What are the benefits of using recycled glass and how has the process been adapted to use this?

3.10.3 Waste Management

- As there is some inconsistency in the EIS, please confirm whether the amount of material to be received at the site is 100,000tpa or 136,000tpa.
- Confirm the amount of waste (in tonnes) to be stored on site at any one time.
- Confirm if the material products stockpile capacity would be 20,000 tonnes (p.30) or 10,000 tonnes (p.31).

- Confirm whether aggregate greater than 1.3m would be received and how this would be managed i.e. would a breaker be required.
- Confirm how material would be moved from the product stockpile to the pugmill (e.g. by conveyor or front-end loader).
- Describe in more detail the range of output products and their end use or destination market.
- Confirm how outgoing trucks would be loaded e.g. by front end loader.

  Demonstrate how waste management activities on site conform with the EPA's Minimum Standards for Managing Construction and Demolition Waste in NSW. Specifically:

  - Provide more detail regarding the inspection points for waste arriving at the site. The EIS states that waste would be visually inspected at the entry weighbridge but it is unclear if inspection would also occur at the tip and spread and waste storage areas
  - Provide details of training requirements for all personnel in relation to inspections.
  - Sorting requirements and mixing of waste: Show where material would be tipped prior to being loaded into the mobile plant by front end loader.
  - Waste storage requirements: Clearly label the waste and material product stockpiles on a plan and describe how these would be clearly delineated.
  - Show where non-recyclable material would be stored and describe how often this would be removed.

3.10.4 Noise and Vibration

Provide a detailed assessment of construction noise and vibration impacts.

3.10.5 Traffic and Transport

Provide swept path diagrams that show the largest vehicles can:

- safely pass while travelling around the site
- enter and exit the truck parking safely
- enter and exit the shed to receive and dispatch materials

Describe how traffic would be controlled to effectively manage vehicles entering and exiting the site.

3.10.6 Site Water Balance

The EIS states on p.31 that water harvesting tanks have a total volume 278.4 kL and states on p.7 site water uses require 184.75 kL/day. This would mean that in periods of no rainfall the tanks would have supply for approximately 1.5 days only. Please clarify.

4.0 Response to key issues raised

A detailed summary of all issues raised in submissions, along with responses to each issue is provided at **Appendix I**. The following section provides responses to the key issues raised by DPIE, agencies and other stakeholders.

4.1 Description of the Development

4.1.1 Use of Buildings and Excavation

Issue raised by: DPIE
Confirmation is sought whether existing temporary buildings would be removed or explain how buildings would be repurposed. DPIE also seek confirmation whether any excavation is required e.g. for installing weighbridge and footings.

Response:
The site is vacant and does not contain temporary buildings. Excavation is limited for the purposes of footings and drainage only. As shown in the revised plans at **Appendix A**, parts of the site will remain vacant. It is intended for these vacant areas would be retained in their current state, with compacted earth/gravel base, and would be used for the occasional storage of Hanson's plant and equipment (such as trucks, excavators, loaders etc) until such time as a future use was identified and approved.

4.1.2 Signage and Photomontage

Issue raised by: BCC
The proposed signage includes 3 separate signs on the recycling shed wall which appears to exceed 10% of the wall area. A photomontage is to be provided.

Response:
The eastern elevation of the recycling shed has an area of approximately 1,680m^2, and proposed signage has a total combined area of approximately 161m^2, which means the three business identification signs do not exceed 10% of the facade. The silo above the building is also proposed to contain business identification signage. The silos has an elevation area of 36m2, with signage comprising 5.6m^2. However, taking into account the cylindrical nature of the silo, the total surface area amounts to approximately 226m^2. The signage proposed to be located on the silo would therefore occupy significantly less than 10% of the silo façade. The nature of the information signage is proposed to be permanent. The proposed signage is shown in revised plans at **Appendix A**, and illustrated in the photomontage (**Appendix B**).

4.1.3 Hours of Operation

Issue raised by: BCC
The proposed operating hours, being 24 hours a day, 7 days a week, is considered excessive and has not been adequately justified. More information is required to support this request.

Response:
The site is located within the IN1 General Industrial zone and adjoins the Eastern Creek Business Park to both the east and north. The Eastern Creek Business Park is an industrial precinct that contains the Bingo resource recovery facility and landfill as well as a range of large-scale industrial facilities and warehouse and distribution centres for numerous companies. The materials handling and processing areas with Bingo facility, as well as many of the industrial warehouse facilities within the Western Sydney Employment Area, operate on the basis of 24 hour, 7 day per week approvals. The proposed land use is therefore considered compatible with existing development in its vicinity.

The site is well-distanced from sensitive development such as residential land uses, being approximately 1.2km away from the closest residential receptor. Given its industrial context, the development will not cause a nuisance by way of the proposed operating hours, and will comply with the EPA's Noise Policy for Industry, as detailed in **Section 4.**4 below. It is therefore considered unnecessary and unreasonable to restrict the development potential of this site within an IN1 Zone by limiting its hours of operation.

The traffic generation associated with the proposed development will be minor, albeit with a significant component of large trucks. Whilst the assessed total annual truck movements are significant, these movements will be spread over the 24/7 period unlike normal truck generating activities and the average movements during the network peak periods is only 24 vehicle trips per hour.

Night time activities have been assessed in the Noise Impact Assessment (see **Appendix H**) as full production capacity, albeit with lower truck movements compared to the daytime period. The Noise Impact Assessment confirms that the project-specific noise limits established under the Noise Policy for Industry will be complied with even at full production capacity during the night time period. Notwithstanding this, it is noted that operation of the facility during the night, or on Sundays and public holidays, will be driven by market demand and is expected to occur every night.

Based on the above, the proposed operating hours, being 24 hours, 7 days a week, are considered reasonable.

4.2 Project Need and Justification

Issue raised by: DPIE
Provide additional detail for the justification for the development including market analysis and the use of recycled glass in blending for final products. What are the benefits of using recycled glass and how has the process been adapted to use this?

Response:
This proposal forms part of Hanson's plans to modernise and renew their production activities on the broader site, which will include a range of concrete related uses, co-located to maximise the efficiency and sustainability of their operations. As detailed in the EIS, Hanson will use the facility to primarily recover aggregates that will be reused as building materials – including bricks, asphalt, concrete, and glass, improving resource recovery rates overall, and improving the sustainability of associated building materials.

As a construction and building material supplier, Hanson themselves generate demand for the recycled products as they are able to be blended into usable aggregate products (e.g. road base) or blended with aggregate in-feeds at their own concrete batching plants. Glass can be recycled by crushing into fine aggregates and blended with other aggregates to create aggregate products such as road base and as in-fed for concrete batching. Crushing of glass is no different to the crushing activities required for recycling other aggregate materials (such as old concrete, rocks and bricks etc). Recycling of glass in this way will directly displace the need for more aggregates to be imported into Sydney from quarries, which are generally located outside of the Sydney basin. This reduces the number of heavy vehicles travelling along the regional road network, and significantly improves the environmental characteristics of the aggregate products. The benefits of using recycled glass therefore includes improved sustainability performance of the construction sector as a whole, and reduction on the demand on natural resources.

4.3 Site Activities and Waste

4.3.1 Clarify capacity details

Issue raised by: DPIE

- Confirm whether the amount of material to be received at the site is 100,000tpa or 136,000tpa.
- Confirm the amount of waste (in tonnes) to be stored on site at any one time.
- Confirm if the material products stockpile capacity would be 20,000 tonnes (p.30) or 10,000 tonnes (p.31).
- Confirm whether aggregate greater than 1.3m would be received and how this would be managed i.e. would a breaker be required.
- Confirm how material would be moved from the product stockpile to the pugmill (e.g. by conveyor or front-end loader).
- Describe in more detail the range of output products and their end use or destination market.

- Confirm how outgoing trucks would be loaded e.g. by front end loader.

Response:
The following clarifications are provided in relation to the proposal's key characteristics:

- The resource facility has an intended capacity to produce up to 136,000 tonnes per annum of recovered aggregate. The total proposed annual throughput of the facility is 136,000 tonnes.
- The revised Architectural Plans (**Appendix A**) have been updated to identify:
  - 6m high raw feed (waste materials) stockpiles with a total combined maximum capacity of 20,000 tonnes broken down as follows:
    - Concrete 14,000 tonnes
    - Glass 3,000 tonnes
    - Asphalt 2,000 tonnes
    - Brick 1,000 tonnes
  - A surge stockpile (if required) is available with a capacity of up to 1,000 tonnes.
  - 6m high finished product stockpiles with a total combined maximum capacity of 11,000 tonnes broken down as follows:
    - Concrete 7,000 tonnes
    - Glass 1,500 tonnes
    - Asphalt 1,000 tonnes
    - Brick 500 tonnes
    - Pugmill 1,000 tonnes
  - Waste and steel bays, together with a non-recyclable materials bin for storing small quantities of residue or rejected materials. The total combined capacity of these residue and rejected material storage bins/areas would be 1,000 tonnes.
- A total of 10 stockpiles are proposed for the facility – 5 for raw feed stockpiles (including 1 surge stockpile being area available to be used if required) and 5 finished product stockpiles. There will also be two stockpiles and a bin for storing waste materials.
- With consideration of the above maximum storage volumes for raw feed stockpiles and finished product stockpiles, the maximum amount of waste (prior to processing) that could be stored at the site would be 21,000 tonnes, and the maximum amount of material to be stored on site at any one time would be 33,000 tonnes.
- Raw feed greater than 1.3m would be received. This will be managed by a rock breaker, which will break the raw feed into pieces suitable for the crusher. The maximum size of raw feed received at the site would be approximately 3m x 1m pieces of concrete, and even concrete pieces of this size would be unusual.
- Materials would be moved around the site by a front end loader, including the loading of the pugmill and loading of outgoing trucks.
- Output products are aggregates – ranging from finer aggregates (such as sand) to courser aggregates (such as gravel). Aggregates are used in a range of construction activities including for the manufacture of asphalt and concrete, as well as for engineered ground formation such as road base and drainage layers. Different grades of aggregates are blended together in different ratios to create the necessary specification depending on the customer needs. Hanson is one of the largest construction materials manufacturers in NSW. Most of the aggregates produced at the Eastern Creek Resource Recovery Facility will be used as in-feed aggregate materials in the manufacture of Hanson's construction materials throughout Sydney. This recycled aggregate material will directly displace the need for more virgin aggregates to be quarried and trucked into Sydney via the regional road network. Subject to market demand, some of the recycled aggregates will be sold to third party contractors for use in construction and infrastructure projects around Sydney.

4.3.2 Conformance with the Minimum Standards for Managing Construction and Demolition Waste

Issue raised by: DPIE, EPA

- Provide more detail regarding the inspection points for waste arriving at the site. The EIS states that waste would be visually inspected at the entry weighbridge but it is unclear if inspection would also occur at the tip and spread and waste storage areas
- Provide details of training requirements for all personnel.
- Show where material would be tipped prior to being loaded into the mobile plant by front end loader.
- Clearly label the waste and material product stockpiles on a plan and describe how these would be clearly delineated.
- Show where non-recyclable material would be stored and describe how often this would be removed.

Response:
The following information is provided in relation to the EPA's inspection and sorting requirements:

- Alex Fraser Group (a subsidiary of Hanson, and the operator of the proposed Eastern Creek Resource Recovery Facility) operates numerous similar facilities, and has developed a Tip Head Management Standard to manage environmental and safety risks associated with tipping and stockpile management activities. The Tip Head Management Standard is provided for reference at **Appendix F**. Some of the relevant management measures adopted in the Standard are detailed further below by way of responses to the issues raised by DPIE and the EPA, and a summary table of the compliance with the EPA's Minimum Standards for Managing Construction Waste in NSW is provided in **Table 1**. The information below also draws from Alex Fraser Group's environmental management plans for similar facilities, where relevant and appropriate.
- Inspection requirements:
  - The vehicle details of all incoming vehicles will be recorded, including registration number, type of material and quantity of material.
  - Material that does not meet the sign posted acceptance criteria will be rejected at the weighbridge. Such as putrescible, odorous, toxic, corrosive, flammable, explosive, infectious, oils or hazardous liquids or materials. The driver will be advised of the closest suitable facility.
  - Visual inspections of all raw feed materials is required to ensure banned or contaminated materials are either reloaded onto the vehicle that tipped off the load, isolated when identified and safely removed from the processing stream.
  - Ultimately, the Site Manager will be responsible for ensuring the site complies with its environmental requirements. If unauthorised material has been found at one of the critical control points the Site Manager will cease all operations within and instruct the driver of the offending truck to reload the unauthorised material and dispose of it at an appropriate disposal facility. If the offending truck has left the Site the unauthorised material will be collected and put into a safe storage location for collection by the offending truck. If the offending truck cannot remove the material, the unauthorised material will be removed by Alex Fraser to a suitably licensed disposal facility.
  - Non-conforming loads will not be stored at the premises. Rejected loads will be recorded and a rejected loads register will be maintained.
  - Visual inspections are to occur at the tip and spread areas as well as at the waste storage areas.
- Load inspectors are the responsible personnel. Load inspectors are trained site personnel that have the designated authority, training and experience to manage the movement of vehicles associate with tipping and stockpile management activities.
- Other on-site personnel who will receive specific training in relation to their environmental inspection roles are: the Weighbridge Operator and the Front End Loader Operator.
- Material would be tipped in raw feed stockpiles prior to being loaded into the mobile plant by a front-end loader.
- All waste areas will be signposted/clearly labelled to indicate the individual waste type being stored in that area. Waste would be stockpiled in accordance with the listed waste types set out in Attachment A of the *Standards*

for Managing Construction Waste and stored in separate storage areas. The listed waste types that would be received at the facility would be limited to aggregate, asphalt, bricks/concrete, glass and residue / reject materials. All finished product stockpiles would be classified as aggregates. Waste and finished material product stockpile locations have been included in the revised Architectural Plans at **Appendix A**. Signs are to be mounted at each stockpile location to label and clearly delineate raw feed and product stockpiles.

- The non-recycled materials bin is located adjacent to the waste and steel bays within the recycling shed, and would be used for temporarily storing small quantities of residue / reject material. These would be removed or emptied on an as-needs basis, for disposal at a suitably licensed waste facility. The total capacity of the waste and steel bays and the non-recycled materials bin would be 1,000 tonnes.
- A dedicated tip and spread area has been clearly indicated on the Floor Plan in the revised Architectural Plans (**Appendix A**). The tip and spread area will not be used for any other activity such as waste sorting, stockpiling or storage, and will be operated in accordance with the EPA's Minimum Standards for Managing Construction Waste in NSW.

Table 1 Compliance Table with EPA's Minimum Standards for Managing Construction Waste in NSW

EPA Guideline Requirement	Assessment
1. Inspection requirements	
1.1. Initial inspection (point 1) – trained personnel must: 1. Inspect the entire top of each load from an elevated inspection point or by using a video camera connected to a monitor and determine whether or not the load contains any asbestos waste and any other unpermitted waste; 2. Where the load is identified as containing, or is reasonably suspected to contain, any asbestos waste, reject the entire load of waste by directing the driver to immediately leave the facility and record the information required by Standard 1.4 into the C&D waste facility's rejected loads register; and 3. Where the load is not rejected, record the details as required by clause 27 of the Waste Regulation and direct the driver and the load of waste to proceed directly to inspection point 2.	1.1 Under the AFG Tip Head Management Standard the Weighbridge Operator is obligated to undertake an initial inspection of the load, including a visual inspection and use of closed circuit television. The Tip Head Management Standard includes rejection procedure asbestos waste is identified, including rejection of the entire load.
1.2. Tip and spread inspection area (point 2) – trained personnel must: 1. Direct the driver of the vehicle to tip the entire load on the tip and spread inspection area; 2. Spread the entire load and inspect the visible surface area for any asbestos waste and any other unpermitted waste; 3. Ensure that each load tipped does not come into contact with any other load of waste on the tip and spread inspection area, waste storage area or other working area at all times during the process; 4. Manually turn, or direct a plant operator to turn the load and inspect the entire load for any asbestos waste and any other unpermitted waste; 5. Where any asbestos waste is identified, reject the entire load of waste; 6. Where any other unpermitted waste is identified, remove that waste from the load or reject the entire load of waste; 7. Where a load is rejected, ensure that the entire load is immediately reloaded onto the vehicle in which it arrived or onto another vehicle and ensure that the vehicle with the rejected load leaves the C&D waste facility within one day and immediately record the information required by Standard 1.4 into the C&D waste facility's rejected loads register; and 8. Ensure that all waste that may lawfully be received at the C&D waste facility proceeds to be sorted and stored in accordance with Standards 2, 3 and 4.	1.2 Under the AFG Tip Head Management Standard, all tip and spread activities will be overseen by the Load Inspector.

EPA Guideline Requirement	Assessment
1.3 Training to be provided for all relevant personnel on: a. the requirements of the POEO Act and its regulations (including the Waste Regulation) applicable to the operations at the C&D waste facility; b. the requirements of the environment protection licence for the C&D waste facility, with reference to the waste conditions and the wastes permitted to be received; and c. the requirements of these Standards. All records of the training undertaken for the purpose of this Standard must be kept at the facility and made available to an authorised officer of the EPA if requested.	1.3 Personnel will be trained as required, and records of training kept at the facility.
1.4. The facility must keep and maintain a rejected loads register. The rejected loads register must be made available for inspection to an authorised officer of the EPA if requested. The rejected loads register must record the following details for each load of waste rejected from the facility: 1. the date and time on which the load of waste was rejected; 2. the registration of the vehicle(s) (including any trailer(s)) transporting the rejected load of waste both to and from the facility; 3. the type of waste(s) in the rejected load of waste; and 4. the reason the load of waste was rejected.	1.4. A Rejected Loads Register will be maintained at the facility.
2. Sorting requirements	
Following inspection, each load of construction waste received at the facility which has not been rejected must be sorted and classified into individual listed waste types before being transferred to the waste storage area.	Most incoming loads of waste are expected to comprise a single waste type, and will be transferred directly to the relevant stockpile. Where loads are mixed they will be sorted and segregated into the relevant stockpiles.
3. Mixing of waste	
Construction waste that has been inspected and sorted must not be mixed with any other construction waste at the facility unless the other waste has been inspected and sorted at the facility.	All incoming waste is inspected and sorted prior to stockpiling with materials of the same type.
4.1. Waste storage requirements All construction waste received at the facility must be stored in accordance with the following requirements: 1. Waste which has been classified into an individual listed waste type, waste which meets the requirements of a resource recovery order or waste which meets the recovered fines specifications must be stored in a separate storage area for that type of waste that is clearly labelled or signposted to indicate the individual type of waste being stored in that area; 2. Each label or signpost must be legible and clearly visible; 3. The labels or signposts at all waste storage areas containing waste intended to meet the requirements of a resource recovery order that is awaiting compliance test results, must also contain the words ‘awaiting validation’; 4. If waste is being stored outside of an enclosed bay, each stockpile of waste must be clearly delineated and separated from stockpiles of other listed waste types by a minimum of three metres from the base of the stockpile; and 5. Separate stockpiles containing the same listed waste type may touch at the base and are exempt from the three-metre separation requirement.	**4.1 Waste storage requirements** 1. Separate stockpiles have been allocated for concrete, brick, glass and asphalt. 2 and 3. Stockpiles will be appropriately labelled and/or signposted. 4. Stockpiles are shown on the plans as minimum 3m apart. 5. Noted.

EPA Guideline Requirement	Assessment
4.2: Personnel must:	**4.2: Personnel requirements:**
1. Inspect each labelled or signposted storage area to determine whether waste is being stored in accordance with Standard 4.1; 2. If any waste, waste which meets the requirements of a resource recovery order or waste that meets the recovered fines specifications is found in a storage area labelled or signposted with another listed waste type, immediately cause the waste to be moved to the correctly labelled or signposted storage area; and 3. Record observations, including each incidence of waste being identified in the wrong storage area, along with the date, time, the role and name of trained personnel carrying out the inspection.	The obligations of the relevant personnel are set out in the Tip Head Management Standard – including for the Weighbridge Operator and the Load Inspector.
4.2.2. Inspection records Records of each inspection carried out by trained personnel in accordance with Standard 4.2.1 must be kept at the C&D waste facility for a period of three years from the date of the inspection.	4.2.2: Records of inspections will be retained.
5. Transport requirements	
Construction waste must not be transported from the C&D waste facility unless it has been inspected, sorted and stored in accordance with these Standards and the load of waste transported from the C&D waste facility consists solely of an individual listed waste type or waste that meets the requirements of a resource recovery order or the recovered fines specifications	Materials dispatched from the facility will include: Quality controlled recovered aggregates produced in accordance with the Recovered Aggregate Order 2014. Recovered recyclable materials (including steel, cardboard, and plastic) which will be segregated and sent for recycling. Residual non-recyclable waste materials that will be sent for disposal to a suitably licenced landfill facility. Rejected loads that are sent directly back to the supplier.

4.3.3 Waste streams and processes

Issue raised by: EPA
The EPA has requested that the following information be provided in relation to waste streams and processes:

- Exactly where the waste will be sourced from, and in particular whether waste will be sourced directly from the building and demolition industry, or specifically from the facilities listed in the EIS.
- Where source separated or otherwise segregated construction demolition waste will come from: This should include the original source of the building and demolition waste stream. Clarification is required on whether source separated waste will be provided by other resource recovery facilities, or exclusively sourced from Hanson and Visy following processing. This should cover all source separated waste, but particularly glass waste.
- How each proposed waste stream (concrete, glass, brick, asphalt) is to be processed at the premises: The EPA requires the applicant to provide additional detail for each stream, and flow diagrams for each waste stream.
- The EPA requires additional detail on how waste will be tracked when being delivered to and from the premises.

Response:

- Waste will be sourced directly from Hanson concrete batching plants, source separated aggregate products from the building and demolition waste stream, and Visy Penrith and Smithfield sites or other similar facilities subject to the availability of materials and market demand. The facility will not receive directly un-separated loads from demolition and construction contractors or drive up loads from the general public. Due to the limited range of materials able to be received and processed at the proposed Eastern Creek Resource Recovery Facility the demolition and construction contractors accessing the site will generally be pre-authorised, and will be aware of the limitations via commercial and contractual arrangements.
- In relation glass, it is intended that the facility will receive glass from the Visy Penrith and Smithfield resource recovery facilities, however this is subject to the availability of materials, market demand and commercial arrangements. If not from these two operations, Hanson would ensure that all glass received at the proposed Eastern Creek Resource Recovery Facility was from an EPA licensed waste management facility, and that the glass was subject to source separation or site-based sorting prior to being delivered to the facility.
- Waste stream and flow diagrams for each waste stream are provided at **Figure 2**. There are two flow diagrams provided.
    - The first relates to the normal process where raw feed (comprising rock, concrete, glass, brick, or asphalt) is size reduced by the rock breaker before being passed through the crusher (labelled in the flow diagram as an ‘impactor’. The crusher will crush and screen the material to a specified size before discharging into the relevant stockpile area.
    - The second relates to the use of the pugmill (see also **Section 4.3.4** below), the only difference being that the rock, concrete and brick once discharged from the crusher can be mixed in the pugmill with water and cement to create aggregate mixes with different specifications in terms of stability and water content.
- Tracking of waste delivering to and from the premises will be through dockets and a ticketing system.

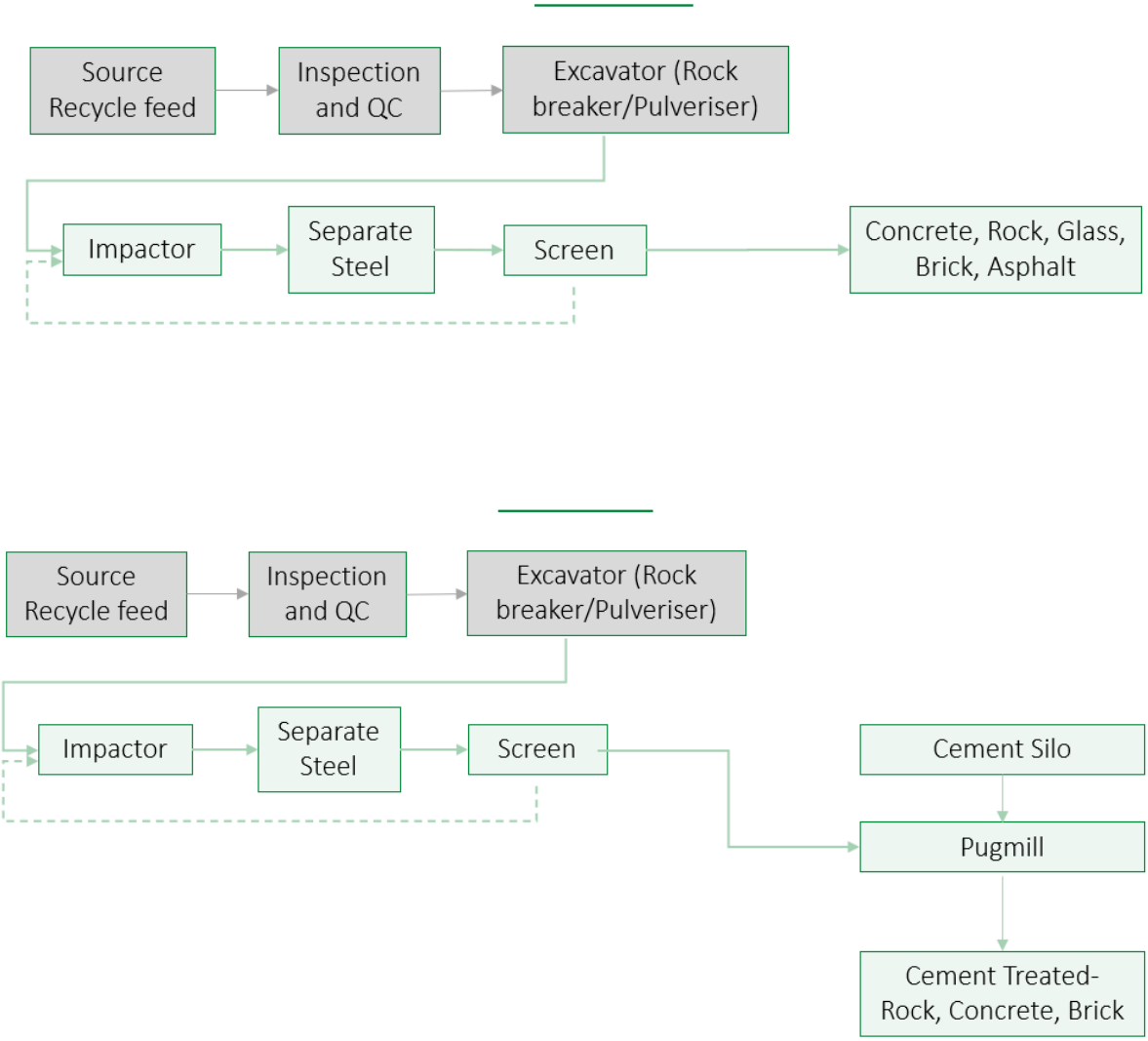

Figure 2 Recycling Flow Diagrams

4.3.4 Pugmill

Many aggregates products (such as road base) are required to meet specifications in terms of consistency and moisture content. A pugmill is a machine that enables mixing of aggregates with water and cement to create a uniformly moist aggregate product with additional properties in relation stability. It does not crush, grind or separate. Rather, it mixes and blends. The pugmill will be operated as a back-end processing step. Its input feed will be on-site crushed and screened aggregate outputs (being crushed rock, concrete or bricks) of a specified size range. The specified output aggregates from the crusher would be fed into the pugmill by front end loader, for mixing with water and cement to create a homogenous mixture with uniform stability and moisture content.

4.3.5 Wheel wash

Issue raised by: DPIE, EPA
DPIE and EPA have recommended installation of a wheel wash at the premises or provide more detail on operational controls to ensure compliance with mandatory licence conditions.

Response:
Soil will not be received at the facility, and materials that will be handled on-site are not of a nature that will stick to truck wheels, being hard materials such as bricks, rocks and concrete. Further, each truck will travel at least 300m on the sealed internal road from where it exits the recycling shed to where it leaves the site and enters the public road network. Any loose material that might have attached itself to the wheels or underside of a truck will certainly be dislodged during this transit. As such, a wheel wash is unnecessary and will not add any additional benefit in relation to off-site tracking.

A street sweeper is proposed to ensure materials are not tracked from the premises and ensure mud is not deposited on a public road by vehicles leaving the site. If deposits of dust or mud are left on any public road adjacent the site entrance/exist, the Site Manager shall be immediately notified, and the road is road is to be cleaned up immediately.

These operational measures will satisfactorily prevent tracking of material around the site and will be implemented to ensure compliance with mandatory EPA conditions without the need for a wheel wash.

4.4 Noise and Vibration

Issue raised by: DPIE, EPA
A detailed assessment of construction and operational noise and vibration impacts is required.

Response:
A Noise Impact Assessment has been prepared by SLR, and is provided at **Appendix H**.

The Noise Impact Assessment includes an operational noise assessment in accordance with the EPA's Noise Policy for Industry.

- The Noise Impact Assessment identifies the closest sensitive residential receptors at Minchinbury and Erskine Park, and has established background noise levels at these receptors for the day, evening and night time period based on historical noise monitoring data.
- The project specific noise levels (LAeq,15-min) established for residential receptors at Minchinbury are: 40 dBA for the daytime, evening and night time periods.
- The project specific noise levels (LAeq,15-min) established for residential receptors at Erskine Park (north) are: 35 dBA for the daytime, and 32 dBA for the evening and night time periods.
- The project specific noise levels (LAeq,15-min) established for residential receptors at Erskine Park (south) are: 35 dBA for the daytime, and 34 dBA for the evening and night time periods.
- Noise modelling has been carried out for the day time, evening and night time periods, with all operational activities occurring concurrently – including truck movements, the excavator, the rock breaker, the crusher and the pugmill. The noise modelling demonstrates that the noise emissions from the resource recovery facility will be well below the project specific noise levels (i.e. by 5dBA or more) for all residential receptors under calm conditions, and for Minchinbury and Erskine Park (north) under unfavourable meteorological conditions (i.e.

temperature inversion). For Erskine Park (south) the noise emissions from the resource recovery facility would still be 2-3dBA below the project specific noise levels under unfavourable meteorological conditions.

- Noise modelling was also used to calculate the potential for night time sleep impacts LA1(1 minute). The predicted night-time maximum LA1(1 minute) noise emissions are at least 17 dBA below the relevant night time sleep disturbance noise levels.
- The modelling also showed that noise emissions from the resource recovery facility would be at least 9dBA below the relevant noise levels for nearby commercial and industrial receptors.

The Noise Impact Assessment also includes a construction noise assessment in accordance with the EPA's Interim Construction Noise Guideline. The construction noise assessment calculates that the predicted daytime construction noise levels comply with the relevant Construction Noise Management Levels at the nearest residences. At the loading dock of one commercial receiver there is a minor exceedance of 2 dBA, due to the close proximity to the warehouse. This exceedance occurs during roadworks when they occur immediately adjacent to the boundary, and for other construction works noise levels will be lower.

The Noise Impact Assessment therefore confirms that the enclosure of recycling activities within a shed will ensure that the project specific noise levels established in accordance with the EPA's Noise Policy for Industry will be complied with.

4.5 Traffic, Swept Paths and Parking

4.5.1 Traffic and Transport

Issue raised by: DPIE, BCC, Lite n' Easy
Swept path diagrams were requested to show that the largest vehicle can safely pass while travelling around the site, enter and exit the truck parking safely, and enter and exit the shed to receive and dispatch materials.

A description of how traffic would be controlled to effectively manage vehicles entering and exiting the site.

BCC raised concern the proposal will exacerbate traffic delays at the Wonderland Drive and Wallgrove Road intersection. Council also requires consultation with TfNSW to provide comments on the applicant's traffic report to determine if the traffic signals are operating at a satisfactory level.

The Traffic Management Plan should be made publicly available and should outline how increased pollution from diesel exhaust and noise pollution will be managed given the operating hours.

Response:
Annexure B of the Traffic Response Letter (see **Appendix H**) provides swept path diagrams for all requested movements. McLarens identify the only area that does not provide internal two-way passing is the south-east corner of the site. The operation of the site is still deemed safe, as intervisibility is provided between passing areas. In particular, heavy vehicle sight distance measures as 2.5m from the ground, and as such vehicles can see opposing vehicles and act accordingly, i.e., wait to give-way to opposing vehicles prior to the bend. In addition, on-site management measures can ensure that the operation of the site does not result in large vehicles opposing each other at this location through the Site Management Plan.

In terms of managing vehicles entering and exiting the site, it is highlighted that the weighbridge is located 100m inside the site, so there is a significant capacity within the internal road network to queue heavy vehicles without spilling over into the public road network. Further, the site would include a truck parking bay with parking spaces for up to 9 trucks, that can also be used if required to prevent queuing spilling out into the public road network.

TfNSW has been consulted on several occasions throughout the assessment of the proposal. TfNSW has not raised any concerns in their submission regarding traffic delays at the Wonderland Drive and Wallgrove Road intersection or traffic . It is considered that no further action is required in this regard.

A Traffic and Parking Impact Assessment was publicly exhibited with the EIS. The proposed 24/7 hours of operation is considered a mitigation measure which will disperse the number of truck movements throughout the day, minimising impacts for surrounding commercial and industrial receptors.

The management measures recommended by McLarens in both the Traffic and Parking Impact Assessment (see Appendix G of the EIS) and the Traffic Response Letter (see **Appendix H** of this RTS) have been adopted, and are included in the mitigation measures at **Table 2** (see **Section 5**).

A number of business identification and wayfinding signs are proposed as shown in **Appendix A**.

4.6 Water Cycle Management

4.6.1 Water and Wastewater

Issue raised by: DPIE, Sydney Water
Sydney Water identified discrepancies amongst the exhibited documentation. The organisation seeks clarification as to what the correct intended average daily reticulated water demand and reticulated wastewater discharge is proposed to be.

DPIE requests clarification that the water harvesting tanks have a total volume 278.4kL compared to site water usage of 184.75kL/day, meaning that in periods of no rainfall the tanks would be able to supply approximately 1.5 days of site usage only.

Response:
The revised Water Cycle Management Plan (**Appendix E**) clarifies the average daily water demand and reticulated wastewater discharge as follows:

- Total water demand = 11.57 kL/day (comprising 0.61 kL/day for site amenities plus 10.96 kL/day for dust suppression).
- Collected rainwater reused = 9.37 kL/day (will service amenities and dust suppression requirements).
- Potable water demand = 2.2 kL/day (this is the residual potable water demand after reuse).
- Wastewater discharge = 0.612 kL/day (reticulated wastewater discharge is from amenities only, there is no wastewater arising from dust suppression).

As detailed in the Water Cycle Management Plan (**Appendix E**), the proposal achieves 81% non-potable water reuse, which exceeds Council's requirement of 80%. The total combined capacity of rainwater storage tanks is 302.4kL, comparing 278.4 kL in aboveground rainwater tanks and a 24 kL underground storage tank. Average daily water demand is calculated at 11.57 kL/day, meaning the tanks (if they were full) could fully service the site's total water demand for 26 days.

4.6.2 Flooding

Issue raised by: BCC
An overland flow study is required to demonstrate the proposed development is adequately protected and can cater for an upstream overland flow path through the site.

Response:
The entirety of the site is located outside of Council's flooding precincts based on Council's mapping. It is further noted Environment, Energy and Science Group's submission identifies a Flood Impact and Risk Assessment is not required as the site is not impacted by flooding. Notwithstanding, an additional assessment of overland flow has been provided in Section 5.3 of the revised Water Cycle Management Plan (**Appendix E**). Following an analysis, results show that the existing estate pipe (25% blocked) and swale can cater for the upstream overland flows in the 1% AEP event. Martens consider that the proposed development is adequately protected by the existing drainage infrastructure.

4.7 Heritage

Issue raised by: Heritage NSW
Heritage NSW requested an Aboriginal Cultural Heritage Assessment Report be prepared to ascertain the current condition and location of known Aboriginal heritage site (AHIMS#45-5-0556) and any other Aboriginal sites that may be located in the proposal area, and to document the significance of cultural heritage values for Aboriginal people who have a cultural association with the land. A survey was requested to be undertaken by a suitably qualified archaeologist and representatives of the registered Aboriginal parties. Following consultation with Heritage NSW, it was confirmed that a ground truth survey would be sufficient to satisfy this requirement.

Response:
It is highlighted that the area of the site where development is now proposed for the construction and operation of the Eastern Creek Resource Recovery Facility is located entirely on filled and graded land, which was carried out as part of previous subdivision works assessed and approved pursuant to Project Approval MP06_0225 issued by the Minister for Planning's delegate in June 2010. Further, the recorded AHIMS site #45-5-0556 was subject of an Aboriginal Cultural Heritage Assessment by Archaeological and Heritage Management Solutions in 2012, which was part of Modification 1 of Project Approval MP06_0225 to construct the site-wide basin in the south-western part of the site. The 2012 Aboriginal Cultural Heritage Assessment recommended that the recorded AHIMS site #45-5-0556 remains within a riparian corridor/conservation area.

An Addendum Due Diligence Archaeological Assessment has been prepared by Navin Officer, which is provided at **Appendix K**. Navin Office has advised that there is no impact to Aboriginal objects from the current proposal and no further Aboriginal cultural heritage assessment is required for the following reasons:

- The area affected by the proposal has been heavily disturbed by past land uses and recently approved development.
- The current proposal is wholly within the area already impacted.
- The previously recorded AHIMS site #45-5-0556 is within a reserved conservation area/riparian corridor over 80m away from the proposed works area and will not be impacted by the proposed development.

As part of the Addendum Due Diligence Archaeological Assessment, Navin Officer carried out a visual inspection of the project area as well as the location of the recorded AHIMS site. The visual inspection found that the project area is highly disturbed and that the location of the recorded AHIMS site is within the riparian corridor.

Navin Officer has also confirmed that the recommendations set out in the EIS remain relevant, including that an unexpected finds protocol be implemented on site. This protocol would include the following key elements:

- In the unlikely event that heritage items, archaeological objects, or Aboriginal objects are located within the Site, works should cease immediately;
- The location of the finds should be cordoned off and a suitably qualified heritage consultant should be contacted; and
- Works will only recommence once the area has been cleared by further assessment.

4.8 Contamination

Issue raised by: EPA
The EPA has raised concerns about gaps in the land use and potential contamination history since the Preliminary Site Investigation was undertaken in 2006, which might undermine the reliability of the DSI submitted as part of the EIS for SSD 9774. The EPA has therefore requested that an updated Detailed Site Investigation (DSI) be provided which determines the full nature and extent of contamination in different media including, but not limited to soil, groundwater, and surface water media to determine if the site is suitable for the proposed use.

Response:
A Supplementary Detailed Site Investigation (DSI) has been prepared by Marten's and is provided in **Appendix J**. The Supplementary DSI sought to address the key data gaps identified by the EPA, including:

- Site activities and potential contamination sources introduced between 2006 (when the previous Preliminary Site Investigation was carried out) and present day.
- Depth to groundwater and risk of groundwater contamination.
- Insufficient sampling density adopted in the previous Detailed Site Investigation submitted as part of the EIS.
- Insufficient sampling depth, and no soil samples collected from underlying natural material during the previous Detailed Site Investigation submitted as part of the EIS.
- Volatile Organic Compounds (VOCs) in soil not analysed during the previous Detailed Site Investigation submitted as part of the EIS.

The Supplementary DSI identified that fill material brought to the site from unknown origins may have introduced contaminants to the subject area, and identified a range of Contaminants of Potential Concern to be investigated, including asbestos, heavy metals and organic compounds.

Field investigations for this Supplementary DSI were completed on 30 and 31 August 2021, and involved:

- Detailed walkover and visual inspection of the site.
- Excavation of 13 boreholes to a maximum investigation depth of 9 meters below ground level (or prior refusal on fill, floaters or rock).
- Collection of representative soil samples for laboratory analysis at varying depths in fill and natural material (where encountered).
- Collection of duplicate samples for laboratory quality assurance and quality control analysis.

Visual inspections confirmed no anthropogenics or obvious signs of contamination (soil staining, unnatural odours) were observed at the site surface, or within borehole cuttings. Laboratory testing of the soil samples found concentrations of all of the Contaminants of Potential Concern to be below adopted Site Acceptance Criteria for commercial / industrial sites.

Groundwater results from a 2015 Detailed Site Investigation DLA indicate elevated concentrations of zinc, copper, lead and cadmium, however these are not considered to pose any significant risk to human health on the site as the development will not encounter groundwater nor will it extract groundwater for any use. No anthropological source of heavy metal was apparent, and it is expected that elevated heavy metal concentrations in groundwater are associated with regional geology and / or the past history of industrial use in the local area.

Based on detailed investigations and extensive laboratory testing completed to date, the Supplementary DSI concludes that:

- The site carries a very low risk of contamination, and is unlikely to impact the health of proposed future site users.
- The site presents a minimal environmental risk due to the lack of potential on and off site ecological receptors.
- The site is suitable for the proposed commercial / industrial use as a materials recycling facility and no further investigation or remediation is required to be undertaken.

4.9 Air Quality and Pollutants

Issue raised by: BCC, EPA, Lite n' Easy
Additional information is requested as to how dust on-site is going to be controlled throughout construction and operational phases.

The EPA requires more information on how dust suppression within the shed will occur. Additionally, the EPA requests that the applicant confirm operational controls to minimise and prevent dust emissions from the shed.

Lite n' Easy raised concern for contamination and requested an Air Quality Management Plan be prepared. Jacfin raised health impact concerns around silica dust.

Response:
ERM have prepared an addendum Air Quality Letter (**Appendix C**) which addresses the air quality concerns raised in the submissions. The letter sets out Hanson's commitment to applying the following operational mitigation measures within the enclosed facility:

- Air pressure control operating at negative pressure.
- Sampling points for dust.
- Receivables handling/off-loading and truck traffic management procedures.
- The roller doors will remain closed when trucks are not entering or exiting the building.

In relation to operational air quality and dust management, all materials handling activities will be carried out within an enclosed building, which represents a significant dust control factor. The AFG Tip Head Management Standards (**Appendix F**) outlines risk mitigation and provides guidance on implementing management standards for Alex Fraser Recycling controlled sites. These Standards will form the basis of the dust management and mitigation measures that will be implemented as part of the Operational Environmental Management Plan.

The Air Quality Assessment dated January 2021 (see Appendix E of the EIS) included a construction dust assessment. A comprehensive list of mitigation measures were listed in the Air Quality Assessment. Measures that were listed as 'recommended' and 'desired' will be included in the Construction Air Quality Management Plan and/or Dust Management Plan, to be implemented during construction.

A detailed response to silica dust exposure is contained within the Air Quality Letter (**Appendix C**). The assessment concluded that any respirable crystalline silica levels would be unlikely to be detectable and significantly below levels that may be of concern.

5.0 Updated Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed development are detailed in **Table 2** below. These measures have been derived from the updated assessments in **Section 4** and those detailed in the updated consultants' reports appended to this RTS. New mitigation measures are shown in ***bold italics***.

Table 2 Mitigation Measures

Mitigation Measures
Air Quality • Stockpiling waste materials and finished products within the enclosed recycling building only. • Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate. • Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods. • Impose and signpost a maximum-speed-limit of 25 km/h to reduce wheel generated dust. • Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport. • ***Operate the recycling building with air pressure control at negative pressure to minimise dust escaping the building.*** • ***Ensure that the recycling building's roller doors will remain closed when trucks are not entering or exiting the building.*** • ***Prepare and implement an Operational Environmental Plan that includes details of sampling points for ongoing dust monitoring, and measures to minimise dust from loading and unloading trucks and the movement of trucks around the site. The air quality management measures will be based on the AFG Tip Head Management Standards.***
Heritage An Unexpected Finds Protocol will be implemented during construction. The Protocol will include the following: • In the unlikely event that heritage items, archaeological objects, or Aboriginal objects are located within the Site, works should cease immediately. • The location of the finds should be cordoned off and a suitably qualified heritage consultant should be contacted. • Works will only recommence once the area has been cleared by further assessment.
Water Cycle Management Plan • Actions to be taken if monitoring reveals the site is not achieving its target of 80% of water supply to be from stormwater reuse: - Confirm estate stormwater harvesting system is operating correctly and is measuring draw for site reuse. - Confirm production is consistent with anticipated rates. - Confirm site non-potable demands are being preferentially suppled with roof water and estate basin stormwater. • If these above measures do not resolve the matter, separate metering of potable demands should be undertaken to confirm if these are significant.
Soil and Groundwater Salinity • Prepare saline soil management strategies at Construction Certificate stage, taking into account the measures set out in Appendix R of the EIS.
Greenhouse Gas Emissions • Development of strong performance indicators based around plant efficiency and greenhouse intensity; • Consideration of energy efficiency in plant and equipment selection/purchase, including the installation of timers on all equipment; • Power factor correction on incoming electricity supply; and

Mitigation Measures

- Recycling of all concrete, water and aggregates that are returned to the plant (this would indirectly mitigate GHG emissions by reducing emissions associated with waste disposal and production of supplementary materials).

Waste Management

- During operations, recyclable plastic, paper a cardboard will be sorted on-site and collected by licensed contractor for off-site recycling.
- During construction green waste will be mulched and stockpiled for reuse in landscaping, and all recyclable materials will be returned to the supplier or to an off-site contractor for recycling.
- ***The vehicle details of all incoming vehicles are to be recorded, including registration number, type of material and quantity of material.***
- ***Material that does not meet the sign posted acceptance criteria to be rejected at the weighbridge. The driver will be advised of the closest suitable facility.***
- ***Visual inspections of all raw feed materials to ensure banned or contaminated materials are either reloaded onto the vehicle that tipped off the load, isolated when identified and safely removed from the processing stream.***
- ***Visual inspections are to occur at the tip and spread areas as well as at the waste storage areas.***
- ***If unauthorised material has been found at one of the critical control points the Site Manager will cease all operations within and instruct the driver of the offending truck to reload the unauthorised material and dispose of it at an appropriate disposal facility. If the offending truck has left the Site the unauthorised material will be collected and put into a safe storage location for collection by the offending truck. If the offending truck cannot remove the material, the unauthorised material will be removed by Alex Fraser to a suitably licensed disposal facility.***
- ***Non-conforming loads will not be stored at the premises. Rejected loads will be recorded and a rejected loads register will be maintained.***
- ***All waste areas will be signposted/clearly labelled to indicate the individual waste type being stored in that area.***
- ***Waste would be stockpiled in accordance with the listed waste types set out in Attachment A of the Standards for Managing Construction Waste and stored in separate storage areas. The listed waste types that would be received at the facility would be limited to aggregate, asphalt, bricks/concrete, glass and residue / reject materials. All finished product stockpiles would be classified as aggregates. Signs are to be mounted at each stockpile location to label and clearly delineate raw feed and product stockpiles.***
- ***The non-recycle materials bin is located adjacent to the waste and steel bays within the recycling shed, and would be used for temporarily storing small quantities of residue / reject material. These would be removed or emptied on an as-needs basis, for disposal at a suitably licensed waste facility.***
- ***The tip and spread area will not be used for any other activity such as waste sorting, stockpiling or storage, and will be operated in accordance with the EPA's Minimum Standards for Managing Construction Waste in NSW.***

Contamination

Prior to the issue of a Construction Certificate, a Site Auditor Statement must be obtained from an EPA accredited Site Auditor certifying that the site is suitable for a commercial/industrial use. If remediation is required in order to make the site suitable for a commercial/industrial use then the Remedial Action Plan must be submitted to the Secretary along with an Interim Audit Advice from an EPA accredited Site Auditor certifying that the site can be made suitable for a commercial/industrial use if the site is remediated in accordance with the Remedial Action Plan. Remediation n works are not to commence until Secretary has approved the Remedial Action Plan.

Mitigation Measures

Traffic and Access

- ***A Construction Traffic Management Plans will be prepared and implemented prior to construction.***
- ***The site would be maintained so that intervisibility is provided for the truck passing area in the southeast corner of the site. The Site Management Plan would set out management measures to ensure that the operation of the site does not result in large vehicles opposing each other at this location (e.g. radio controls from the weighbridge and/or wait to give-way to opposing vehicles prior to the bend).***
- ***The Site Management Plan will set out management measures to ensure that sufficient room is retained around stockpiles for vehicles to circulate around the stockpile areas.***
- ***A minimum of four (4) bicycle parking spaces will be provided within the light vehicle car parking area, or otherwise in the vicinity of the Sales Office or the Production Office.***

6.0 Conclusion

The SSD Development Application seeks consent for the construction and use a resource recovery facility at 21, 31 and 42 Hanson Place, Eastern Creek. The resource facility has an intended capacity to produce up to 136,000 tonnes per annum of recovered aggregate. The proposed facility includes:

- A sales building and an administration office building;
- An enclosed shed which will comprise of raw feed stockpiles, finished product stockpiles, a pugmill and a mobile crusher; and
- An internal road system, including weighbridges, and car and truck parking facilities.

This RTS has been prepared as required by the Planning Secretary in accordance with the EP&A Regulations. Each of the submissions received has been collated, analysed and relevant issues have been addressed.

This RTS clarifies the scope of the proposed development in the context of the existing and previously approved development at the site. This submission provides additional clarify and a further assessment of air quality and dust, noise, stormwater, traffic and waste impacts in response to the issues raised by Government agencies and other stakeholders.

The revised assessments demonstrate a reduction in the environmental impact of the proposed development, compared to the original proposal described in the EIS. No significant adverse environmental, social or economic impacts have been identified.

The mitigation measures provided within the EIS have been updated where necessary to respond to the submissions received, and these updated measures will further reduce the overall environmental impacts during both the construction and operation of the proposal.

Having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development, the carrying out of the project is considered to be justified.