Statement of Environmental Effects

Proposed Refractory Development

Lots 101, 102 and 103 DP 839149

36-46 Gloucester Boulevard, Port Kembla

Prepared for MCJC Industrial

21st December 2010

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Document Status			Approved For Issue	
Version	Author	Reviewer	Signature	Date
Draft	Casey Joshua	Elaine Treglown	Authorised	17/12/10
Final	Casey Joshua	Elaine Treglown	Elaine Treglo	21/12/10

Contents

1 Executive Summary

This Statement of Environmental Effects has been prepared for Vesuvius regarding the relocation of an existing refractory to a new site at Sylvester Avenue, Unanderra. Vesuvius (formally Cookson Plibrico) currently operates from premises in Sturdee Avenue, Bulli. The Cookson Plibrico company (now Vesuvius) has operated from the Bulli site since the 1960s, however, due to encroaching residential development, in particular the development of the Sandon Point area, the operation is significantly impacted and needs to relocate. Cookson Plibrico began operating under the name of Vesuvius Australia Pty Ltd (*Vesuvius*) in 1 September 2010. After an extensive search Vesuvius have found a suitable site in Port Kembla that, if approved, will allow it to continue operating in the Illawarra, and retain much needed local jobs.

In 2008-2009, the then Cookson Plibrico sought to relocate from Bulli to a site in Unanderra, and the application was approved by the Department of Planning in 2010 (MP 09_0045). However, Vesuvius have since decided that the Unanderra site no longer meets their operational requirements and therefore the current site at Port Kembla was found. The current proposal seeks Council approval for the construction of an 8,026m^2 industrial warehouse, with 2,024m^2 of associated office space over two levels. The proposal includes the provision of 102 parking spaces, including 4 disabled spaces, bicycle spaces and motorbike spaces. The proposal also includes landscaping along the road frontages and within the carparking area.

The subject site (figure 1) is identified as Lots 101, 102 and part of 103 DP 839149, and is located on the western side of Gloucester Boulevarde, Port Kembla. The site has a total area of 2.3 hectares, however only a portion of Lot 3 will be utilised for the proposed development. The southern portion of Lot 103 contains an existing industrial use, which will remain and will not be impacted by the proposed development. The proposal will incorporate the northern 1318m^2 portion of Lot 103 only. Therefore the current redevelopment proposal covers 19,669m^2 of land. The subject site is zoned IN3 Heavy Industry under State Environmental Planning Policy (Major Developments) 2005 – Amendment (Three Ports) 2009. There is no existing development on the subject portion of the site, which has frontage to Gloucester Blvd and Darcy Rd. The subject site and surrounding context are described in detail in Section 2 of this Environmental Assessment.

The proposal will employ approximately 80-90 people, including approximately 45 office staff and 35 factory staff. Vesuvius produce castable products used in high-heat industry applications through seven (7) processes, which are outlined in detail in Section 3 of this report, and include the Crushing and Screening Process, Ball Mill Operation, the dry powder blending (TEKA and Batching plant), RAM Operation (plastics refractory), COMCAST Slab Production, PRECAST Slab Production and Taphole Clay Production. The existing Vesuvius operations at Bulli also incorporate mortar production, which is used in refractory brick laying projects. It is noted that this area of machinery will not be transferred to the new facility.

The current plant at Bulli also includes the operations of Vesuvius subsidiary, Andreco-Hurll Refractory Services Pty Ltd, which install products manufactured by Vesuvius. Andreco Hurll are intended to also relocate to the Unanderra plant and the Andreco Hurll staff members have been included in the employee numbers. Vesuvius and Andreco Hurll share some services, including accounts and contract staff. The Andreco Hurll operations conducted at Bulli and within the current proposal predominantly relate to administration and contracts.

Section 4 of this report provides details of discussions held during a prelodgement meeting held with Council in relation to this proposal on 21 July 2010.

Sections 5 - 8 of this report details the regional and state statutory framework that relates to the proposal, and outlines the manner in which the proposal meets the requirements of State Environmental Planning Policy (Major Developments) 2005; State Environmental Planning Policy No. 55; State Environmental Planning Policy No. 71; Illawarra Regional Environmental Plan No. 1; Wollongong Local Environmental Plan 1990; Draft Environmental Planning Instruments and Wollongong Development Control Plan 2009.

The proposed development meets the zone objectives for the IN3 Heavy Industry zone and is a permissible use pursuant to State Environmental Planning Policy (Major Developments) 2005 – Amendment (Three Ports) 2009. The proposed development is also principally compliant with the requirements of Wollongong Development Control Plan 2009, with the exception of a minor variation to the façade treatment, landscaping and a minor shortfall in parking spaces. It is argued that the proposal is an appropriate development in the locality and incorporates features to improve the visual appearance of the development and the streetscape amenity in the wider context. The proposal is consistent with existing surrounding development and is appropriate in the heavy industry context of the surrounding Port Kembla industrial precinct.

This Statement is accompanied by the following documentation:

Document	Document Number	Date	Author
Architectural Plans	24 600 (drawing DA01–DA07)	10/12/2010	Anthony Joseph
Landscape Plan	L-16-10	Sept 2010	Myriam Rooney Designs
Drainage Plan	10100 (drawing C1-C4)	20/07/2010	Sherson Lautier Consultancy
Traffic Report	A1012239N (Version 1b)	Aug 2010	
Waste Report	2591464//AU1-340374-1 0.1	10/12/2010	BECA Pty Ltd
Water Quality Report	600.10047.00000 WQ	17/12/2010	Heggies SLR
Air Quality Report	2010-100	15/12/2010	Envirodyne Group Pty Ltd
Contamination Report	600.10047.R1	10/12/2010	Heggies SLR
Preliminary Hazard Report	-	07/12/2010	Whamcorp Pty Ltd
Access Report	-	16/12/2010	Moris Goding Accessibility Consulting
Flora and Fauna Report	08/23	June 2008	Kevin Mills & Associates

2 Site Context

2.1 Subject Site

The subject site is known as 36 – 46 Gloucester Boulevarde, Port Kembla and consists of three individual properties identified as Lots 101, 102 and 103 DP 839149. However, the current proposal only includes a portion of Lot 103. There is an existing industrial use on the southern portion of Lot 103 (figure 4), which will be unaffected by the current proposal. Therefore, the proposed Vesuvius refractory will be located across Lots 101 and 102 and the northern portion of Lot 103 of DP 839149. The site is located on the corner of Gloucester Boulevarde and Darcy Road. The land is relatively regular in shape and has a total area of approximately 2.7Ha (including all three lots), with approximately 1.97Ha (19,689m^2) proposed for redevelopment (i.e. Lots 101, 102 and part 103). The site location is presented in figure 1.

The subject site is zoned IN3 Heavy Industrial under the SEPP (Major Projects) Amendment (Three Ports) 2009 Port Kembla. Council has identified several constraints including acid sulphate soils, contamination, flooding and the existence of threatened species.

Figure 1: Aerial photograph showing location of subject site (*source: Wollongong Council*)

The subject site is located within the industrial area surrounding the Port Kembla precinct, south of the Wollongong CBD, and is opposite North Beach, Port Kembla. The portion of the site to be redeveloped is cleared and free from vegetation (the clearing that has occurred on the land was approved in DA 2008/833) and has been sealed with an asphalt hardstand area which features some deterioration and cracking. The subject site is depicted in figures 2 and 3.

In terms of topography, the site is relatively level and features drainage easements that benefit the industrial properties to the west. The subject site currently contains five (5) points of access, two from Darcy road and three from Gloucester Boulevarde.

Figure 2: Subject site - Gloucester Blvd frontage

Figure 3: Subject site – corner Gloucester Blvd & Darcy Rd

Figure 4: Existing industrial use on southern portion of Lot 103

2.2 Surrounding Development

The site is generally surrounded by heavy industrial uses within an industrial area that has been established for some 50 years. Darcy Road lies along the sites northern boundary and Gloucester Boulevarde extends along the site's eastern boundary. Further afield, to the north of the site is a large industrial premises currently occupied by Orrcon Steel (figure 5).

To the west of the site the properties front Darcy Road. Immediately adjoining the subject site's western boundary is an electrical sub-station and an industrial premises (figure 6). To the south of the subject site more industrial uses feature (see figure 7). To the east of the site, on the opposite side of Gloucester Boulevarde, is the Metal Manufacturers ('MM') Beach (access shown in figure 8).

Figure 5: Industrial development on the northern side of Darcy Rd

Figure 6: Electrical substation and industrial development adjacent to the western boundary of the subject site and fronting Darcy Rd

Figure 7: Industrial development to the south of the site

Figure 8: Beach access opposite the subject site with Gloucester Blvd in the foreground

In the wider context, the site is located in the southern portion of the Port Kembla industrial precinct, to the south of the Port Kembla harbours. The Port Kembla industrial area supports the largest concentration of heavy industry in the Illawarra, and is an appropriate location for the proposed development. As described above the subject site is immediately surrounded by heavy industrial land, which continues further afield. The closest residential development is located approximately 500m to the south and southwest of the site, and the Port Kembla Public School is also located approximately 500m to the south. Industrially zoned land is separated from these sensitive uses by a vegetated Private Recreation buffer, which is located some 400m to the south of the subject site.

2.3 Development History

The following summarises the development history of each of the sites.

No. 36-38 Gloucester Blvd, Port Kembla (Lot 103 DP 839149:

DA-1996/73 – Workshop and Office

- Approved 13/3/96

DA-2005/522 – Workshop Extension to existing industrial buildings and associated carpark

- Approved 6/7/05

The southern portion of Lot 103 still retains the industrial use approved in the above development applications. The current application will not affect the existing industrial operations on this site (featured in figure 4). The proposed refractory development is located on the northern portion of Lot 103, however, the existing industrial development and the current proposal will be separated by an existing fence line. The refractory proposal will not change the current access locations for the existing development on Lot 103, nor will it impact on any parking areas. The landowners have indicated that they would be willing to consider the need to undertake a boundary adjustment as a condition of consent.

40-46 Gloucester Blvd, Port Kembla (Lots 101 & 102 DP 839149):

BA-1998/205 – Storage Depot/Tanks

- Approved 15/6/98

DA-1995/109 – Office warehouse and Fuel Diesel Storage

- Approved 22/5/96

DA-1995/109/A – Amendment to retain existing temporary offices

- Approved 10/11/97

DA-2008/833 – Removal of overgrown vegetation

- Approved 15/8/08

The subject site is currently cleared of vegetation in accordance with DA-2008/833. The site is now a continuous hardstand area that has been sealed with asphalt.

3 Development Proposal

3.1 Current Operations

Vesuvius currently operates from premises at Sandon Point at Bulli. Vesuvius is a large local employer, and the Company's activities have been ongoing at the Bulli site since 1968. The business operations primarily include the production of refractory products used in high-heat industry applications. In this regard, the Vesuvius operations to be conducted at the Port Kembla factory include ceramics manufacturing, specialising in refractory operations. Currently, Vesuvius have a production of approximately 15,000 – 20,000 tonnes per year at the Bulli site. The finished products are shipped as premixed powders in various bag sizes, packaged wet clays and precast concrete shapes for use in the steelmaking and aluminium smelting industries.

The business operation is now being significantly impacted by encroaching residential development, which necessitates the relocation of the operation from its current site. Historically, the primary concern of residents surrounding the Bulli site has been noise impacts. This was largely due to the use of certain machinery and because some of the current operations take place externally.

The current plant at Bulli also includes the operations of Vesuvius subsidiary, Andreco-Hurll Refractory Services Pty Ltd. It is intended that Andreco-Hurll will also relocate to the Port Kembla. Vesuvius and Andreco Hurll share a number of services, including accounts and contract staff, which will continue in the Port Kembla factory. Andreco-Hurll install products manufactured by Vesuvius. However, the operations conducted at Bulli and within the proposal pertain to administration and contracts. Andreco Hurll have a separate workshop in Tate St, Wollongong, at which maintenance and storage uses will continue to be undertaken. It is noted that the figures contained in this Statement of Environmental Effects, such as employee and parking numbers, pertain to the total operations on the site including both the Vesuvius operations and the Andreco-Hurll operations.

3.2 Consideration of Alternate Sites

After an extensive search Vesuvius and Andreco-Hurll have decided to relocate to a suitable site in the Port Kembla industrial estate that, if approved, will allow them to continue operating in the Illawarra, thereby retaining and increasing much needed local job numbers.

The Vesuvius (previously 'Cookson-Plibrico') relocation has been the subject of a previous development proposal to relocate to the industrial estate at Unanderra. That proposal was approved by the Department of Planning (MP 09_0045) however, due to the residential properties in proximity to the site; Vesuvius would not have been able to operate extended hours. Hence, Vesuvius have selected a heavy industrial site where it is appropriate to undertake extended hours of operation. Therefore this current development application to relocate to Port Kembla has been submitted.

3.3 Project Description

The proposed site is identified as Lots 101, 102 and 103 in DP 839149, and is located on the western side of Gloucester Boulevarde, Port Kembla. The site has a total area of 2.7 Ha, although a portion of the site (the southern portion of Lot 103) is already developed. Therefore, the proposed development will be situated on a 1.9Ha portion of the land.

The Company intends to relocate the exiting business from Bulli to Port Kembla, maintaining the operational elements of the production facility although upgrading and improving the processes where possible. The operations will be housed in the proposed factory building designed by Anthony Joseph. The architectural plans have been included as Appendix 1 of this report and are listed as follows;

Survey Plan/Site Analysis Plan	Ref: 24 600; Drawing DA01 Revision A dated 10 December 2010
Site Plan	Ref: 24 600; Drawing DA02 Revision A dated 10 December 2010
Ground Floor Plan/First Floor Office Plan	Ref: 24 600; Drawing DA03 Revision A dated 10 December 2010
Roof Plan	Ref: 24 600; Drawing DA04 Revision A dated 10 December 2010
Elevations	Ref: 24 600; Drawing DA05 Revision A dated 10 December 2010
Elevations/Section	Ref: 24 600; Drawing DA06 Revision A dated 10 December 2010
Site Access Plan	Ref: 24 600; Drawing DA07 Revision A dated 10 December 2010

The current proposal seeks Council approval for the construction of an 8,024m^2 industrial warehouse, with 2,024m^2 of associated office space over two levels. The proposal includes the provision of 102 parking spaces, including 4 disabled spaces, bicycle spaces and motorbike spaces. The proposal also includes landscaping along the road frontages and within the carparking area.

3.3.1 Employee numbers

Currently, the Bulli site accommodates 75 employees, which includes 10 administration and management staff for Andreco Hurl. There are also 3 persons that are based at the Andreco Hurl Warehouse which will be relocated to the Port Kembla facility, totalling 78 employees to be transferred to the proposed development. This number has been rounded up to 80 to allow for visitors, which includes approximately 45 office staff and 35 employees who work in the warehouse, and are employed in varying shifts. The staff figures include the total staff for both the Vesuvius and Andreco Hurll operations and some services are shared between both companies.

3.3.2 Hours of Operation

The proposed hours of operation of the development are 24 hours per day, 7 days per week. The subject site, which is located within the heavy industry area of Port Kembla, is considered appropriate for this type of operation.

3.3.3 Operational Processes

The Vesuvius operations to be conducted at the Port Kembla factory include ceramics manufacturing, specialising in refractory operations. Currently, Vesuvius have a production of approximately 15,000 – 20,000 tonnes per year at the Bulli site and approximately 90% of this product is made from aluminia based cementitious materials. The finished products are shipped as premixed powders in various bag sizes, packaged wet clays and precast concrete shapes for use in the steelmaking and aluminium smelting industries.

It is proposed that Vesuvius will relocate the majority of its existing equipment to a site at Port Kembla which will feature a warehouse building and associated office and amenity space. The refractory operation consists of seven main manufacturing units, as detailed below (*note: MT = Metric Tonne*):

1. Crushing and Screening Process: The preliminary process to be undertaken at the proposed factory involves bringing raw materials into the plant, which are then subjected to initial crushing and screening.
   1.1. Approximately 550MT of aggregate Raw materials are brought into the plant per year.
   1.2. Material is elevated to a rotating crusher where it is smashed and/or sieved into different size fractions.
   1.3. 1.3 Crushed and sized materials will then be conveyed to hoppers and into bulk bags/bins for further processing through the Ball Mill or for mixing within the Batching Plant.

2. Ball Mill Operation: Some of the product from the crushing and screening process is further processed in the Ball Mill plant (refer figure 9) which delivers a size reduction in, and homogenisation of, the raw materials in preparation for later applications.
   2.1. 1300 MT/year of the screened product is processed in the Ball Mill plant.
   2.2. The Ball Mill is a rotating conical mill containing steel balls designed to further reduce the size of the aggregate into a fine powder in preparation for later application through the Batching Plant (refer figure 10).

3. Dry Powder Blending (TEKA and Batching Plant): The Batching Plant utilises approximately 15,000 MT/year of raw materials including the crushed and milled materials to make a dry powder which is either stored for later onsite use (approximately 7400 MT/year) or transferred to the TEKA to be bagged ready for market (off site) sale (approximately 7600 MT/year).
   3.1. In order to produce the batched materials, the Batching Plant uses the crushed and milled material plus 13100 MT/year of purchased raw materials (cements, silica fume, clays etc).
   3.2. The Batching Plant will consist of 6 x 30 Tonne and 20 x 15 Tonne hoppers where product is batched onto a weigh scale conveyor.
   3.3. A bag opener will be used to add the purchased raw materials to the same belt to also be conveyed into bins for use internally within process described later or the TEKA skip.
   3.4. The skip is raised to a 1.5 MT mixer where the product is mixed for an average of 5 minutes.

3.5. The TEKA mixed material is then expelled into a bagging unit and is bagged off. There is a range of packaging types and sizes. Some material is sold externally.

4. Plastic/RAM Operation: The RAM line operations (plastic refractory) take the premixed product (dry powder) and blends it with other elements, such as Phosphoric acid, Phenolic resin or Aluminium Orthophosphate, according to client requirements. The material is mixed and then discharged onto an incline conveyor to be extruded through a hydraulic ram (refer figure 11). The extruded blocks are boxed or bucketed (600MT/year) for later use (off site) in the repair of furnace linings or containers that hold liquid metals.

5. COMCAST Slab Production: The COMCAST plant makes use of the pre-blended product from the TEKA to fashion precast slabs and other moulds (4000 tonnes of precast shape/year), according to client requirements, which are subjected to oven curing.
   5.1. Material premixed within the Batching Plant is raised to a 1.5 tonne mixer (figure 12) where water is added to create a wet cement mix, which is mixed for 5 minutes.
   5.2. The cement is then emptied into a 2m x 2m mould which is the vibrated for 8 minutes to de-air and level the cement.
   5.3. The moulds are then left overnight to cure.
   5.4. Once cured, the moulds are stripped and the slab is taken to an oven for the drying process. The maximum temperature of the oven is 250 degrees Celsius with a four to five day cycle. Material in the oven cures with a 50% reduction in moisture content from approximately 3.2% to 1.6% moisture.
   5.5. The final precast slabs are utilised to provide a lining for the electrolytic cells employed in the Aluminium smelting process.

6. PRECAST Shape Production: The PRECAST area consists a 500kg mixer (refer figure 13) whereby material from the TEKA mixer is emptied into the mixer and water is added to create a wet cement mix. This is then emptied into a small mould (i.e., 5kg to 300kg) where material is then vibrated for 8 minutes before being levelled off and left to cure for 18 hours. Once the mould is stripped the shape is then dried in an oven with a similar drying cycle to the Comcast slabs.

7. Taphole Clay Production: The TAPHOLE product line utilises premix from the Batching Plant with Resins and Hexamine to create a malleable clay type product for specialised use in the control of high temperature liquidised metals, such as those found at the base of blast furnaces or may used to open and close the "taphole" in furnaces while iron is being produced.
   7.1. The premix is vibrated into the mixer (figure 14) and mixed with Resin and Hexamine to the right consistency before it is dropped onto an incline conveyor to then be extruded through a hydraulic ram (figure 15).
   7.2. Small 4kg squares are extruded onto a belt where they are then hand stacked into 1.4 tonne boxes ready for shipment (2500 MT produced per year).

The existing Vesuvius operations at Bulli also incorporate mortar production. Mortar material is produced, to client requirements, using the bagged TEKA powder, water and Sodium Silicate, which is mixed before being packaged for use (off site), for example, in refractory brick laying projects. It is noted that this area of machinery will not be transferred to the new facility.

Fig 9: Ball Mill

Fig 10: TEKA Mixer

Fig 11: Plastic RAM Machine

Fig 12: COMCAST Mixer and Vibrating table

Fig 13: PRECAST Shape Mixer

Fig 14: Taphole Clay Mixer

Fig 15: Taphole Clay Mixer

The proposed operational processes are summarised in the following flow diagrams included as figures 16 to 22. Figure 16 is a general summary of the whole refractory processes undertaken at Cookson Plibrico, and Figures 17 to 22 detail each of the separate processes described in 1-7 above.

Figure 16: General Summary of processes and Process output

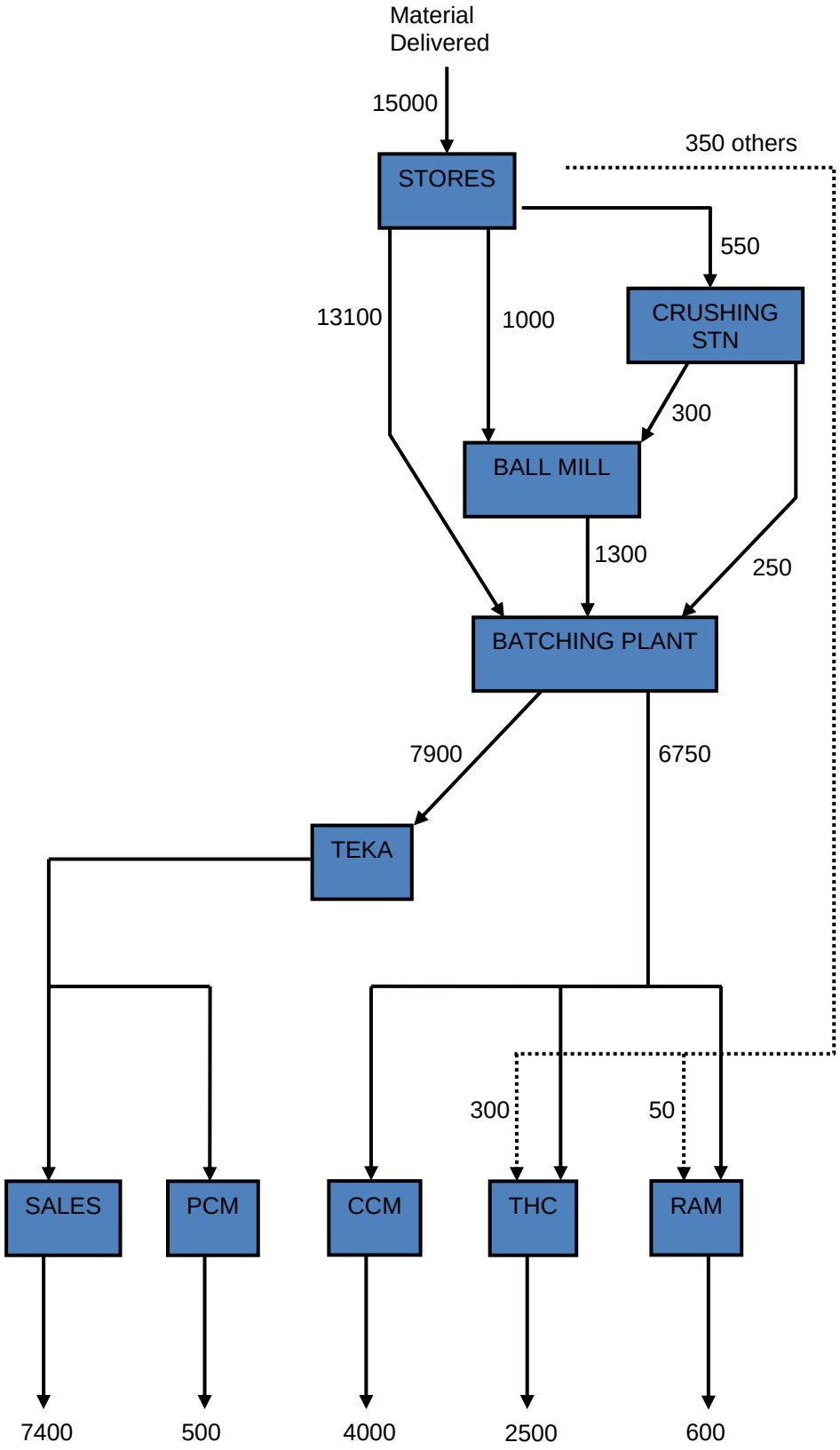


Figure 17

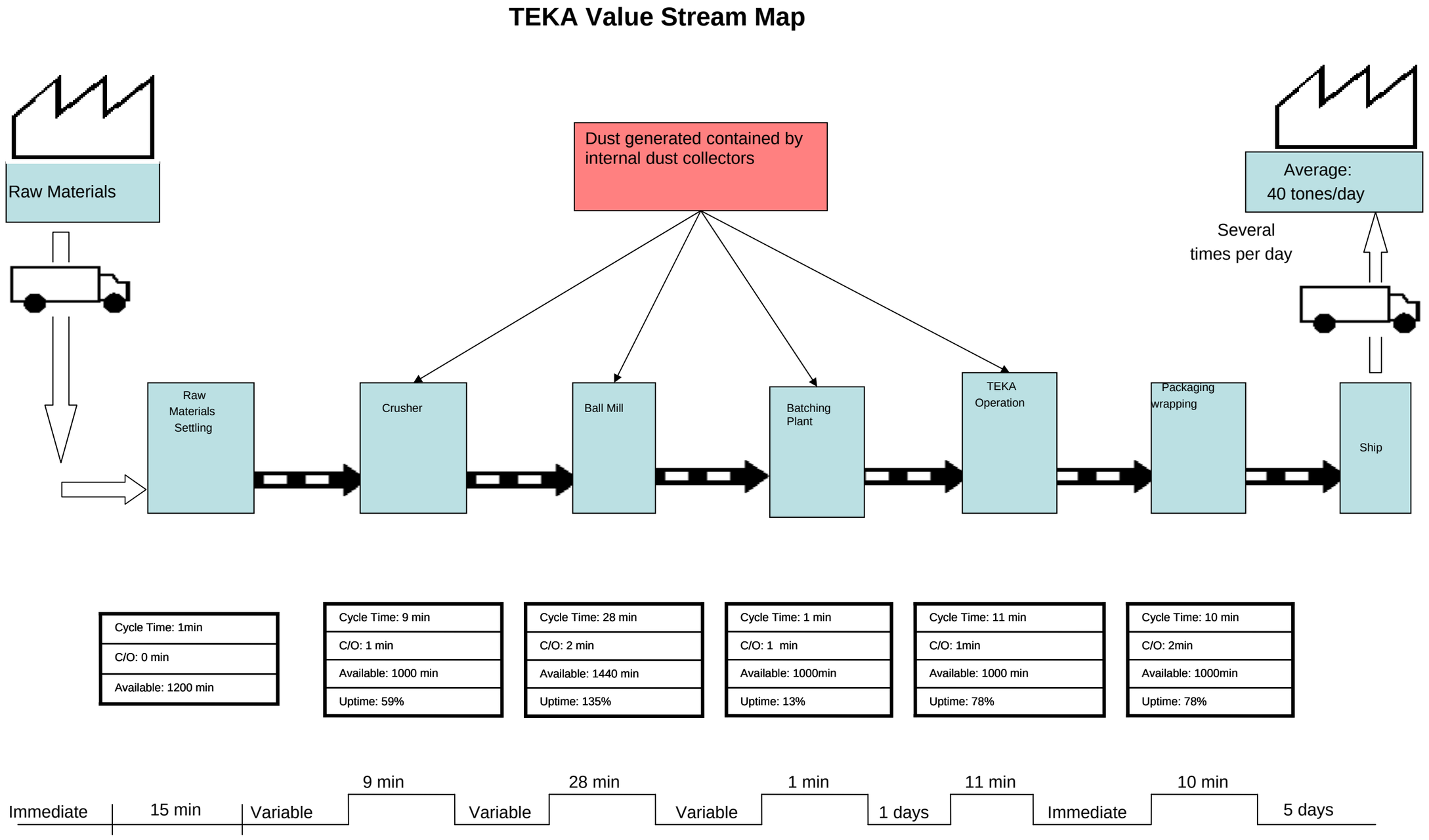

TEKA Value Stream Map
Raw Materials
Dust generated contained by internal dust collectors
Average:
40 tones/day
Several
times per day
Raw
Materials
Settling
Crusher
Ball Mill
Batching
Plant
TEKA
Operation
Packaging
wrapping
Ship
Cycle Time: 1min
C/O: 0 min
Available: 1200 min
Cycle Time: 9 min
C/O: 1 min
Available: 1000 min
Uptime: 59%
Cycle Time: 28 min
C/O: 2 min
Available: 1440 min
Uptime: 135%
Cycle Time: 1 min
C/O: 1 min
Available: 1000min
Uptime: 13%
Cycle Time: 11 min
C/O: 1min
Available: 1000 min
Uptime: 78%
Cycle Time: 10 min
C/O: 2min
Available: 1000min
Uptime: 78%
Immediate
15 min
Variable
9 min
Variable
28 min
Variable
1 min
1 days
11 min
Immediate
10 min
5 days

Figure 18

TAPHOLE CLAY Value Stream Map

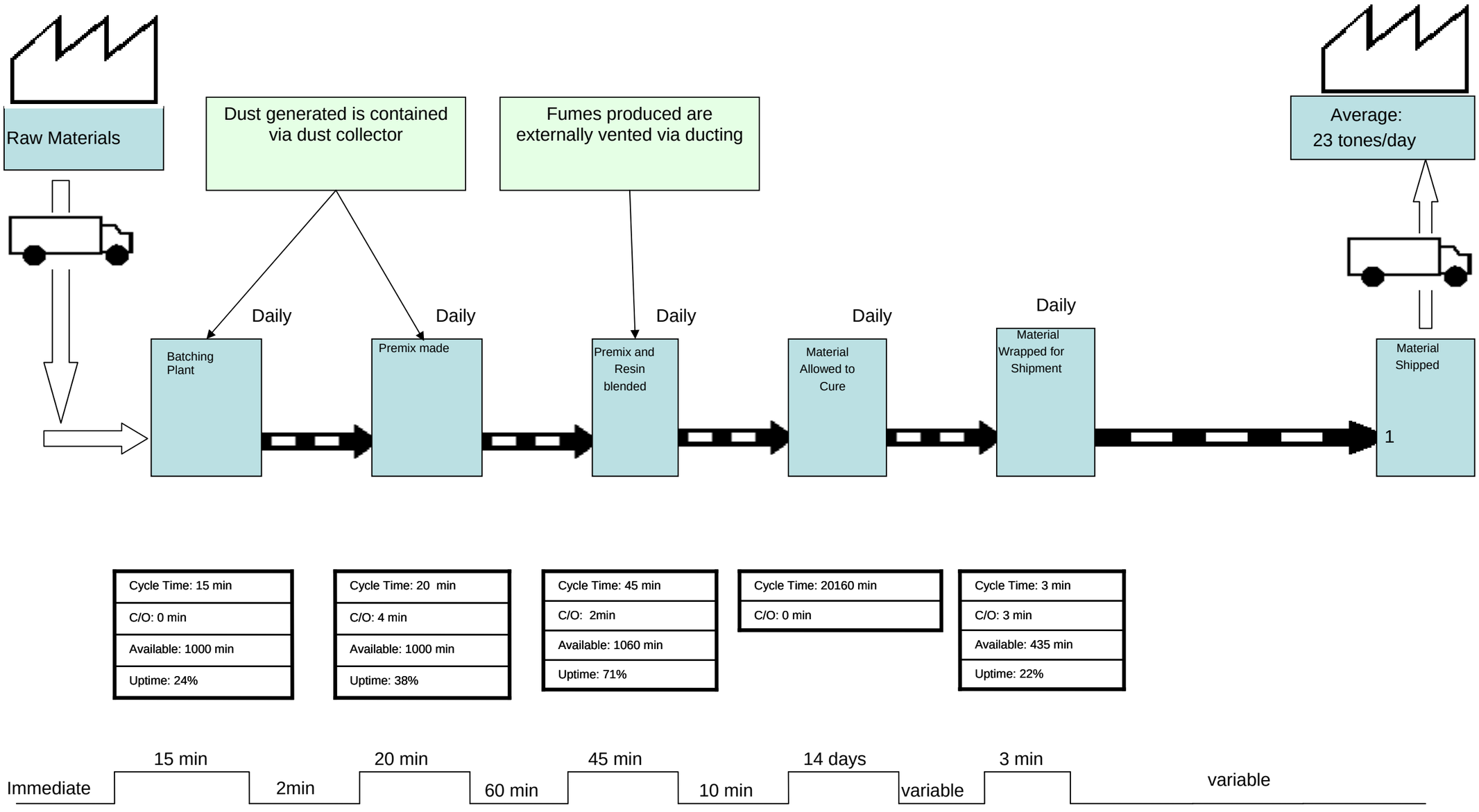
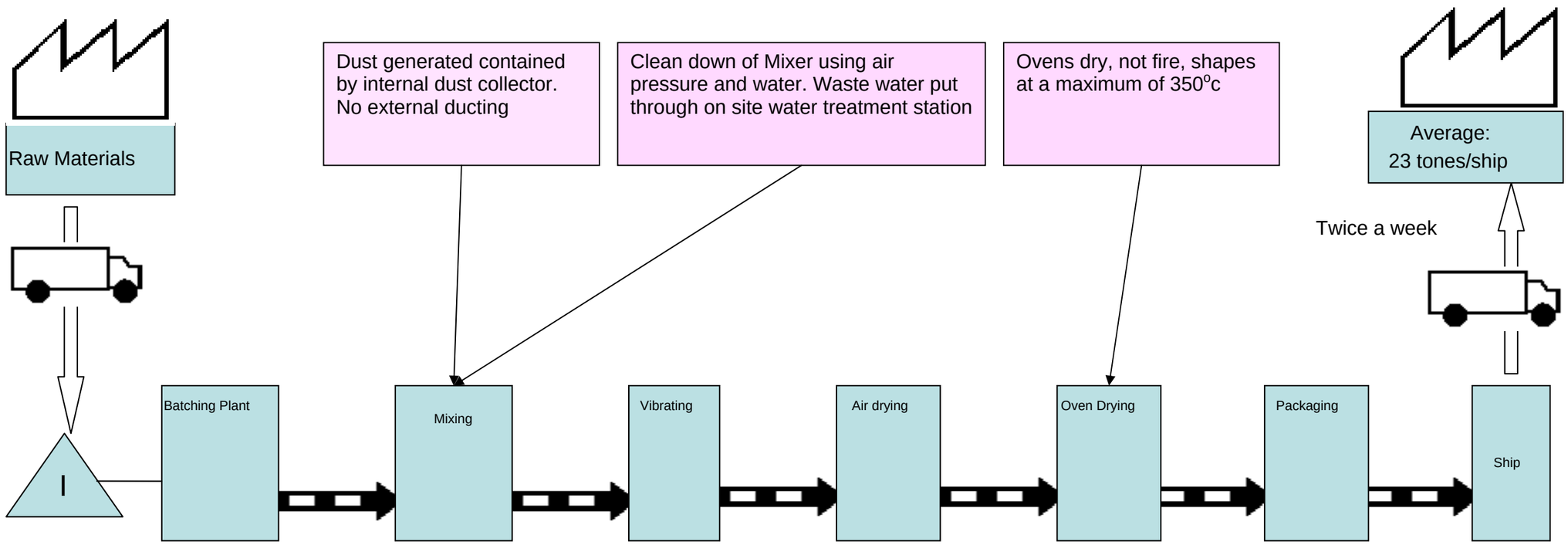


Figure 19

COMCAST Value Stream Map



See TEKA Value Stream Map

Batching Plant	Mixing	Vibrating	Air drying	Oven Drying	Packaging	Ship
Cycle Time: 5 min	Cycle Time: 8 min	Cycle Time: 24 h	Cycle Time: 4 days		Cycle Time: 15min	
C/O: 10 min	C/O: 5 min	C/O: 15min	C/O: 6min		C/O: 2 min	
Available: 576 min	Available: 576 min		Available: 1440 min		Available: 576 min	
Uptime: 52%	Uptime: 35%		Uptime:		Uptime: 59%	

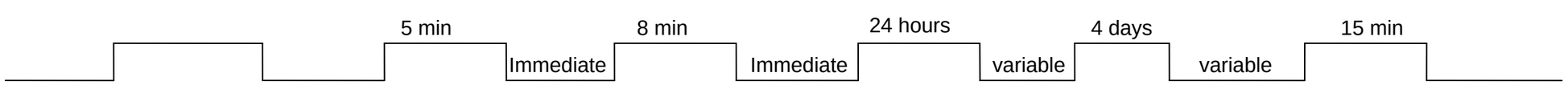
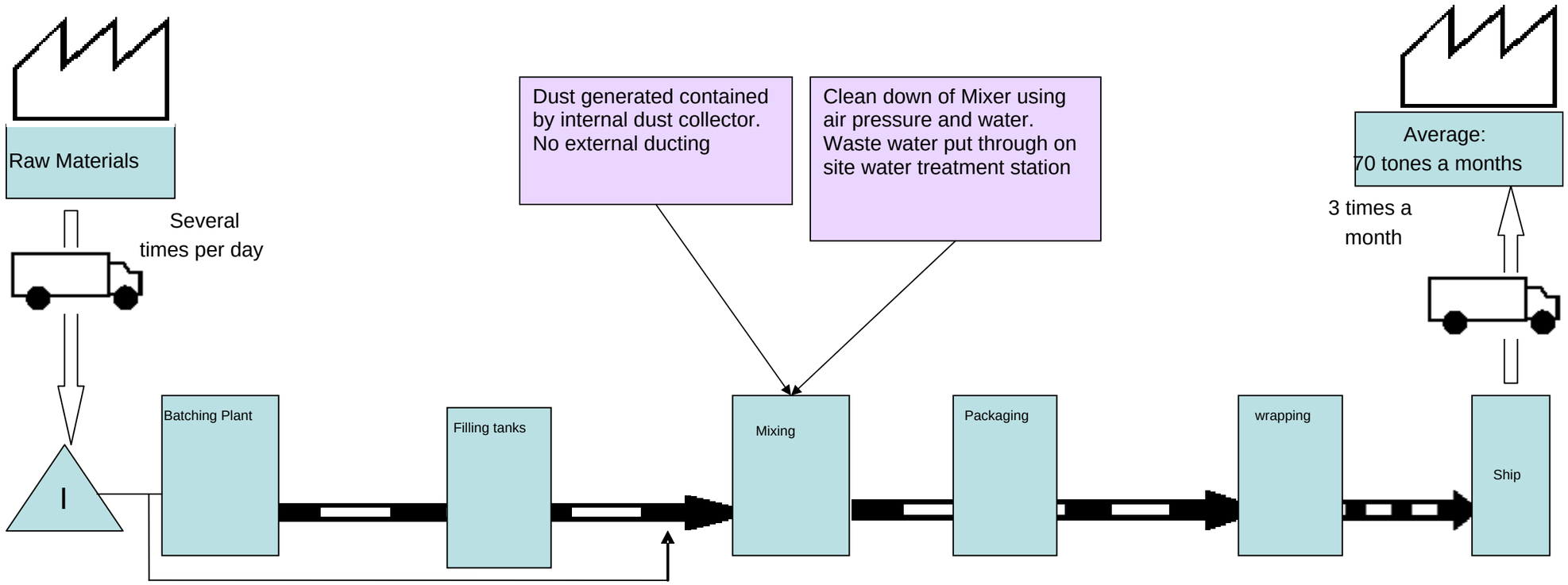


Figure 20

RAM Value Stream Map



See TEKA Value Stream Map

Cycle Time: 15 min
C/O: 5 min
Available: 1000min
Uptime: <1%

Cycle Time: 7 min
C/O: 6 min
Available: 1000min
Uptime: 26%

Cycle Time: 20 min
C/O: 6 min

Cycle Time: 10 min
C/O: 3 min
Available: 435 min
Uptime: 69%

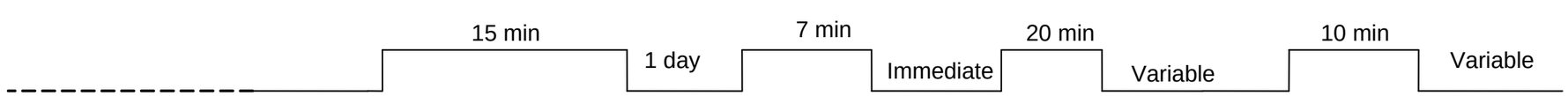


Figure 21

MORTAR Value Stream Map

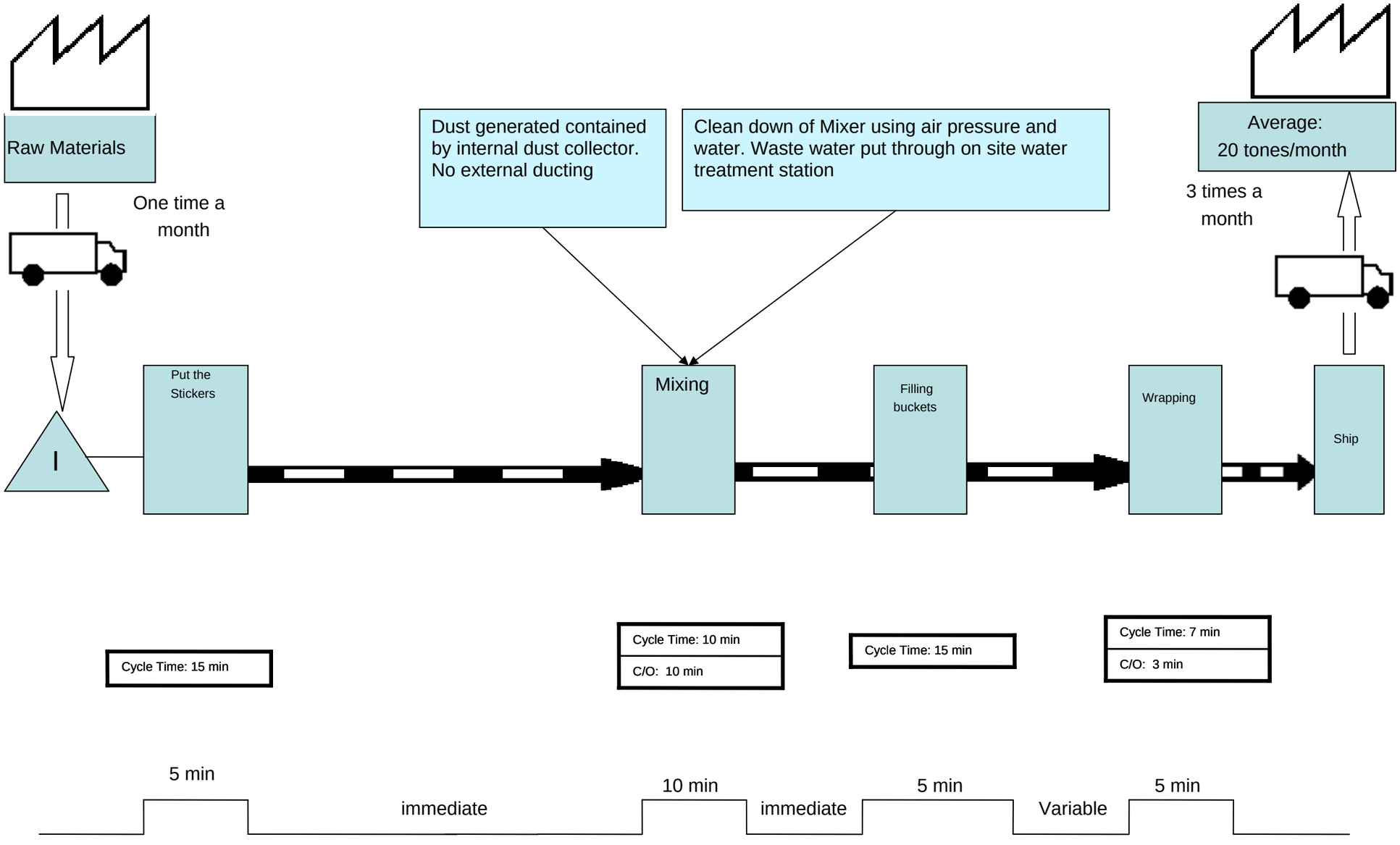
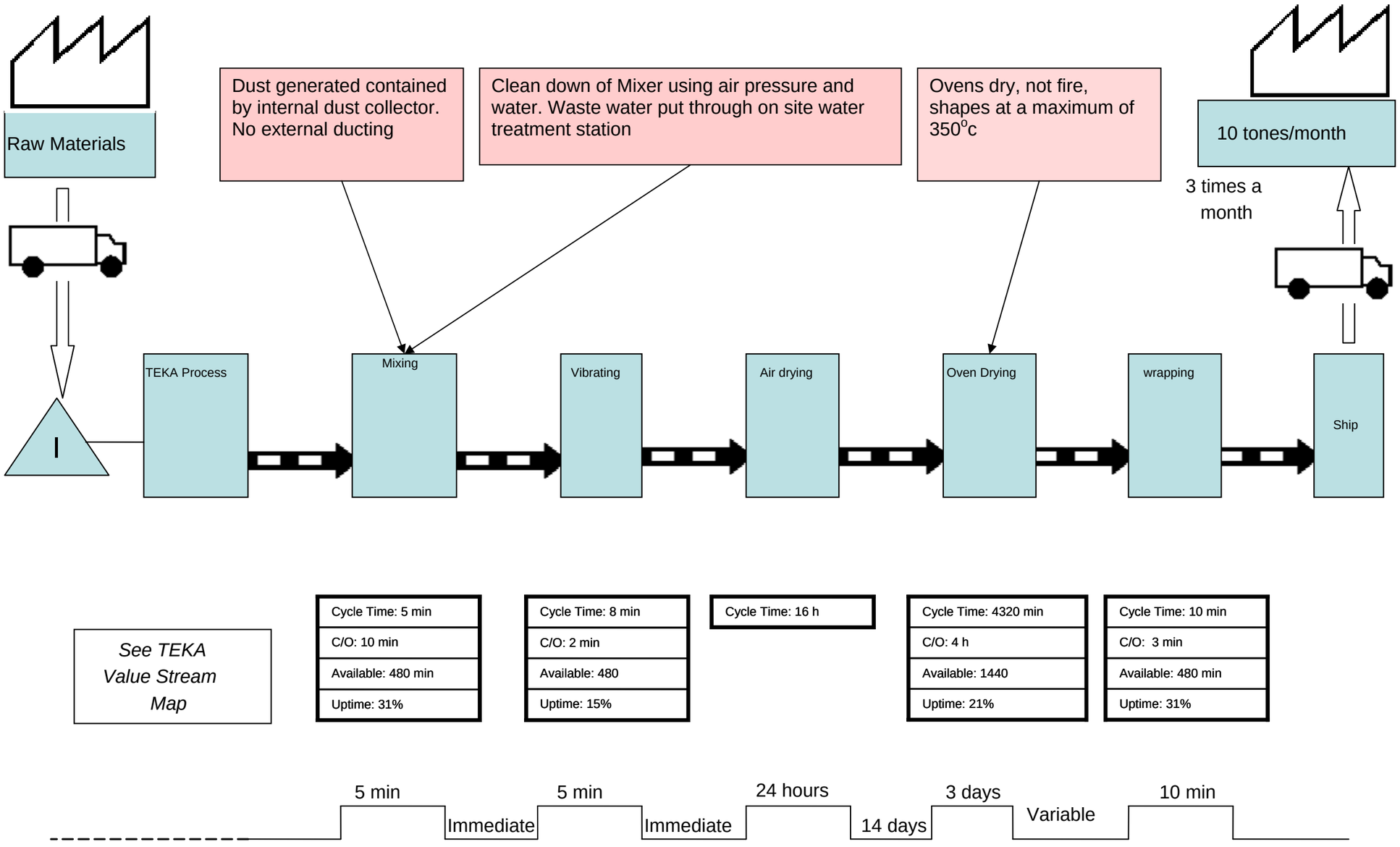


Figure 22

PRECAST Value Stream Map



3.3.4 Mitigation Measures

Vesuvius will employ a number of measures within the proposed refractory operation, designed to minimise adverse impacts. The following provides a summary of such measures, with further detail regarding the listed measures contained in the various consultant reports accompanying this application and in the later sections of this SEE.

Dust Collection: Each production unit is fitted with a dust collection system that captures the emissions from each process in bags, before returning them to the process.

Amenity Issues: Amenity issues have been properly addressed in preparation for the proposed relocation. Firstly, the new site will internalise the entire operation to abate the potential impacts, particularly of noise or particulate emissions. The style of construction will also aid in the containment of undesirable emissions.

Emissions: The exhaust flues servicing the ovens will be fitted with filters and/or scrubbers as required to manage any potential emissions. However, it is understood that the flue gas from the ovens (combustible natural gas) does not require filtering or scrubbing. Further mitigation measures will be implemented where required, such as dust collectors, adequate ventilation and odour control devices to ensure there are no adverse impacts from emissions from the proposed operations.

3.3.5 Vehicle Movements

The proposed development will utilise the existing five (5) vehicle access points, two from Darcy Road and three from Gloucester Blvd. This will allow larger vehicles adequate manoeuvrability to enable them to enter and leave the site in a forward direction. The traffic volume and movement information is detailed in the Traffic and Parking Impact Report prepared by ML Traffic Engineers (ref: A1012239N, dated: August 2010), which accompanies this application. Drawing DA07 (prepared by Anthony Joseph, ref: 24 600, dated: 22/11/09) features details of turning path movements on the site.

The proposed development includes 102 vehicular parking spaces, 4 motorbike parking spaces and 24 bicycle spaces.

3.3.6 Loading and Unloading

Loading and unloading is currently carried out by solid-tyred fork lift vehicles. The average time to load or unload a truck is 30 minutes, and up to one hour to load a container. A designated 40m x 8m loading and unloading area has been provided.

3.3.7 Servicing

Augmentation of existing water and electricity services will be required, subject to endorsement by relevant servicing authorities.

4 Council Consultation

A prelodgement meeting was held with Council on 21 July 2010 to discuss the proposed development, prior to the completion of the architectural plans.

The issues that were raised at the prelodgement meeting and the manner in which they have been addressed within this development application are outlined in the following table:

Table 1: Issues raised at the Pre-Lodgement Meeting (PL-2010/35)

	Issue	Comment
1.	***General*** *Councils records identify the site has the following constraints* • *Flood affected* • *Threatened Species* • *Contamination* • *Acid Sulfate Soils*	This DA is accompanied by a Flora and Fauna report (prepared by Kevin Mills & Associates), and a contamination and acid sulphate soils report (prepared by Heggies). With regard to the flood risk to the site, Council's Drainage department has confirmed that the flood risk to the site is minimal and that Council will not require a formal flood study for this site.
2.	***SEPP (Major Development) 2005*** *The requirements of the SEPP must be addressed in the application*	This proposal is not captured by SEPP (Major Projects) 2005. For further discussion see section 5 of this SEE.
3.	***SEPP No.55 (Contamination)*** *As the site is contaminated, the development application must address SEPP 55 and provide a contamination report.*	Refer Contamination report prepared by Heggies (ref: 660.10047.R1, dated: 10 December 2010). SEPP 55 is also addressed in section 6 of this SEE.
4.	***SEPP No.71 Coastal Protection*** *The application must address SEPP 71.*	Refer Section 6 of this SEE.
5.	***Wollongong Combined City Wide and City Centre Section 94A DCP*** *A detailed cost summary is to be provided.*	A detailed cost summary has been prepared by the developer and will be lodged with this application.
6.	***Wollongong Development Control Plan 2009*** ▪ *The following chapters must be addressed* – *A1- Introduction* – *B5- Industrial Development* – *E3- Car Parking Access Servicing Loading Facilities* – *E6- Landscaping* – *E7- Waste Management* – *E9 Hoardings and Cranes* – *E14- Stormwater Management* – *E15- Water Sensitive Urban Design* – *E17- Preservation and Management of trees and vegetation* – *E18- Threatened Species* – *E19- Earthworks* – *E20- Contamination Land Management* – *E22- Soil Erosion and Sediment Control*	Refer Section 8 of this SEE for the manner in which the proposed development meets the requirements of Wollongong DCP 2009.
	▪ *The SEE must provide operational details of proposed use, identify whether the proposed use is permissible, and provide details of the site clearing works already undertaken in accordance with DA- 2008/833 – removal of overgrown vegetation*	Operational details, development history and permissibility of the proposal are detailed in sections 3, 2.2 and 5 of this SEE respectively. The site has been cleared of vegetation in accordance with DA-2008/833.
	▪ *A comprehensive site plan and context analysis must be prepared*	A site plan and site analysis has been prepared by Anthony Joseph (Project No. 24 600, dated: 10/12/10, Sheet: DA01).
	▪ *The applicant is to confirm if consolidation of the lots is proposed*	The site owners will be prepared to consolidate the lots as a condition of approval.
	▪ *Easements and other restrictions shown on the deposited plan and 88B instruments are to*	The drainage easements (existing and proposed situation) are indicated in the drainage concept prepared by Sherson

	Issue	Comment
	investigated and addressed	Lautier Consultancy (ref: 10100, dated: 20/7/10). The drainage easement running west-east through the central portion of the site is to be extinguished, and a new easement shall be created along the northern boundary of the site to accommodate the proposed building. It is understood that discussions have been undertaken with the solicitor of the benefiting lots (as per the deposited plan). Documentation of these discussions will be provided to Council if requested.
	▪ *A schedule of external finishes is to be provided*	The elevation plans prepared by Anthony Joseph indicate the materials to be used in the proposal.
	▪ *The proposal when lodged will be notified in accordance with WDCP 2009*	Noted.
7	***Other Matters to addressed*** *Does the proposed development fall within the legislative requirement of designated or integrated development*	The proposed development does not fall within the provisions of Designated or Integrated development. Refer Section 6 of this SEE.
8	***Stormwater*** ▪ *A concept stormwater drainage plan is to be prepared by a suitably qualified civil engineer in accordance with Chapter E14.* ▪ *Dispersal of stormwater being piped to the street kerb is limited to 55 litres a second. Any higher capacity and a direct connection will be required*	Refer Drainage Concept Plan prepared by Sherson Lautier Consultancy (Drawing No: 10100-C2, dated: 20/07/10).
	▪ *The drainage easements that traverse the properties can't be built over. Alternate easement locations must be investigated.*	The drainage easements (existing and proposed situation) are indicated in the drainage concept prepared by Sherson Lautier Consultancy (ref: 10100, dated: 20/7/10). The drainage easement running west-east through the central portion of the site is to be extinguished, and a new easement shall be created along the northern boundary of the site to accommodate the proposed building. It is understood that discussions have been undertaken with the solicitor of the benefiting lots (as per the deposited plan). Documentation of these discussions will be provided to Council if requested.
	▪ *The development site is not located within the on site detention area and OSD is required for this location.*	A Drainage Concept Plan has been prepared by Sherson Lautier Consultancy. The project architect has advised that discussions have been undertaken with Council's Drainage Department with regard to the requirement of OSD. It has been concluded that no OSD is required.
9	***Environment*** ▪ *A Flora and Fauna Assessment is to be submitted with the development application*	A Flora and Fauna Assessment has been prepared by Kevin Mills & Assoc. (date: June 2008).
	▪ *As Green and Gold bellfrog has been reported on location, a plan of management must prepared to DECCW guidelines with the consultation of a frog ecologist.*	The Flora and Fauna Assessment recommends a site management plan be prepared which include a mechanism by which reports can be made to DECCW and DSEWPC.
	▪ *A Water Quality Plan is to be submitted. Stormwater from the site is to be treated before discharge. Performance Targets are detailed in chapter E15.*	A Water Quality Report has been prepared by Heggies Environmental Consultants (ref: 660.10047.00000-R1, date: 17/12/10).
	▪ *Waste Management Details are to be provided in line with chapter E7.*	A Waste Study Report has been prepared by Beca Pty Ltd (ref:2591464, dated: 10/12/10), and the manner in which the proposal meets the requirements of Chapter E7 is detailed in part 9 of this SEE.
	▪ *An Air Quality Impact Assessment Report shall be prepared by a suitably qualified air quality consultant*	An Air Quality Report has been prepared by Envirodyne (ref: 2010-100, dated: 15/12/10).
	▪ *Chemical Storage details are to be provided and detailed within the SEE*	Refer Preliminary Hazards Analysis Report prepared by Whamcorp Pty Ltd (dated: 7 December 2010)
10	***Traffic*** ▪ *Parking provisions must apply with chapter E3* ▪ *The applicant must provide internal access*	Refer Traffic report prepared by ML Traffic Engineers (ref: A1012239N, dated: August 2010) and the traffic discussions in section 9.2.6 of this report. Furthermore, the

	Issue	Comment
	dimensions on the site plan. All aspects must adhere to Australian standards. ▪ *The plan must identify which users will use each entry of the site* ▪ *Details of servicing of the site must be provided including waste collection and loading/unloading points. Swept path turning circle templates must be provides and be in accordance with the Australian Standard.* ▪ *Disabled parking provisions and dimensions are to comply with Australian standards. Disabled parking is to be located as close as possible to the main reception* ▪ *All access grades are to comply with the Australian Standard are to be detailed on the plans.* ▪ *The proposed use of the car parking is to be detailed in the SEE.*	manner in which the development meets the requirements of Chapter E3 of WDCP 2009 is discussed in section 8 of this SEE.
11	***Landscape*** ▪ *It is required to submit a Landscape concept plan that has been prepared by a landscape architect.*	A Landscape Concept Plan has been prepared by Myriam Rooney Designs (Ref: L-16-10; dated: Sept 2010).
	▪ *An accurate vegetation survey is to be submitted for the subject site and on effected adjoining development. All vegetation indicated in retention and removal is to be indicated clearly*	The site is cleared of vegetation and is predominantly asphalt. Therefore there are no significant trees to be removed, and a vegetation survey is unnecessary.
	▪ *A minimum of 10% of the site area is to be required to be landscaped. The majority of this should be provided within the property setback areas.*	The architect has confirmed that the total area of landscaping is 1,008.4m^2. This equates to 5.1% of the site. For discussion on this issue refer section 9.2.4 of this report.
	▪ *The provision of dense landscaping within the front property boundary to public road is required. Plant species must be selected in consideration of the exposed position*	The landscape plan incorporates dense planting, tree screen planting and landscaping to accommodate the movement corridor for the Green and Gold Bell Frog.
	▪ *Trees are to be planted at a rate of 1 tree per 10 car spaces. The trees must be coastal. A minimum 1.5m wide landscape strip is required to be provided after every 5th car space.*	A 1.5m wide landscape strip has been provided after every 5th car space, as required.
	▪ *Planter beds shall be a minimum of 1.5m wide and shall be contained by a 150mm concrete kerb.*	All planter beds have a minimum dimension of 1.5m.
	▪ *Pedestrian and vehicular movement is to be clearly separated by the use of design devices such as paving, bollards ect. Pedestrian paths are to be a minimum 1.5m wide.*	Pedestrian crossings and footpaths have been provided at appropriate locations throughout the site. These will be delineated through the use of different paving.
	▪ *Fencing forward of the front building line shall be palisade type, maximum of 1.8m high.*	The architect has advised that the fencing along the Darcy Road and Gloucester Blvd frontages is 1.8m high palisade type fencing.
	▪ *An external shaded seating area is to be provided*	An external shaded seating area has been provided within the site adjacent to Gloucester Boulevarde.
	▪ *Contrasting paving is required at driveway thresholds*	The landscape plan shows contrasting pavement used at the driveway thresholds.
	▪ *Details of lights must be provided on landscape plans.* ▪ *Provide taps or irrigation to ensure landscape works are all adequately watered.*	Tap details are provided on the landscape plan.

5 SEPP (Major Developments) 2005 – Amendment (Three Ports) 2009 (MD SEPP 2005)

5.1 Application of SEPP (Major Developments) 2005

The subject site has been identified as a State Significant Site under Part 20 of Schedule 3 of *SEPP (Major Developments) 2005 – Amendment (Three Ports) 2009* due to its location within the Port Kembla port precinct. The MD SEPP 2005 was introduced in August 2005 and aims to identify major developments, critical infrastructure developments and state significant sites to facilitate the use, development or conservation of those developments or sites so as to benefit the state.

The three ports of Newcastle Port, Port Botany and Port Kembla were added to the MD SEPP 2005 as an amendment in 2009. Clause 4 of Part 20 of Schedule 3 of MD SEPP 2005 provides that

> *"The only environmental planning instruments that apply, according to their terms, to land within the Three Ports Site are this Policy and all other State Environmental Planning Policies, other than State Environmental Planning Policy No 1—Development Standards".*

Therefore, under this clause Wollongong Local Environmental Plan 2009 does not apply to the site. Rather, the zoning and land use objectives and controls for the subject site have been regulated by the MD SEPP 2005.

Despite the applicability of the MD SEPP 2005 to the subject site, the scale of the proposed development is not captured by any other section of the MD SEPP 2005 and is therefore not defined as a 'major development' under Part 3A of the *Environmental Planning and Assessment Act 1979*. Therefore, Wollongong Council is still the consent authority for this development application.

5.2 Zone IN3 Heavy Industry

The land lies within the IN3 Heavy Industry Zone of MD SEPP 2005 (see figure 23).

Under the MD SEPP 2005, Clause 10 of Part 20 of Schedule 3 outlines the objectives and the permitted land uses for the IN3 Heavy Industry Zone, as detailed below:

Objectives:

- *To provide suitable areas for those industries that need to be separated from other land uses*
- *To encourage employment opportunities*
- *To minimise any adverse effect of heavy industries on other land uses*
- *To provide transport infrastructure and intermodal facilities*
- *To allow some diversity of activities that will not significantly detract from the operation of existing or proposed industries*

The proposal will meet the objectives because it is a use that is sympathetic to the existing surrounding industrial uses in the Port Kembla industrial precinct. Vesuvius is a significant local employer in the Illawarra, and the Port Kembla relocation will allow Vesuvius to continue operating in the Illawarra and will retain much needed local jobs. The proposal will have minimal environmental impact as detailed in the supporting documentation. The subject location is appropriate for the proposed use, and will benefit the region.

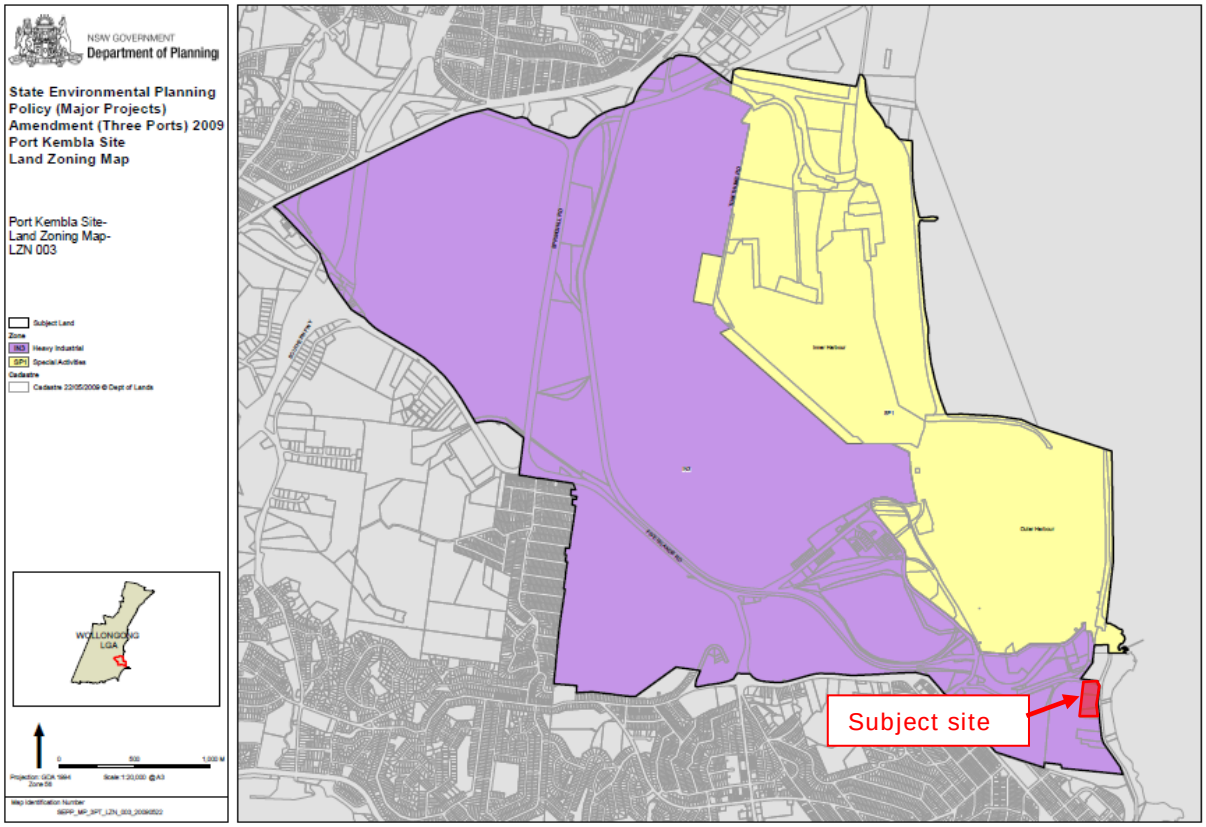


Figure 23: Zoning of subject site and surrounding land pursuant to MD SEPP 2005 – Amendment (Three Ports) 2009

Land Use Permissibility:

The land use table for the IN3 zone in MD SEPP 2005 is as follows:

Permitted without development consent:

Environmental protection works

Permitted with development consent:

Depots; food and drink premises; freight transport facilities; heavy industries; port facilities; roads; transport depots; warehouse or distribution centres; waste or resource management facilities

Except as otherwise provided by this Part, development is prohibited on land within Zone IN3 unless it is permitted by subclause (2) and (3)

The proposed development is defined as a heavy industry, which is defined in the *Standard Instrument – Principal Local Environmental Plan* as:

> ***heavy industry*** *means an industry that requires separation from other land uses because of the nature of the processes involved, or the materials used, stored or produced. It may consist of or include a hazardous or offensive industry or involve the use of a hazardous or offensive storage establishment.*

While the proposal is not considered to be a hazardous or offensive industry (as concluded in the supporting documentation accompanying this application), this application is seeking consent for 24 hour per day/7 day per week operation without restrictions on machinery operation, which results in the current application being captured by the definition of heavy industry. The extended hours of operation make this application appropriately located in the Port Kembla Industrial precinct as it is separated from sensitive uses by considerable distances and buffers, and is sympathetic to existing and allowable uses in the zone.

It is noted that the previous application to relocate the then Cookson Plibrico operations to Unanderra (through the Department of Planning MP 09_0045) was defined as light industry due to the proximity of residential development and the required limitation on the hours of operation and the operation of the crusher. Vesuvius are now seeking approval for extended hours of operation and the removal of a restriction on the machinery operation, which necessitates separation from sensitive landuses. Whilst the separation is readily provided by locating on this site, the development will be defined as a heavy industry due to the nature of its 24 hour operations.

The proposed use is permissible with development consent, as sought from Wollongong City Council.

5.3 Summary: MD SEPP 2005 – Amendment (Three Ports) 2009

In summary, the provisions of the MD SEPP 2005 as contained in Part 20 of Schedule 3 capture the site within the Port Kembla port precinct. Therefore, the site is subject to the requirements of Part 20 of Schedule 3 of the MD SEPP 2005, and therefore the provisions of Wollongong Local Environmental Plan 2009 do not apply to the site. Despite this, given the scale of the proposed development it is not captured as a Major Development under the MD SEPP 2005 or Part 3A of the EP&A Act, and hence Wollongong City Council is the consent authority.

Under Part 20 of Schedule 3 of the MD SEPP 2005 the proposed development is defined as a heavy industry, which is permitted with development consent. The proposal does not include any contravention of any development standards imposed by the MD SEPP 2005, or any other planning instrument, and therefore there are no other clauses that apply to the site within this document.

6 Other Relevant State Planning Framework

At the pre-lodgement meeting held on 21 July 2010 Council requested the Statement of Environmental Effects include a discussion on whether the proposed development falls within the legislative requirements of designated or integrated development. As such, a discussion on these matters is included below (section 7.1 & 7.2). It is concluded that the proposed development is not captured by the designated or integrated development provisions.

The following section also outlines the manner in which the proposal addresses other relevant state planning policies, such as SEPP 55 and SEPP 71, and local environmental planning instruments, including Wollongong Local Environmental Plan 2009.

6.1 Environmental Planning and Assessment Act 1979

6.1.1 Integrated development

Division 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act) outlines the procedure for defining, preparing and assessing integrated development applications. Integrated development refers to a development which, in addition to development consent, requires one or more additional environmental approvals before it can proceed.

Integrated development is development which, as well as development consent, requires on or more of the following types of approvals:

- A permit (aquaculture, dredging, removing marine vegetation, or to alter a waterway) under the *Fisheries Management Act 1994*
- Approval under the *Heritage Act 1977*
- Approval to erect improvements within a mine subsidence district
- A mining lease under the *Mining Act 1992*
- Consent to destroy aboriginal relics under s 90 of the *National Parks and Wildlife Act 1974*
- Production lease under the *Petroleum (Onshore) Act 1991*
- A pollution licence under the *Protection of the Environment Operations Act 1997*
- Consent to alter a public road under the *Roads Act 1993*
- Bush fire safety authorisation under the *Rural Fires Act 1997*
- An approval under the *Water Management Act 2000*.

The proposed development does not require a pollution licence under the *Protection of the Environment Operations Act 1997* (refer Air Quality Assessment prepared by Envirodyne accompanying this application), and the subject site is located more than 40m from the mean high water mark, and does not require water use approval, water management work approval or activity approval under Part 3 of Chapter 3 of the *Water Management Act 2000*.

The proposed development does not require any of the above permits or approvals, and is therefore not integrated development.

6.2 Environmental Planning and Assessment Regulation 2000

6.2.1 Designated Development

Clause 4 of the Environmental Planning and Assessment Regulation 2000 defines what constitutes 'designated development'.

'Designated development' refers to developments which are high-impact developments (for example likely to generate pollution), or which are located in or near an environmentally sensitive area (for example a wetland).

There are two ways a development can be categorized as *"designated development"*:

- The class of development can be listed in Schedule 3 of the *EPA Regulation 2000* as being designated development, or
- an LEP, REP or SEPP can declare certain types of development to be designated

The proposed development is classified as a ceramic industry. Schedule 3 of the EPA Regulations 2000 includes ceramic or glass industries:

(a) that have an intended production capacity of more than 150 tonnes per day or 30,000 tonnes per year, or
(b) that are located:
(i) within 40 metres of a natural waterbody or wetland, or
(ii) within 250 metres of a residential zone or dwelling not associated with the development.

The Vesuvius operations to be conducted at the Port Kembla factory include ceramics manufacturing, specialising in refractory operations. Currently, Vesuvius have a production of approximately 15,000 – 20,000 tonnes per year. The proposal is located beyond 40m from the mean high water mark of the ocean to the east (40m from the property boundary to the east is the vegetated dune area) and the site is in excess of 250m from the Port Kembla Public School to the south and from a residential zone and dwellings. Therefore the proposal is not captured by the designated development provisions.

6.3 State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

The object of SEPP 55 is to provide for a state-wide planning approach to the remediation of contaminated land. Clause 7 of SEPP 55 outlines the considerations for the consent authority in determining development applications on land that is potentially contaminated. Clause 7 of SEPP 55 requires the following:

(1) A consent authority must not consent to the carrying out of any development on land unless:
(a) it has considered whether the land is contaminated, and
(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and
(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.
(2) Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subclause (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.

A section 149 certificate obtained from Council indicates that because of the previous uses the land may be contaminated, and that the services of a suitably qualified consultant should be sought to ascertain the degree of contamination, if any, on the land and its likely effect on the land.

As such, SLR Heggies were commissioned to prepare a Preliminary Site Assessment (Report No: 660.10047.R1, dated: 10 December 2010), with an approach development on the basis of SEPP 55 Stage 1 Preliminary Investigation. Field and laboratory data obtained were interpreted to assess the presence and level of contaminants of concern. These results where then assessed against the criteria outlined in Section 9 of the report.

Based on the results of the Preliminary Site Investigation, Heggies considers that the site is suitable for the proposed development based on the relatively uniform nature of the various fill materials combined with the fact that the proposed development offers restricted exposure pathways for the various contaminates detected during sampling.

Heggies also concludes, given the limited nature of the investigation undertaken, there is a possibility of asbestos contamination within the site. It is therefore recommended that prior to construction an appropriate Environmental Management Plan (EMP) be developed for all intrusive on site works. This plan shall be developed to assure any unidentified contamination (if encountered) is appropriately identified and managed during the construction stage.

6.4 State Environmental Planning Policy No. 71 – Coastal Protection (SEPP 71)

State Environmental Planning Policy – 71 Coastal Protection (SEPP 1) aims to protect, manage and preserve natural, cultural, recreational and economic attributes of the NSW Coast and marine area. Part 1 lists the Local Government Areas to which the policy applies.

According to Section 2 Aims of the SEPP, The policy:

a) requires certain development applications to carry out development in sensitive coastal locations to be referred to the Director-General for comment, sensitive coastal location includes:
b) land within 100m above mean high water mark of the sea, a bay or an estuary,

The subject site is located within 100m of the mean high mark of Port Kembla and will therefore require referral to the Director-General for comment.

Clause 4 of Part 20 of Schedule 3 of SEPP (Major Developments) 2005 – Amendment (Three Ports) 2009 provides that

> *"The only environmental planning instruments that apply, according to their terms, to land within the Three Ports Site are this Policy and all other State Environmental Planning Policies, other than State Environmental Planning Policy No 1—Development Standards".*

Therefore SEPP 71 is applicable to the site.

Clause 8 of SEPP 71 prescribes matters, which must be taken into consideration by Council when assessing a development application. A discussion of the policy aims and matters for consideration follows:

Table 1: Compliance with SEPP 71 – Coastal Protection

Policy Provisions	Comment
(b) existing public access to and along the coastal foreshore for pedestrians or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved	There will be no alteration to the existing situation with regard to public access. Members of the public may obtain access to the foreshore from Gloucester Blvd, and this situation will not change or be impacted by the proposed development. The proposal is located on the opposite side of Gloucester Blvd to the beach, and has no relationship to existing public foreshore access.
(c) opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability,	Not relevant.
(d) the suitability of development given its type, location and design and its relationship with the surrounding area,	The proposed industrial building will be similar to that of surrounding development in the Port Kembla industrial precinct and along Gloucester Blvd. The proposal is generally compliant with Council's planning policies for this development type and location, and it is therefore considered that the proposal will be suitable in type, location and design in relation to the surrounding area. The supporting consultant reports that accompany this application confirm the suitability of the site for future development.
(f) the scenic qualities of the New South Wales coast, and means to protect and improve these qualities,	The proposed development does not seek to degrade the scenic quality of the foreshore. Landscaping and appropriate orientation will create a visually appealing for the site in accordance with the relevant development control plan.
(g) measures to conserve animals (within the meaning of the Threatened Species Conservation Act 1995) and plants (within the meaning of that Act), and their habitats,	Measures have been incorporated in the proposed development to provide habitat and transport corridors for the Green and Golden Bell Frog in accordance with the submitted Flora and Fauna Assessment.
(h) measures to conserve fish (within the meaning of Part 7A of the Fisheries Management Act 1994) and marine vegetation (within the meaning of that Part), and their habitats	Not relevant. The proposed development will not alter any habitat for fish or marine vegetation.
(i) existing wildlife corridors and the impact of development on these corridors,	Appropriate measures have been incorporated in accordance with the submitted Flora and Fauna Assessment to provide a landscaped corridor for the Green and Golden Bell Frog.
(j) the likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards,	The proposed development is separated from the foreshore and dune area by Gloucester Blvd, and is located on a heavy industry zoned site. The proposal is not anticipated to have and impacts on coastal processes or hazards, and is not expected to detrimentally impact the dunes.
(m) likely impacts of development on the water quality of coastal water bodies	It is not anticipated that the proposed development will have a detrimental impact on the water quality of coastal water bodies. The proposal is consistent with surrounding industrial developments, and a drainage concept plan has been prepared and designed to incorporate appropriate drainage solutions for this type of development and locality. Adverse impacts on water quality are not anticipated.

7 Regional and Local Planning Framework

7.1 Illawarra Regional Environmental Plan No. 1

The Environmental Planning and Assessment Amendment Act 2008 (the Amendment Act) was assented to on 25 June 2008. Under Division 2, Part 3 of the Act all Regional Environmental Plans, including Illawarra Regional Environmental Plan (IREP) No. 1, became a deemed State Environmental Planning Policy on 1 July 2009. However, the provisions of this Act ensure that the provisions of a REP that becomes a deemed SEPP does not prevail over any other environmental planning instrument, if it did not prevail over that instrument before 1 July 2009.

The subject site has been identified as a State Significant Site under Part 20 of Schedule 3 of *SEPP (Major Developments) 2005 – Amendment (Three Ports) 2009*. This SEPP, which was introduced in August 2005, sets the parameters for development of the land. It is intended that this SEPP prevails over other environmental planning instruments, including Illawarra Regional Environmental Plan No. 1 and Wollongong Local Environmental Plan 2009. Accordingly the provisions of IREP No. 1 are not considered to be relevant to the current application.

7.2 Draft Environmental Planning Instruments

There are no known draft exhibited Environmental Planning Instruments that require consideration.

7.3 Wollongong Local Environmental Plan 2009

Wollongong Local Environmental Plan 2009 does not apply to the subject site pursuant to Clause 4 of Part 20 of Schedule 3 of MD SEPP 2005. See section 6 above.

8 Wollongong Development Control Plan 2009

Wollongong Development Control Plan 2009 can into effect on the 3 March 2009. The manner in which the proposed development complies with the standards contained in the relevant chapters of this DCP is outlined in the following tables. The tables below addresses the primary controls and relevant standards contained within the DCP:

Chapter B5 Industrial Development			
WDCP Requirements		**Proposed**	**Compliance**
Part 3 Factory/Warehouse Distribution Centre Building Design Requirements			
3.1 Building Setbacks	*1. Min front building lines:* *Arterial road – 20m* *Subarterial road – 15m* *Collector road – 10m* *Local – 7.5m* *2. Min secondary setbacks for corner or dual frontage:* *Arterial road – 7.5m* *Subarterial road – 5m* *Collector road – 5m* *Local – 5m*	**Required:** Both Gloucester Boulevarde and Darcy Road are local roads (refer Traffic report prepared by ML Engineers (ref: A1012239N, dated: August 2010). Therefore, the required setback to Gloucester Boulevarde (Primary frontage) is 7.5m, and to Darcy Road (secondary frontage) is 5.0m. **Proposed:** Setback to Gloucester Boulevarde = 12.656m Setback to Darcy Road = 14.625m	Complies
Part 4 Building Design / Façade Treatment			
4.1.2 Development Controls	*1. High quality glass, decorative finished concrete or face brick construction fronting public roads. Alternatively, 50% of the total front façade of the building may be colorbond, with the remaining 50% of the façade being of a glass, decorative finished concrete or face brick construction.*	Colorbond wall materials may be used for up to 50% of the total front façade with the remainder being glass, concrete or brick. Currently, the majority of the building is colorbond, with precast concrete used for the lower portion. The portion of the building to be colorbond is more than 50%. However, this is considered to be appropriate in this industrial context. Further discussion on this variation is included in section 9.2.1 of this report.	Refer section 9.2.1 of this report
	2. Max reflectivity of glazing should not exceed 20%	The use of glass will be limited to the office areas due to the industrial use of the building.	
	3. A schedule of external building materials and finishes is required.	External materials are indicated on the elevation plans.	
	4. Large unrelieved expanses of walls to be broken up through articulation or modulation to provide visual interest	Expanses have been broken up through the use of the office space and roller doors. The proposed building will be consistent with other industrial buildings in the locality and is appropriate in this industrial context.	Complies
	6. Building to be oriented towards major road frontage with architectural features for both road frontages	The building is oriented towards Gloucester Blvd, which is the largest frontage and the main address. Along the Gloucester Blvd frontage the building features the office space which includes different building materials to the warehouse structure and a considerable number of windows. This design provides articulation and minimises the impact of the large warehouse walls. The Darcy Rd elevation features two large roller doors and a protruding crusher enclosure to break up the expanse of the building. Landscaping is proposed along both the northern and eastern elevations to improve the	Complies

Chapter B5 Industrial Development			
WDCP Requirements		**Proposed**	**Compliance**
		visual appearance of the development and to provide some screening to the building.	
	7. Buildings located on corner allotments must incorporate architectural corner features to ad visual interest to the building.	A significant amount of landscaping is proposed on the corner of Darcy Rd and Gloucester Blvd to add visual interest to the corner.	Complies
	9. Roller shutters, loading docks and other building openings shall be located to the side or rear of the building where possible.	The loading docks are located to the rear of the building, and wherever possible, the roller doors have been located to the side or rear of the building. However, there are portions of the warehouse that require direct roller door access and therefore complete avoidance of roller doors in the front of the building is impossible. However, along with the office location, the roller doors help to provide articulation to the building frontage.	Complies
	10. Ancillary offices should be wherever possible located at the front of the building.	The proposed office is located on the Gloucester Blvd frontage.	Complies
	11. The main entry should be easily identifiable from the road	The main entrance is located in the office portion of the building and is clearly identifiable through the use of a double door within an articulated portion of the building that appears different from the remainder of the office.	Complies
	13. Buildings should incorporate decorative roof elements to avoid bulky roof forms.	The roof has been angled to minimise bulk, and the frontages of the building have been articulated with ancillary offices and the crusher enclosure to minimise the bulk of the appearance.	Complies
	18. Natural lighting must be incorporated into the design for large-scale factory or warehouse distribution buildings	The roof of the proposed factory incorporates translucent sheeting at regular intervals to maximise natural lighting access.	Complies
5. Safety and Security			
5.2.1 Entrances and Natural Surveillance	*1. Front door to face the road;*	The main public entrance to the building is located in the reception of the office, which fronts Gloucester Blvd.	Complies
	2. Administration offices located at front of building	The offices are located along the main frontage facing Gloucester Blvd.	
	6. Buildings should comply with Chapter E2: CPTED of WDCP 2009	Refer Chapter E2 table below for CPTED compliance.	
6. Car Parking Requirements			
6.2 Development controls	*1. Carparking is to be provided in accordance with Chapter E3 of WDCP 2009.*	Refer Chapter E3 for carparking requirements and compliance.	Discussed further
	2. 100% of parking requirements to be provided on site	All parking is provided on the site, with the proposal including 102 vehicle spaces. Of these, 4 have been designated as disabled spaces, which equates to 4% of the total spaces.	Complies
	4. All developments shall provide a minimum of one disabled space that is clearly marked and located in proximity to the main entrance. Where there is 50 or more spaces, at least 2% of part thereof of these spaces shall be dedicated as disabled spaces.		
7. Loading Dock Facilities, Vehicular Access and Manoeuvring Requirements			

Chapter B5 Industrial Development			
WDCP Requirements		**Proposed**	**Compliance**
7.2 Development Controls	*1. Servicing and loading dock facilities shall be provided in accordance with Part E of this DCP;*	Refer Chapter E3 for details on the loading area requirements.	Discussed further
	2. Each factory/ unit shall be provided with a suitable loading bay designed to accommodate a large rigid truck. However, buildings with a GFA greater than 3,000m^2 shall provide loading dock facilities capable of accommodating both semi-trailers and large rigid trucks.	Drawing number DA07 of the architectural plans prepared by Anthony Joseph (ref: 24 600, dated: 22/11/09) show the manoeuvring paths of a semi-trailer truck.	Complies
	3. Each factory shall be provided with a loading area external to the factory/warehouse building;	The development plans include an external 40.8m x 8.0m loading area on the western side of the building.	Complies
	5. Loading docks shall not be visible from adjoining residential areas.	N/A – no immediately adjoining residential areas.	N/A
	6. Loading docks shall be positioned away from public road frontages wherever possible.	The proposed loading area is located on the western side of the building, to the rear of the building from Gloucester Blvd, and is setback further than the building from the Darcy Rd frontage. It is therefore positioned away from the public road frontages.	Complies
	7. All loading dock facilities must guarantee satisfactory on-site manoeuvring areas for trucks.	Drawing number DA07 of the architectural plans prepared by Anthony Joseph (ref: 24 600, dated: 10/12/10) show the manoeuvring paths of a semi-trailer truck.	Complies
	9. Truck turning movements shall not encroach onto any building, car parking space or landscaped area.	The space for manoeuvrability is located free of the building, parking spaces and landscaping.	Complies
	11. All internal access roads shall have a minimum width of 7 metres.	The internal access road surrounds the proposed building. Generally, the internal access exceeds 7.0m where it will be used for truck access. There is a portion where the access is only 6.0m, but this is adjacent to the parking spaces in the northeast portion of the site, where only smaller vehicles will access. This is considered adequate.	Complies
	12. As per the provisions of the BCA, the internal access road must have an unobstructed width of 6m with no part of the building being more than 18m away from the access road to allow for emergency access.	The internal access road is more than 6.0m wide, and runs around the perimeter of the proposed building. Therefore no portion of the building is more than 18m from the access road.	Complies
	13. All carparking areas and roadways shall be appropriately drained.	Refer drainage plan prepared by Sherson Lautier Consultancy (ref:10100, dated: 20/07/10)	Complies
8. Landscape Requirements			
8.2 Development controls	*1. Landscaping is required to be integrated with the design.*	Refer Landscape plan prepared by Miriam Rooney Designs (ref:L-16-10, date: September 2010)	Complies
	2. Min 10% of the site area is required to be landscaped	The architect has advised that the proposed landscaped area comprises 1,008.4m^2, which is 5.1% of the total site area. For discussion on this issue refer section 9.2.4 of this report.	Refer section 9.2.4 for comment
	4. Dense landscaping is required within	A planting corridor is provided along the Darcy Rd and Gloucester Blvd frontages, which	

Chapter B5 Industrial Development			
WDCP Requirements		**Proposed**	**Compliance**
	the front property boundary; *5. A 3m minimum deep dense landscaped area is required along the full length of the property frontage to a local or collector road;*	includes street tree planting. The landscape corridor varies from 4.0m to 2.0m along the frontage, and increases in width at the corner of both roads and adjacent to the access driveways to accommodate dense landscaping.	
	6. Trees to be planted at min rate of 1 tree per 10 car spaces. A min 1.5m landscape strip is required for every fifth space.	A 1.5m landscaping bed is provided after every 5th parking space.	Complies
	8. Carparking areas that adjoin public roads are to be visually screened by landscaping.	Landscaping is provided along both road frontages to screen the parking spaces.	Complies
	12. All carparking spaces shall contain concrete wheel stops.	Concrete wheel stops provided.	Complies
	15. Fencing forward of the front building alignment to be palisade type with a maximum height of 1.8m gates to be sliding.	1.8m high palisade type fencing is provided along the road frontages.	Complies
	16. An external shaded area for meal breaks to be provided *17. Contrast paving is required at driveway thresholds.*	An external shaded area has been provided adjacent to Gloucester Blvd. Contrast paving has been provided at driveway thresholds.	
8.2.1 Landscape Plan	*A landscape Plan is required for all applications*	Refer landscape concept plan prepared by Miriam Rooney Designs (ref: L-16-10, dated: Sept 2010).	Complies
8.2.2 Arborist Report	*Required in relation to any significant tree on the subject site*	There are no existing trees on site that require removal, therefore an Arborist report is not required.	N/A
9. Outdoor Storage Areas			
9.2 Development Controls	*Any storage for raw materials must be provided outside, positioned at the rear and side of buildings, adequately screened by 2m high masonry fence*	There is no outdoor storage of raw materials proposed	Complies
12. Fencing			
12.2 Development Controls	*1. All fencing in industrial developments shall be constructed of palisade or decorative open style metal fencing with a max 2.4m height;* *No sheet metal or chain wire fencing permitted*	The proposal includes palisade fencing along frontages, 1.8m in height.	Complies
19. Advertising Structures / Signs			
19.1	*Must be in accordance with Chapter C1 of this DCP*	Advertising on site will be subject to another development application at a further date.	N/A
20. Stormwater Drainage Requirements & Flood Study Requirements			
20.2 & 20.3	*Water sensitive urban design treatment measures should be designed in accordance with Part E of this DCP;* *All developments must provide for stormwater drainage and on-site detention in accordance with the requirements of Part E of this DCP;*	Refer the Drainage concept plan prepared by Sherson Lautier Consultancy (ref:10100, dated: 20/07/10) and the Water Quality Assessment prepared by Heggies (ref: 660.10047.00000-R1, dated: 17/12/10). A Drainage Concept Plan has been prepared by Sherson Lautier Consultancy. The project architect has advised that discussions have been undertaken with Council's Drainage Department	Complies

Chapter B5 Industrial Development			
WDCP Requirements		**Proposed**	**Compliance**
		with regard to the requirement of OSD. It has been concluded that no OSD is required. A small portion of the site has been captured within an uncategorised flood risk. However, Council has provided advice a flood impact assessment is not required. Refer Section 9.3.3 of this report.	
	If flood affected, must comply with Floodplain Management Chapter, Part E of this DCP		
21. Riparian Corridor Management			
21.1	*If 40m within watercourse of on waterfront land, must comply with Chapter E23 Riparian Corridor Management in this DCP*	The site is not within 40m of a watercourse	N/A
22 Utility Infrastructure Services			
22.1	*Satisfactory arrangements are required for:* *(a) The provision of reticulated water and sewerage;* *(b) The provision of underground electricity; and* *(c) The provision of underground telecommunications*	Servicing of the subject site will be addressed in conjunction with service agencies as a condition of consent.	Refer comment.

Chapter C8 Extractive Industry			
Chapter C8 Extractive Industry does not apply to the proposal as the proposed operations do not constitute the *"winning or removal of extractive materials by methods such as excavating, dredging, tunnelling or quarrying, including the storing, stockpiling or processing or extractive materials by methods such as recycling, washing, crushing, sawing or separating"*. However, a pre-lodgement meeting held with Wollongong Council on 21 July 2010 indicated an Air Quality Assessment Report must be prepared, referring to Chapter C8 Extractive Industries, Clause 8 Air Quality Issues. Therefore, while Chapter C8 of the DCP does not apply, an Air Quality Assessment report is required due to the nature of the proposed operations. Due to there being no strict mention of Air Quality Assessments within Chapter B5 Industrial Development, Clause 8 of Chapter C8 Extractive Industries has been addressed.			
WDCP Requirements		**Proposed**	**Compliance**
Section 8: Air Quality Issues			
Requirements	The following issues are to be addressed: • *All stockpiles of materials should be effectively stabilised and maintained so as to prevent any dust nuisance* • *The preparation of an air quality impact assessment report will be required for extraction industry purposes* • *The air quality impact assessment report shall address a range of air quality matters including:* - *Existing meteorological conditions of the site* - *Identification of likely fixed and mobile sources of air emissions from the site* - *Identification of baseline data on the ambient quality of the air* - *Projected dust emissions and deposition rates* - *Meteorological conditions under which adjoining dwellings and*	An Air Quality Assessment has been prepared by Envirodyne Group Pty Ltd (ref: 2010-100, dated: 15/12/10). The Air Quality Assessment addresses all of the requirements of clause 8, and concludes that the operations are classified as a 'non-scheduled' activity under the POEO Act, and the relocated plant will not increase the level of pollutants as tabled in DECCW Air Emissions Inventories for the NSW Greater Metropolitan Region.	Complies

	other sensitive land uses are likely to be affected - *Compliance with NSW DECC criteria for dust emissions and deposition levels* - *Proposed mitigation measures.* - *Proposed on-going air emission monitoring program*		

Chapter D11 Port Kembla (Gloucester Boulevarde)
Part D11 of WDCP 2009 relates to Lot 1 DP 852309 and Lot 51 DP 1002696. The subject site is not identified as any of these allotments, and therefore Part D11 does not apply to this application.

Chapter E1 Access for People with a Disability			
WDCP Requirements		**Proposed**	**Compliance**
Section 3: Design Requirements			
Design Requirements	*Access and facilities for people with a disability must be provided in accordance with the requirements of the DDA, BCA and the relevant Australian Standards stated in Section 2.4.* *The BCA and AS1428.1 require a continuous accessible path of travel: From accessible parking spaces and passenger drop off points; and connecting accessible entrances of buildings to all accessible spaces; from the allotment boundary at the main point of entry; and through the principle public entrance*	The requirements of chapter E1 have been addressed in the Access Review prepared by MGAC (dated: 16/12/10).	Complies

Chapter E2 CPTED			
WDCP Requirements		**Proposed**	**Compliance**
Part 3 Factory/Warehouse Distribution Centre Building Design Requirements			
5.1 Lighting	*1) c) Light heavily used spaces such as car parks etc.* *e) Consideration to light pollution and energy use.* *3)b) Place lighting to take into account vegetation , current and future form to avoid light blocking.* *f) Avoid glare by not placing any unshielded lighting at eye level.*	Details of lighting will accompany the Construction Certificate. Consent can be conditioned to prevent glare from lighting.	Noted.
5.2 Natural Surveillance and Sightlines	*1) a) Avoid blind, sharp corners especially on pathways, stairs, corridors.* *b) Avoid sudden change of grade on pathways.* *f) Avoid medium height vegetation concentrated top to bottom foliage. Plants 1 – 1.2m high are good for surveillance.* *4) a) Ensure windows of activity rooms overlook pedestrian areas.*	No blind, sharp corners are proposed within the design. The subject site is relatively level and there are no sudden change of grade. The landscape plan includes screen planting along the road frontages. Shrub planting is proposed at regular intervals within the carpark. These are not anticipated to exceed 1.2m in height to allow surveillance. The office windows are oriented towards the vehicle parking area adjacent to Gloucester Blvd. The development is not defined as a mixed use	Complies

Chapter E2 CPTED			
WDCP Requirements		**Proposed**	**Compliance**
	5) Encourage mix use developments to facilitate day and night use of public spaces.	activity. The proposal includes both office and factory uses, and the factory workers will operate during shifts. This will include night and day use of the proposal.	
5.3 Signage	*3) All signage must be in compliance with AS1742.10 (1998) Manual of Uniform Traffic control devices – Pedestrian Control and Protection and AS1428.1 (1998) Design for access and Mobility – General Requirements for Access.*	Advertising on site will be subject to another development application at a further date.	N/A
5.4 Building design	*1)a) Ensure entrances to buildings are clearly defined, secure, well lit and face the street.* *f) Locate lifts within secure entrances and incorporate graffiti and vandal resistant measures.* *4)a) Locate delivery hatches, loading and storage areas where they do not assist in gaining entry to the building and are well lit and can be locked after hours.* *8)d) Avoid large expanses of car parks.* *g) Locate disabled parking in highly visible and accessible areas* *h) Minimize number of entry and exit points.*	The main entrance to the building (reception in the ground floor of the office building) is clearly defined and highly accessible from the carpark. No lifts are proposed. The designated loading dock is located to the rear of the building, away from the main reception entrance. The loading dock is provided with separate roller doors that can be locked when not in use. Carparking has been provided to meet Council's requirements and is open to prevent loitering. The disabled parking is located in an accessible location in proximity to the main access at the front of the building. One main entry is provided to the office portion of the building.	Complies
5.5 Land use mix	*Provide a variety of landuses on the site.*	Not appropriate in an industrial zone.	Not applicable.
5.6 Land-scaping	*1)a) Ensure planting on footpaths does not exceed 1m in height.* *2)a) grade planting with higher planting next to walls.* *3)a) Avoid taller plants next to doorways, entrances, windows.*	Shrub planting is proposed at regular intervals within the carpark as required by Council's policies. This will provide visual interest to the development and still allow for viewing of the building and carpark for security purposes. There is no landscaping proposed immediately adjacent to the doorways, entrances or windows of the building.	Complies
5.7 Entrapment	*Avoid creating entrapment places adjacent to main pedestrian routes.*	The lines of the building do not provide for entrapment opportunities.	Complies

Chapter E3 Car Parking, Access, Servicing/Loading Facilities and Traffic Management			
WDCP Requirements		**Proposed**	**Compliance**
6. Traffic Impact Assessment and Public Transport Studies			
6.1 Car Parking and Traffic Impact Assessment Study	*1. A car parking / traffic impact assessment study shall be submitted in support of the following development applications:* *a) all development requiring referral to the NSW Roads and Traffic Authority*	A traffic / parking report has been prepared by ML Engineers (ref: A1012239N, dated: August 2010) and accompanies this application. Referral is required for industrial developments of greater than 5,000m^2 where access is provided to an arterial road or 20,000m^2 for access to any other road. Therefore referral to the RTA is not required.	Complies

Chapter E3 Car Parking, Access, Servicing/Loading Facilities and Traffic Management			
WDCP Requirements		**Proposed**	**Compliance**
	b) other development applications where in the opinion of Council may cause a potential significant adverse traffic generation of traffic management impact upon the surrounding road network		
7. Parking Demand and Servicing Requirements			
7.1 Car Parking, Motor Cycle, Bicycle Requirements and Delivery / Servicing Vehicle Requirements	*1. Car parking, motorcycle and bicycle requirements for specific land uses are contained in Schedule 1 to this chapter of the DCP.* *The proposal includes industry and ancillary office, therefore the requirements for both uses have been considered.* ***SCHEDULE 1:*** ***CARPARKING:*** *Industry:* *Car parking: 1 space per 150m² of GFA for buildings >10,000m² of GFA where the cacility is purpose built for a particular building and where it can be demonstrated that employee parking is satisfactorily catered for.* *Offices:* *1 space per 40m² of GFA* ***BICYCLE:*** *Industry:* *1 space per 200m² of GFA.* *Offices:* *1 space per 200m² GFA for staff plus 1 space per 750m² GFA for visitors.* ***MOTORCYCLE:*** *Industry:* *1 space per 25 car parking spaces* *Offices:* *1 space per 25 parking spaces.* ***SERVICE TRUCK REQUIREMENT:*** *Industry:* *1 large rigid vehicle – articulated vehicle (semi trailer).* *Offices:* *Large Rigid Vehicle*	The proposed development includes a factory (8,026m²) and office (2,024m²) component, which generates the following parking requirements: CARPARKING: Industry: 8,026m² / 150 = 53.5 spaces Offices: 2,024m² / 40 = 50.6 spaces Total car spaces required = 104 spaces. Proposed = 102 spaces. **Variation sought for 3.4 spaces – refer Traffic Study**. BICYCLE: Industry: 8,026m² / 200 = 40 spaces Offices: 2,024m² / 200 = 10 spaces (staff) 2,024m² / 750 = 2.6 spaces (visitors) Total bicycle spaces required = 52.6 Proposed = 24 spaces. MOTORCYCLE: For both uses: 100 spaces / 25 = 4 spaces Proposed: 4 spaces SERVICE TRUCK REQUIREMENT: Provision has been made on site for loading/unloading and manoeuvring for a semi-trailer and large rigid truck.	Variation sought for 2 car spaces. Discussed further in section 9.2.6 of this report.
7.2 Disabled Access and Parking	*Disabled access and parking facilities are to be provided in accordance with AS 2890.1, Building Code of Australia and the Commonwealth Disability Discrimination Act 1992.*	The 4 proposed disabled spaces have dimensions of 3.5x5.5m, which is compliant with AS 2890.1.	Complies

Chapter E3 Car Parking, Access, Servicing/Loading Facilities and Traffic Management			
WDCP Requirements		**Proposed**	**Compliance**
7.3 Bicycle Parking / Storage Facilities and Shower and Change Facilities	*Bicycle parking is to be designed and constructed in accordance with AS 2890.3, Parking Facilities Part 3: Bicycle Parking Facilities OR Austroads: "Guide to Traffic Engineering Practice, Part 14: Bicycles (1995)".* *Schedule 1 – Car parking, Bicycle, Motorcycle and Delivery Vehicle Parking Requirements:* *Office & Industry:* *Bicycle: 1 bicycle space per 200 sqm of GFA*	Schedule 1 requires 1 space per 200m^2 GFA and 1 space per 750m^2 GFA for the office: <u>Industry:</u> 8,026m^2 / 200 = 40 spaces <u>Offices:</u> 2,024m^2 / 200 = 10 spaces (staff) 2,024m^2 / 750 = 2.6 spaces (visitors) Total bicycle spaces required = 52.6 Proposed = 24 spaces.	Variation sought.
7.5 Car Parking Layout and Design	*The parking dimensions, internal circulation, aisle widths, kerb splay corners, head clearance heights, ramp widths and grades of the car parking areas are to be in conformity with the current relevant Australian Standard AS2890.1 (2004).* *The layout of all car parking areas shall be in strictly accordance with Australian Standard AS 2890 and the following additional requirements:* *Parking areas must be designed so any vehicle which uses the area will be able to enter and leave the site in a forward direction without the need to make more than a three point turn.*	Layout and design of car park provided on architectural plans prepared by Anthony Joseph (ref: 24 600, dated: 10/12/10) Refer submitted architectural plans. All vehicles using the site are able to enter and leave the site in a forward direction as shown on plans D07 prepared by Anthony Joseph.	Complies Refer submitted plans. Complies
7.12 Car Parking & Access Construction Requirements	*Constructed of hard standing, all weather material with appropriate seal and drainage*	Sealed manoeuvring and parking areas provided. Appropriate materials will be utilised.	Complies
7.13 Directional Signage for Car Parking Areas	*All car parking areas shall be provided with appropriate entry and exit advisory signage to direct vehicles into / from the car park and to minimise potential vehicular conflicts. The details of the proposed entry / exit signage shall be reflected on the architectural plans submitted with the Development Application*	This matter can be conditioned for inclusion on the construction certificate documentation,	Refer comment
8. Vehicular Access			
General	*Access to off-street parking areas must comply with Council's Standard Vehicle Entrance Designs, with any works within the footpath and road reserve subject to a section 138 Roads Act 1993 approval.* *Sight distances to be used for assessment and determination of a suitable driveway location shall be obtained from AUSTROADS, "Guide to Traffic Engineering Practice, Part 5: Intersections at Grade".* *Driveway grades, vehicular ramp width/grades and passing bays must be in accordance with AS 2890.1.* *Direct access to arterial road or sub*	There is no direct access to an arterial or sub arterial road. Site access will be provided from both Darcy Rd and Gloucester Blvd. The access locations exist, and will be upgraded to accommodate the proposed development where required.	Complies

Chapter E3 Car Parking, Access, Servicing/Loading Facilities and Traffic Management			
WDCP Requirements		**Proposed**	**Compliance**
	arterial road will generally not be permitted *Where dual frontage to a classified road and a secondary road, all driveway crossings are to be provided via the secondary road*		
9. Loading/Unloading facilities and service vehicle manoeuvring			
9.1 General	*Table 1: Minimum Loading / Unloading Facilities for Specific Land Uses* *Factory:* *1 designated loading / unloading area per 800m² up to 5,000m², plus 1 additional loading/unloading area per 1,000m² thereafter.* ' *Commercial Office/business development:* *1 loading dock per 4,000m² up to 20,000m²*	The proposed 8,026m² factory requires 6.25 loading docks for up to 5,000m², and 3.0 loading docks for the remaining 3,031m². The office space requires 1 separate loading dock. Therefore, under this part of Chapter E3, a total of 10 loading docks (9 for factory, 1 for office) are required. Provided: 1 loading dock to accommodate a B-Double and 19.5m long articulated truck. The requirements of this clause are contradictory to the requirements of Schedule 1 of Chapter E3, which the proposal complies with. It is argued that the proposed loading dock is sufficient to service the proposed development, as confirmed in the Traffic Report prepared by ML Engineers.	Refer comment.
9.2 Loading / Unloading and Manoeuvring Area Require-ments	*All large and small trucks must be able to manoeuvre on site and enter and exit in a forward direction.*	All large and small trucks are able to manoeuvre and leave the site in a forward direction as shown on Plan D07 prepared by Anthony Joseph, and as outlined in the Traffic Report prepared by ML Engineers.	Complies
10. Pedestrian Access			
	Developments are to be designed to support access for pedestrians and disabled persons to and within the site.	The development has been designed to support disabled access through the central location of disabled parking and disabled access.	Complies
11. Safety and Security for Car Parking Areas			
	White finish to improve visibility; *Exit fire stairs to be wide and open for visual surveillance;* *Prevent blind corners;* *Visible to approaching vehicles*	Refer CPTED Assessment in Chapter E2 section below.	Complies
12. Landscaping			
	The provision of landscaping to car parking areas is designed to provide visual relief to the development site and to help screen the car parking area from adjoining properties and public road frontages. *Landscaping is required to be an integral part of all car parking areas and internal roads within a development.* *Landscaping should be used throughout the car parking areas at*	The Landscape plan prepared by Myriam Rooney Designs (ref: L-16-10, dated: Sept 2010) shows landscaping along both road frontages and at the corner of both roads. The landscaping plan also shows planting within the carpark area. Landscaping is provided at several intervals within and around the perimeter of the car	Complies Complies Complies

Chapter E3 Car Parking, Access, Servicing/Loading Facilities and Traffic Management			
WDCP Requirements		**Proposed**	**Compliance**
	regular intervals and around the perimeter of the car parking areas.	parking area.	
	A minimum 3 metre deep front landscaped setback is required for car parking areas fronting a public road (excluding industrial developments where a 5 metre – 10 metre landscaped buffer screen may be required, depending upon the scale and height of the development).	A 2m-4m landscape buffer is provided along the road frontages. An additional 10 large trees will be planted in the footpath outside the site, as shown on the landscape plans.	Minor Variation. Refer section 9.2.4.
	A minimum 2 metre wide side landscaped buffer screen is required for all car parking areas.	Landscaping has been provided at regular intervals within the carparking area and along both road frontages. Landscaped buffers have not been provided along the side boundaries. However, the provided landscaping is considered appropriate for this heavy industrial context. Council's variation for the side boundary landscaping is sought. Refer comment in section 9.2.4 for further discussion.	Refer comment section 9.2.4.

Chapter E6 Landscaping			
WDCP Requirements		**Proposed**	**Compliance**
Section 4: Minimum Requirements to accompany a Development Application			
	1. Industrial developments require the provision of a 'Category 3' Landscape Concept Plan, which means it has to be prepared by a Landscape Architect eligible for corporate membership of the Institute of Landscape Architects.	A landscape concept plan has been prepared by Myriam Rooney Designs and accompanies this application.	Complies
4.2 Landscape Concept Plan	*The submitted Landscape Concept Plan shall comply with the requirements of the Table in section 4.2 of this chapter.*	Refer landscape plan.	Complies

Chapter E7 Waste Management			
WDCP Requirements		**Proposed**	**Compliance**
Section 4: Submission / Application Requirements			
4.1 General	1*. All applications for development must be accompanied by an SEE, which is to include a Site Waste Minimisation and Management Plan (SWMMP) as the central document of compliance with this chapter.* *Waste management facilities shall be clearly illustrated on the architectural plans accompanying the development application.*	A Waste Study report has been prepared by Beca Pty Ltd (ref: 2591464, dated: 10/12/10) and accompanies this application. The Waste report addresses the generation and disposal of 3 waste streams: General Solid Waste (non-putrescible) from processing, General solid waste from the office and liquid waste.	Complies
Part 5: Planning Requirements / Assessment Criteria			
5.8 Industrial Development	*A complete Site Waste Minimisation and Management Plan shall accompany the development application.* *The plans submitted to show:*	The development plans prepared by Anthony Joseph include waste storage areas adjacent to the western property boundary. This location will ensure minimal adverse impacts on the streetscape. The surrounding uses are heavy industrial uses that will not be adversely	Complies

Chapter E7 Waste Management			
WDCP Requirements		**Proposed**	**Compliance**
	Location of waste storage areas; *On site path of travel and manoeuvring of waste collection trucks* *The industrial development must include a designated general waste and recycling storage area in accordance with Appendix 6:* *2) Storage areas must be integrated with the design of the development;* *Must be located and designed in a manner that reduces adverse impacts upon neighbouring properties and the streetscape.* *3) Storage area must be of sufficient sized to accommodated separate general waste bins and recycling bins* *4) The development must be designed to allow adequate access by collection vehicles used by the nominated waste contractor. Wherever possible, the site must be configured to allow collection vehicles to enter and exit the site in a forward direction and so vehicles do not impede general access to, from and within the site.*	impacted by the storage of waste associated with the proposal. Currently, Vesuvius is serviced by waste disposal contractor Transpacific Cleanaway. This arrangement is intended to be maintained. There is adequate space on site to accommodate on site waste collection vehicles, as demonstrated by the turning templates shown on drawing 07 prepared by Anthony Joseph.	

Chapter E9 Hoardings and Cranes Policy			
WDCP Requirements		**Proposed**	**Compliance**
Section 6: Specific requirements for the construction of hoardings			
6.1 Type A Hoardings	*Building sites are to be secured with a Type A secured hoarding that is a minimum of 2m high and keeps unauthorised entry out.* *The hoardings must be built to comply with the relevant Australian Standards.*	Further details regarding hoardings will be addressed in the construction certificate.	Refer comment
6.7 Use of Cranes	*A crane must not be used to transport material over public land unless type B hoardings are used.*	This matter can be appropriately included as a condition on development consent to be addressed at the construction certificate stage.	Refer comment

Chapter E14 Stormwater Management			
WDCP Requirements		**Proposed**	**Compliance**
Section 11: Management of Stormwater from Development			
11.1 General	*3. Detailed plans showing the proposed method of stormwater disposal are to be submitted with the development application.*	Refer Drainage Concept Plan prepared by Sherson Lautier Consultancy (ref: 10100, dated: 20/07/10)	Complies

Section 12: On Site Stormwater Detention			
12.1 Application of OSD	*OSD requirements generally apply to all types of development.*	A Drainage Concept Plan has been prepared by Sherson Lautier Consultancy. The project architect has advised that discussions have been undertaken with Council's Drainage Department with regard to the requirement of OSD. It has been concluded that no OSD is required.	Refer Comment
Section 13: Information Requirements (to be submitted by applicant)			
13.1 DA Stage	1*. A stormwater layout is required.*	Stormwater layout is provided with the DA.	Complies

Chapter E15 Water Sensitive Urban Design			
WDCP Requirements		**Proposed**	**Compliance**
Section 4: Development to which this Policy relates			
4. Development to which this Policy relates	*The incorporation of appropriate water sensitive urban design measures may be required for the following types of development:* *Industrial developments involving a site area of 2 hectares or more.*	The Water Sensitive Urban Design requirements are addressed in the Drainage concept plan prepared by Sherson Lautier Consultancy and in the Water Quality Assessment prepared by Heggies (ref: 660.10047.00000-R1, dated: 17/12/10).	Refer comment

Chapter E17 Preservation of Trees and Vegetation			
WDCP Requirements		**Proposed**	**Compliance**
Section 5: Other Relevant Legislation			
5.4 Threatened Species Conservation Act 1995	*Any action such as the removal of trees or other vegetation has the potential to affect a threatened species.* *Therefore an assessment may be made necessary pursuant to 5A of the EPAA 1979 or Part 6 of the Threatened Species Conservation Act 1995*	As confirmed by the Flora & Fauna Assessment prepared by Kevin Mills & Assoc. (dated: June 2008), the subject site has been completely cleared of vegetation within the last 2 years (under DA-2008/322), and now consists of one continuous hardstand area. Therefore there is no further tree removal required.	N/A
Section 10: Trees and other Vegetation requiring the lodgement of a development application.			
10.1 General	*The lodgement of a development application is required from council for the wilful destruction of trees and vegetation in the following situations.* *Any tree or vegetation which is contained upon any land containing endangered ecological community or threatened flora species under the TSC Act 1995.*	Refer comment above. While the site has been identified as containing threatened species, no vegetation removal is required. The impact of the proposed development on the Green and Golden Bell Frog is considered in the Flora & Fauna assessment.	N/A
Chapter E18: Threatened Species			
WDCP Requirements		**Proposed**	**Compliance**
4. Flora and Fauna Impact Statement			
4.1. When is Flora and Fauna Impact Statement	*A Flora and Fauna Impact Statement is required where:* *There is potential impact on threatened species directly or indirectly*	A flora and fauna impact statement has been supplied by Kevin Mills & Assoc. (dated: June 2008).	Complies

required to be lodged	*The proposal impacts on native vegetation or fauna habitat* *Any proposal that has an effect on matters of national environmental significance.*		
4.2. When is an assessment of significance required	*An assessment of significance test is required when an endangered population as identified by the TSC or FMA Act.* *The Assessment of Significance must be undertaken by a specialist officer or a suitably qualified ecologist/consultant* *A section 91 license is required to harm of pick of a threatened species under the TSC Act. When applying for the section 91 license the Assessment of Significance is to be provided to the consent authority.*	The Flora & Fauna Assessment prepared by Kevin Mills & Associates does not indicate the need for an Assessment of Significance.	N/A
4.3 What is required for a Flora and Fauna Impact Assessment	*The content and survey methodology of a Flora and Fauna Impact assessment Report is required to be consistent with the survey methodology contained in this policy.*	Refer Flora & Fauna Assessment prepared by Kevin Mills & Assoc.	Refer comment

Chapter E19 Earthworks			
WDCP Requirements		**Proposed**	**Compliance**
Section 4: Development Standards			
Stormwater Mgt, Sediment control & Stability	*It is the responsibility of the developer undertaking earthworks to ensure such works do not adversely impact on stormwater damage*	Issues pertaining to earthworks are addressed in the contamination report prepared by Heggies (ref: 660.10047.R1, dated: 10/12/10)	Refer comment

Chapter E20 Contaminated Land Management			
WDCP Requirements		**Proposed**	**Compliance**
Section 1: Introduction			
1. Introduction	*This policy outlines Council's procedures policy in dealing with the assessment of known or potentially contaminated land and the remediation of contaminated land.*	The requirements of Chapter E20 are addressed in the contamination report prepared by Heggies (ref: 660.10047.R1, dated: 10/12/10)	Complies

9 Section 79(C)(1) – Matters for Consideration

9.1 The provisions of:

(a) Any environmental planning instrument

The proposal is consistent with the objectives and provisions of State Environmental Planning Policy (Major Developments) 2005 – Amendment (Three Ports) 2009 as it relates to industrial development within the IN3 Heavy Industry zone of the Port Kembla precinct. The proposal is also compliant with the provisions of SEPP 55 and SEPP 71.

The proposed development is not subject to the provisions of Wollongong Local Environmental Plan 2009 because, as Clause 4 of Part 20 of Schedule 3 of MD SEPP 2005 states:

> *"The only environmental planning instruments that apply, according to their terms, to land within the Three Ports Site are this Policy and all other State Environmental Planning Policies, other than State Environmental Planning Policy No 1—Development Standards".*

Therefore, under this clause WLEP 2009 does not apply to the site. Rather, the zoning and land use objectives and controls for the subject site have been regulated by the MD SEPP 2005.

Furthermore, the proposal is not captured by the provisions of '*integrated development*' or '*designated development*' as provided by the EP&A Act and the EP&A Regulation.

For detailed discussion on these policies refer to sections 6 and 7 of this report.

(b) Any development control plan

Section 8 of this Statement details the manner in which the proposal complies with the applicable chapters of WDCP 2009, namely:

B5 Industrial development
C8 Extractive Industries
D11 Port Kembla (Gloucester Boulevarde)
E1 Access for People with a Disability
E2 Crime Prevention through Environmental Design
E3 Car Parking, Access, Servicing/Loading Facilities and Traffic Management
E6 Landscaping
E7 Waste Management
E9 Hoardings and Cranes
E14 Stormwater Management
E15 Water Sensitive Urban Design
E17 Preservation and Management of Trees and Vegetation

E18 Threatened Species
E19 Earthworks
E20 Contaminated Land Management

The proposal generally complies with Council's WDCP 2009 as it relates to industrial development. Minor variations are sought in relation to:

Chapter B5 Industrial Development:

- Part 4(1): Building Façade
- Part 8.2(2) & (5): Landscaping requirements

Chapter E3 – Car Parking, Access, Servicing/Loading Facilities and Traffic Management

- Part 7.1(1): Carparking and bicycle spaces
- Part 12: Landscaping requirements

These issues are addressed in detail below.

9.2 The likely impacts of the development

9.2.1 Streetscape Integration/Visual Impact

The proposed development is located within a heavy industrial landscape in the Port Kembla precinct, which supports similar some of the more significant industries in the Illawarra. The proposal is similar in design, scale, height and character to the surrounding development. The development is not located in proximity to any sensitive uses such as residences or schools (the closest are some 500m away), and will therefore not significantly impact unsympathetic uses.

The proposed industrial building design allows for a functional arrangement on the site and provides for an accessible carparking and manoeuvring area. When viewed from the Gloucester Blvd, the visual expanse of building will be reduced, with the placement of the office levels along the Gloucester Blvd frontage to provide building articulation and visual interest. Along the northern elevation (Darcy Rd frontage) the building is articulated through the provision of roller doors and the crusher enclosure. The proposal also includes perimeter landscaping along the road frontages to minimise the visual impact of the building.

Part 4(1) of WDCP 2009 limits the use of colorbond finishes to less than 50% of the building, with the remaining 50% to include glazing, decorative finished concrete or face brick construction. These requirements are considered inappropriate in the proposed development location. The subject site is not located on a major transport route, nor is it in proximity to any significant attractions. Furthermore, the site is located within a heavy industrial area characterised by industrial warehouse buildings that are predominantly of pre-cast concrete or colorbond construction (see images in section 2 of this report). In this regard the proposal is consistent with the established streetscape of the area.

Clause 4.1.1 of Chapter B5 of WDCP 2009 outlines the objectives for building design and façade treatments for industrial development:

a) *To achieve a high standard of industrial development by promoting visually attractive buildings and through the use of high quality external finishes,*
b) *To encourage a range of architectural design elements and innovative roof forms for industrial buildings, in order to improve the visual interest and attractiveness of such buildings, and*
c) *To promote functional, safe and environmentally friendly industrial development.*

The design of the proposed development aims to achieve a practical, simple design that serves the purposes of the tenant and in consistency with the streetscape and further afield the industrial precinct of Port Kembla. Keeping the design simple eliminates the risk of potential problems as the building ages. It ensures that building maintenance will be more practical and affordable, and reduces the likelihood of the building becoming dilapidated. These factors are particularly important in the subject site's location in a coastal area exposed to elements such as salt water and strong winds. Additional glazing is considered inappropriate in this location given the maintenance required for glass exposed to coastal elements. The proposal is consistent with existing buildings in the locality, and will not adversely impact the streetscape. It appropriately addresses the corner of both roads, and the provision of landscaping reduces the bulk and visual appearance of the building. Therefore the proposal is considered to meet the objectives for building design and facades.

It is therefore concluded that there will be no adverse visual impact issues associated with this development. The building has been designed to merge into the existing surrounding industrial fabric through elements such as the proposed colour scheme and landscaping. Furthermore, the closest residences are some 500m away. This distance coupled with the industrial context mitigates any visual impact issues.

Hence Council's support for the minor variation to clause 4.1.2 of Chapter B5 of WDCP 2009 is sought.

9.2.2 Building Height

There are no specific height requirements that apply to the site in MD SEPP 2005 or WDCP 2009. However, the proposed building height is 16.1 metres, which is consistent with the existing development in the locality. It is considered that the intent behind not restricting the height in the Port Kembla precinct is to allow larger industrial developments as the location is deemed appropriate for such developments.

It is further noted that the proposed development is sited centrally within the Port Kembla industrial precinct and does not immediately adjoin residential properties. Given the building's siting it is not anticipated that it will be visible beyond the boundaries of the estate or beyond Gloucester Blvd.

9.2.3 Side and Rear Setbacks

DCP 2009 does not specify minimum side setbacks for industrial development. However, the building has been positioned centrally within the site to allow carparking and manoeuvring areas to be sited around the building.

The subject site is a corner allotment on two local roads, Gloucester Blvd (primary frontage) and Darcy Rd (secondary frontage). The proposed building setback to Gloucester Blvd is 12.65m and 14.63m to Darcy Rd, which is greater than the 7.5m primary frontage setback and 5.0m secondary frontage setback that is required for local roads respectively under the provisions of Section 3.1.2 of DCP 2009.

9.2.4 Landscaping

Clause 8.2(2) of DCP 2009 requires that a minimum of 10% of the site area on an industrial allotment is to be landscaped, with the majority of this landscaping to be provided within the front property building line setback area and the side property boundaries. Whilst a lesser percentage of landscaping is provided, it is considered that this quantity is adequate given the heavy industrial zone in which the site is located. Further, it is considered that the placement of the landscaping accords with the intent of the DCP provision through the achievement of the landscaping objectives:

a) To use landscaping to improve the appearance of industrial developments,
b) To ensure that landscaping is provided to enhance the streetscape environment and amenity of industrial areas
c) To screen unsightly land uses and outdoor storage areas.

The proposal utilises landscaping along the property boundaries and at regular intervals within the carpark area. The proposal also includes the provision of 10 large trees along the Gloucester Blvd boundary. The provision of landscaping will screen the building and provide visual relief in the carparking areas.

In support of this variation it is noted that the landscaping which is provided will meet the objectives of Section 8.1 of the DCP as it will improve the appearance of the development, with the greatest concentration of landscaping located on the corner to improve the streetscape environment and amenity of the surrounding industrial areas due to its siting.

Clause 8.2(5) requires the provision of a minimum of 3 metres of dense landscaping for the full length of the property frontage to local roads. This is consistent with the 3m front landscape requirements which is generally applicable under Chapter E3 (Carparking, Access, Service/Loading Facilities and Traffic Management), except for exceptional circumstances where a 7-10m landscaped area is required due to the scale of the development. The proposed development at No. 36-46 Gloucester Blvd is a typical scale of industrial development in this location and is not considered to be of exceptional scale which would warrant the increased 7-10m landscaped buffer. The proposed development includes a landscaped buffer of varying widths between 4.0m and 2.0m. It is unreasonable to require the provision of additional landscaping buffers for this site when industrial sites in the locality have provided minimal landscaping, if at all (see images in section 2.2 of this report). Therefore, a reduction in the landscaped buffer provided will allow for compatibility with surrounding developments and will not adversely impact on surrounding streetscape character.

Clause 8.2(6) of DCP 2009 requires the provision of tree planting at the rate of 1 tree per 10 car spaces. The Landscape Plan prepared by Myriam Rooney Designs shows such planting, in compliance with Council's requirements.

Clause 12 of Chapter E3 of WDCP 2009 requires a 2 metre wide side landscaped buffer screen for all car parking areas. This is considered to be an onerous requirement given the size of the property and the surrounding heavy industrial context. The proposal includes regular 1.5m wide landscaped strips within the carparking area to provide visual interest within the carpark and to break up the expanse of hardstand areas.

The provision of landscaping along the road frontages with a concentration on the corner portion of the lot is considered adequate to improve the streetscape amenity, and further landscaping along the side boundaries, which will have limited visibility from the public areas, is considered to be excessive. The impact on adjoining properties will be minimal given both are established heavy industrial uses that provide minimal landscaping along the shared boundaries. The proposed landscaping component is greater than that featured on surrounding allotments, and is considered more than reasonable in this heavy industrial context. The proposal will not adversely impact on surrounding streetscape character. It is considered that with the concentration of landscaping along the road frontages the proposal will actually improve the streetscape amenity.

Hence, Council's support for a variation to the landscaping requirements is sought based on the achievement of the landscaping objectives, streetscape integration and in the context of the surrounding industrial character.

9.2.5 Overshadowing

The proposed building is sited centrally within the subject property, away from any shared boundaries. Therefore any overshadowing impacts are considered to be negligible. Notwithstanding, the subject site does not adjoin residential lands and immediately abuts industrial land. Any adverse impacts on amenity will be minimal given the nature and siting of the adjacent land uses.

9.2.6 Parking, Traffic, Access and Loading

Parking, access and loading considerations are addressed in the Traffic and Parking Impact Report prepared by ML Engineers (ref: A1012239N, dated: August 2010), which accompanies this application. The proposed development utilises the existing five (5) access driveways for site entry, and provides for dual lane traffic movements through the site. Provision has been made for B-Double and articulated semi-trailer vehicles to enter and leave the site in a forward direction without impacting on any parking or landscaped areas (Refer drawing DA07 prepared by Anthony Joseph).

ML Engineers undertook a SIDRA Analysis of the key intersections that may be affected by the proposed development. ML Engineers also assessed the peak hours for traffic access. In relation to the traffic generation, ML Engineers concludes there is spare capacity for additional trips from the proposed expansion at the nearby intersections of Old Port Road with Darcy Road and Military Road and Five Islands Road with Darcy Road. ML Engineers also notes there are vacant on street car spaces on Gloucester Blvd and Darcy Rd, however all parking for the proposed development should be fully met on the site and there should be no parking overspill.

The carparking requirements for the proposal are detailed in the Traffic and Parking Impact Report prepared by ML Engineers (ref: A1012239N, dated: August 2010). Schedule 1 of Chapter E3 of WDCP 2009 requires the provision of 104 car parking spaces, and the proposal includes 102 parking spaces (including 4 disabled spaces), representing a minor shortfall. While it is noted that the proposal does not comply with the parking requirements of WDCP 2009 it is argued that the number of spaces provided meets the likely car parking utilisation rates based on the actual usage of the existing site at Bulli. This comparison with an exact usage of a proposed facility is an accepted approach to likely car parking generation (eg. Section 5 'Parking Requirements for Specific land Uses' of the RTA's document Guide to Traffic Generating Developments for a

range of uses). In this circumstance, the more general car parking generation requirements of WDCP 2009 are considered unnecessary and unreasonable for the proposed purpose built development type.

It is considered that the following carparking requirements apply to adequately cater for the actual building usage are:

Office requirement	*45*
Industrial requirement	*35*
Visitors	*7 (approximately)*
Total required	***87***

Therefore, the provision of 102 parking spaces on site is adequate to cover the peak access time.

Therefore, while the proposed parking provision is slightly less than that required by WDCP 2009, it is justified based on the current operations at Bulli.

9.2.7 Accessibility

An Access Review Report has been prepared for the proposed development by Morris-Goding Accessibility Consulting (dated: 16/12/10) to provide advice and strategies to maximise reasonable provisions of access for people with disabilities. The development was reviewed to ensure that ingress and egress, paths of travel, circulation areas and toilets comply with relevant statutory guidelines. The Access Review found the proposal to generally be in accordance with the statutory guidelines, and provided recommendations where necessary. Some recommendations included widening the stairs to 1500mm and provision of stair platform lift to allow vertical circulation. The development plans prepared by Anthony Joseph show a staircase widened to 1500mm to accommodate a stair platform lift if required.

In terms of ingress, egress and paths of travel the Access Review found the entrances and parking facilities to be adequate for disabled persons. The development plans also include disabled amenities on the ground floor of the office building, in accordance with the Access Review.

9.2.8 Air Emissions and Odour Impacts

Envirodyne Group Pty Ltd were engaged to undertake an Air Quality Assessment for the relocation of the Vesuvius Refractory Manufacturing Plant to Port Kembla. This assessment, which was undertaken in December 2010, examines the issues of contaminates in the air generated by plant emissions. This assessment indicates that the plant will fall within the Group C Categorisation of the POEO Act.

Envirodyne undertook computerised predictive dispersion modelling of residual emissions from the proposed new plant to predict if emissions exhausted from the Vesuvius plant would cause impact on nearby industrial, commercial or residential properties outside the plant boundary. Envirodyne concluded the following as a result of their modelling:

- *"The current manufacturing operations are classified as 'non scheduled' activities as defined by POEO Act, and in their relocation there is no change in the operations or manufactured output volumes that would alter this classification.*
- *The relocated plant to Port Kembla will be required to meet conditions within the POEO Act and the Regulations for emissions from 'non scheduled' premises including fumes, pollutants and odours.*
- *The current plant located at Bulli has no history of odour impact on the surrounding residential properties, based on the lack of odour complaints.*
- *Modelling work undertaken using worst case scenarios has indicated that the plant emissions for dust and VOCs from the plant in its new location will comply with the provisions of the Clean Air regulations of the POEO Act. Impact levels beyond the plant boundaries are well within statutory guidelines.*
- *The relocated plant will not increase the level of pollutants as tabled in the DECC Air Emissions Inventories for the NSW Greater Metropolitan Region. This assessment of emissions from the plant show a miniscule contribution to overall pollution levels.*
- *From a Due Diligence point of view to ensure compliance with the POEO Act, it would be appropriate to conduct sampling and analysis of exhaust airstreams from the various plant processes to verify dust collection efficacy and the levels of air impurities that may be present. This work should be conducted during commissioning work for the new plant and the results become required operating conditions for plant Standard Operating Procedures (SOPs).*

9.2.9 Waste and Servicing:

A Waste Study Report prepared by Beca Pty Ltd (ref: 2591464, dated: 10/12/10) accompanies this application. The Waste Study details the solid and liquid waste generated during the operation of the proposed facility. The report aims to classify and quantify the waste streams and explain the method of disposal for each. In addition, the report outlines the waste reduction measures being incorporated into the new facility.

It is noted the Waste Study does not include the waste generated during construction as Beca proposes this can be covered under the construction permit and environmental management plan.

The Waste Study identifies three waste streams to be disposed of as follows:

General Solid Waste (non-putrescible) from processing:
Due to the inert, non-hazardous and non-restricted nature of the concrete and ceramics waste, all wastes from the process that are not already recycled or retained within the plant are suitable for land fill. Beca confirm that 3 skips per week (total volume of each skip is $15m^3$) of general non-putrescible waste will be generated.

General Solid Waste from office:
These wastes are suitable for disposal via Council's waste collection service, or using skips with general solid waste.

Liquid Waste:
Sewage will be disposed of through the existing sewage lines at the Port Kembla site. Wash down water will undergo treatment for pH reduction and TSS removal prior to discharge as trade waste trough the existing sewage lines.

Adequate area has been allowed for in the design for a garbage truck to enter the site and collect the bins directly from the holding area in the carpark. Frequency of collection will be weekly.

Waste from the operation will be housed in separate waste containers and waste storage areas are located within the carpark adjacent to the western boundary. The waste is all solid, non-putrescible waste and can be disposed of as landfill. The proposed operation will see an average of 290 - 400 tonnes of raw materials and product transported by road vehicles per week, with the preferred vehicle type being 12.5m heavy rigid vehicles. The Vesuvius operations at Bulli are currently serviced by Transpacific Cleanaway collection services, and this arrangement is anticipated to continue. Drawing DA07 prepared by Anthony Joseph shows that the collection vehicles can be accommodated on site.

9.2.10 Water Quality:

SLR Heggies Pty Ltd ('Heggies') were commissioned to conduct a Water Quality Assessment (ref: 660.10047.00000 WQ, dated: 17/12/10) in relation to the proposed development to assess the potential impact of the proposed development on the stormwater characteristics of the site in terms of water quality, and to identify potential stormwater management devices to either maintain or improve the quality of stormwater being discharged from the site. The report also assesses potential options for water re-use with regards to the proposed operations on site.

Heggies concludes that two gross pollutant traps (GPT's) should be provided on site to provide water quality treatment.

In relation to options for the re-use of water for the project, it is recommended that a further detailed assessment be undertaken at the construction certificate stage to ascertain the feasibility of implementing a rainwater harvesting system to collect and harness roof runoff for water to use for the washdown of machinery.

9.2.11 Preliminary Hazards Analysis:

A Preliminary Hazards Analysis (prepared by Whamcorp Pty Ltd, dated: 7/12/10) has been undertaken for the proposed development. The PHA assesses the hazards and risks associated with the proposed Vesuvius refractory project, including an assessment of the potential off-site risks.

The PHA has identified the risks associated with the use of raw materials that may be dangerous goods or otherwise present a potential hazard in terms of land use planning and the use of various fuels which are dangerous goods.

The study concludes that the safeguards identified in the recommendations will provide adequate protection for both personnel and the environment. From the analysis conducted, the proposed facilities in operation will not pose a significant risk to surrounding land uses and are permissible.

The PHA makes recommendations as follows:

- The design and operation of the proposal should proceed as planned, with the implementation of the safeguards detailed in the PHA report.
- Prior to construction of the building, the final design of the building, including bunded areas and tanker bay(s) and fire resistance levels adjacent to the combustible liquid tanks should be checked by a suitably qualified person to confirm compliance with the relevant safeguards.
- A HAZOP study of the Hexion Cascophen AB403 resin storage and handling system design should be conducted, prior to construction/installation of that system.
- The dangerous goods storage should be notified to WorkCover NSW and all dangerous goods requirements of the OH&S Act and Regulation should be met.
- The detail of this study should be reviewed against the final design and any new requirements documented. Where significant changes have been made, a final hazard analysis should be conducted.

The recommendation to proceed (with the 5 recommendations above) is made in conformity with the requirements of SEPP 33.

9.2.12 Servicing

A 40.8 x 8.0m designated loading/unloading area has been provided in an appropriate location to the rear of the proposed building that allows forward ingress and egress for B-Double and articulated semi-trailer vehicles. The swept turning paths for large vehicles are included in drawing DA07 prepared by Anthony Joseph.

Augmentation of existing water, sewer and electricity services will be required for the proposed development, subject to endorsement by relevant servicing authorities.

Loading and unloading is currently carried out by solid-tyred fork lift vehicles. The average time to load or unload a truck is 30 minutes, and up to one hour to load a container.

9.3 The suitability of the site for development

The subject site is zoned IN3 Heavy Industry and is an infill site located within an established industrial estate. The proposal has been designed having regard to the development controls for industrial lands.

9.3.1 Contamination & Acid Sulphate Soils

Council's records indicated the site is potentially affected by contamination, and as such, a Preliminary Site Investigation has been undertaken by Heggies Pty Ltd (ref: 660.10047.R1, dated: 10/12/10). The proposed application relates to the above ground redevelopment of the site for industrial purposes. The majority of the site is to be covered with hardstand or sealed surfaces with a large portion of this area to be covered by one large industrial building, while the remainder of the site will consist of appropriate landscaping.

As part of the Preliminary Site Investigation, Heggies undertook a site history review and site inspection, and it was considered that there was potential for soil contamination due to both past on site (and adjacent) heavy industry as well as the presence of undocumented imported fill on the site. The results of the investigation have shown that with the exception of asbestos, no exeedences of the adopted soil assessment criteria were

encountered. Heggies noted fragments of asbestos cement in 3 of the 8 test pits. However, the fragments of fibre cement were discrete and are unlikely to represent gross contamination of the on-site fill units.

Heggies considers the site suitable for the proposed development based on the relatively uniform nature of the various fill materials combined with the fact that the proposed development offers restricted exposure pathways for various contaminates detected during sampling.

Heggies also recommend that prior to construction an appropriate Environmental Management Plan (EMP) be developed for all intrusive on site works to assure that any unidentified contamination is appropriately identified and managed during the construction stage. This is considered to be a matter that is appropriately dealt with at the construction certificate stage.

Council's records also indicate that the subject site is classified having a probability of containing acid sulphate soils. The contamination report prepared by Heggies (ref: 660.10047.R1, dated: 10/12/10) incoudes a consideration of any likely impacts of the proposal on the acid sulphate soils. Heggies indicate that the disturbed nature of the site makes it unlikely that acid sulphate soils are present within the fill on site unless they were imported during the fill process. Given the results of the field investigation, Heggies confirms that acid sulphate soils are not considered likely to exist on the site and do not pose an issue for the current development proposal.

9.3.2 Stormwater

Stormwater drainage details are shown on the Drainage Concept Plan prepared by Sherson Lautier Consultancy, which accompanies this development application.

It is noted the subject site is currently burdened by a number of drainage easements benefitting the lots to the west. The drainage easements (existing and proposed situation) are indicated in the drainage concept prepared by Sherson Lautier Consultancy (ref: 10100, dated: 20/7/10). The drainage easement running west-east through the central portion of the site needs to be extinguished to accommodate the proposed building. To replace this easement, a new easement is indicated on the drainage concept running along the northern boundary of the site. It is understood that discussions have been undertaken with the solicitor of the benefiting lots (as per the deposited plan). Documentation of these discussions will be provided to Council if requested.

9.3.3 Flood Liability:

Council's records indicate that the site is partially affected by flooding. However, Sherson Lautier Consultancy contacted Council during the preparation of this application. Council's Drainage Department confirmed that this application will not require a formal flood study given only a very small portion of the site has been identified as flood affected, and appropriate drainage measures have been proposed in this application.

10 Conclusion

The proposed use is defined as 'Heavy Industry' as outlined in the preceding analysis, and is permissible with consent in the IN3 Heavy Industry zone pursuant to State Environmental Planning Policy (Major Developments) 2005 – Amendment (Three Ports) 2009. The proposal meets the relevant national, state and local statutory requirements that apply to the subject site and the proposed use. The proposal is consistent with surrounding development and will have no impacts on residential developments further a field.

A number of environmental consultant reports accompany this Statement of Environmental Effects that make recommendations to mitigate any potential environmental issues. The current operation at Bulli has received some noise complaints in the past from the encroaching residential developments. These noise concerns have been mitigated in the proposed relocation through the internalisation of all of the processes that will occur on site. Furthermore, the subject site is an appropriate location for the proposal as it is within a heavy industrial context that is not in proximity to any sensitive uses.

The proposal provides a minor shortfall of the parking spaces required under Wollongong Development Control Plan 2009. However, the proposed development is a purpose built facility for an existing established use at Bulli. Therefore, based on current parking requirements, the proposed parking provision is considered more than adequate to accommodate the Vesuvius operations, and the minor shortfall is justified.

In terms of air quality the assessment undertaken by Envirodyne confirms that the plant at Bulli has not been the cause of air emissions nuisances to the surrounding community and hence it is anticipated that the manufacturing practices to be translated to Port Kembla will not require major changes to ensure compliance with the relevant statutory guidelines.

The proposal includes appropriate waste management measures and the facility will be constructed and operated with no adverse environmental impacts.

With regard to the visual impact of the proposed building, the building has been designed to merge with the existing industrial character adjacent to the subject site and the colours and materials used assist in this.

The Hazards and Risks Analysis also did not indicate any adverse impacts from the proposed development, and concludes that subject to compliance with the relevant Australian standards the proposal is acceptable.

The proposed landscaping is appropriate for the industrial context of the site, and for the site's corner location. Landscaping has been concentrated along the road frontages to minimise the visual bulk of the building and to provide visual interest. Landscaping has also been appropriately incorporated within the carparking area.

The proposal is appropriate in this location and will not have any unreasonable impacts given the industrial character in the surrounding estate and the implementation of mitigation measures, where required, to minimise any adverse impacts on the environment and adjacent and surrounding property owners.

Therefore Council's support for the proposed development is sought.

Appendix 1

Development Plans