

Environmental
Assessment s75W
Application

Visy/Pratt Industries, Smithfield DA 13/94



RR
Urban Perspectives
11/04/2012

Environmental Assessment for s75W Modification Application prepared by:

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Modification application in respect of: Modification to consent made 15 November 1994 for DA 13/94 (as modified) to construct a pipebridge for services over Lot 34 DP DP850596

Applicant Name: Visy Packaging Pty Ltd ABN 13 095 313 723

Applicant Address: 6 Herbert Place Smithfield NSW 2164

Land on which activity to be carried out: Lot 34 DP850596 being 6 Herbert Place Smithfield NSW 2164 (previously known as 160 Warren Road Smithfield)

Date: 11 April 2012

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Definitions

Applicant	Visy Packaging Pty Ltd (ABN 13 095 313 723)
Building	The industrial building constructed on Lot 2 in approximately 1997 pursuant to development consent 96/372 from Holroyd City Council
Council DA	The development application for alterations and additions to the Building and for a change of use and hours lodged with Holroyd City Council on 20 March 2012
Department, the	Department of Planning and Infrastructure
Lot 2	Lot 2 DP 849480 at 6 Herbert Place Smithfield
Lot 34	Lot 34 DP 850596 at 6 Herbert Place Smithfield
Lot 12	Lot 12 DP 808195 at McCredie Road Smithfield
Marubeni	The Smithfield Energy Facility known as Marubeni on Lot 33 DP 850596 Smithfield
Minister, the	Minister for Planning and Infrastructure
Silos DA	Development Application number 69/2012 lodged with Holroyd City Council on 28 February 2012 for the demolition of ancillary structures, relocation of a fire hydrant line and erection of 7 silos
Site	Lot 34 DP 850596 at 6 Herbert Place Smithfield NSW
WWTP	The waste water treatment plant on Lot 34 DP 850596

Acronyms

DA	Development Application
dB(A)	Decibel, 'A' weighted scale
DPI	Department of Planning & Infrastructure
EPA	Environmental Protection Agency
EP&A Act	Environmental Planning and Assessment Act 1979
EPL	Environment Protection Licence pursuant to the POEO Act
LA90	The noise level exceeded for 90% of a monitoring period, also referred to as the background noise level
LA10 (15 mins)	Sound pressure level exceeded for 10 per cent of the time over a 15 minute period
LEP	Local Environmental Plan
MRF	Materials Recycling Facility
POEO Act	Protection of the Environment and Operations Act 1997
RL	Reduced Level
RMS	Roads and Maritime Service
RTA	Roads and Traffic Authority (now within the RMS)
SEPP	State Environmental Planning Policy
WWTP	Waste water treatment plant located on Lot 34 DP 850596

Executive Summary

Environmental Assessment

The Applicant, Visy Packaging Pty Limited is seeking consent from the Department a modification to the existing consent to allow for the erection of a pipebridge on Lot 34 DP 850596 to facilitate a redevelopment of facilities on the adjoining land at Lot 2 DP 849480 for a plastics processing plant at 6 Herbert Place Smithfield.

Additionally it is proposed that trucks accessing Lot 2 will turn around on Lot 34 to enable the use of the existing weighbridges and facilitate truck movements for the plant. Holroyd City Council has also requested that an easement for pipebridge and services be registered over Lot 2 and Lot 34 for the proposed pipebridge.

The Department is the consent authority for Lot 34 and its adjacent Lot 12 as the original consent 13/94 was granted pursuant to SEPP34 – Major Employment Generating Industrial Development. Holroyd City Council is the consent authority for Lot 2 on which the redevelopment is mostly to occur.

On Lot 34 and Lot 12 various Visy facilities operate including a materials recovery facility (MRF), two paper mills, Visy Recycling and Visy Cardboard. Lot 34 also operates a waste water treatment plant (WWTP) which is proposed to be utilized by the redeveloped plastics processing plant.

Assessment of the potential environmental impacts conclude as follows:

- Construction noise and traffic will have little or no impact.
- The WWTP has the capacity to accommodate the anticipated highest potential water flows from the plastics processing plant.
- The truck circulation proposed and swept path assessment demonstrates satisfactory manoeuvrability throughout the Lot 2 and on Lot 34.
- Sediment and erosion control measures are considered and shown on the plans.
- A waste management plan during construction and operations has been provided. Most waste during construction will be natural ground material.
- There will be minimal impact on odour from additional water flows to the WWTP.

Having regard to topography and local meteorological conditions, there is nothing in the proposal likely to significantly affect the amenity of the neighbourhood by reason of noise, visual impacts, air pollution (including odour, smoke, fumes or dust), vermin or traffic, nor are there any environmental planning issues which preclude consent to the proposed modification.

1. Introduction

1. Introduction

1.1 General

Visy Packaging Pty Ltd ABN 13 095 313 723 commissioned the preparation of this environmental assessment to support a s75W modification application to consent 13/94. On 24 November 2011 the Proponent was advised by the Department that a s75W application was the appropriate application to be made to the Department in respect of the proposed development on the Site.

On 15 November 1994 approval was given to DA 13/94 by the Minister for Planning pursuant to clause 8 of the State Environmental Planning Policy No. 34 – Major Employment Generating Industrial Development relating to the expansion of the Pratt Industries' waste paper recycling and corrugating plant at Smithfield. That approval now covers the Site and Lot 12 DP 808195. A series of modification applications have been made, summarised as follows:

- Modification 1 (MOD-124-8-2005-i) – upgrade to existing paper and cardboard operations and construction of a new building
- Modification 2 (MOD-41-3-2006-i) – relocation of waste packers, alterations to eaves
- Modification 3 (MOD-138-11-2006-i) – construction of a 2 storey administration building
- Modification 4 (MOD-68-8-2007) – upgrade to Water Treatment Plant
- Modification 5 – relocation of Water Treatment Plant

Regulation 8J(8) of the *EP & A Regulations* indicates under the former Part 3A transitional provisions, that modifications to approvals made under *State Environmental Planning Policy No. 34 – Major Employment Generating Industrial Development* are to be made by s75W of the *E P & A Act* as applying before that section's repeal.

A development application was lodged on 20 March 2012 with Holroyd City Council (the Council DA) to redevelop existing industrial facilities on Lot 2 for a plastics processing plant, to seek a change of use and the extension of hours of operation to 24 hours. Part of the Council DA involves the transfer of steam, steam condensate, electricity and water between the Site and Lot 2 to enable the operations to occur. Both lots are under the ownership of McCredie Road Properties Pty Limited. This modification application seeks approval for the construction of a pipebridge for services to enable the provision of services to the adjoining Lot 2 DP 849480. This environmental assessment also describes the proposed use of the Site for turning of

heavy vehicles for the proposed plastics processing plant and for a proposed easement for pipebridge and services.

1.2 Property Description

The Site is situated at 6 Herbert Place Smithfield in Holroyd City Council LGA approximately 31 kilometres from Sydney CBD.

The Site comprises an area of 6.618 hectares situated at Herbert Place Smithfield which intersects with Warren Road Smithfield (being the Cumberland Highway). The land is comprised in Lot 34 Deposited Plan 850596 in the parish of St John in the County of Cumberland. **Figure 1** shows the Site's location.

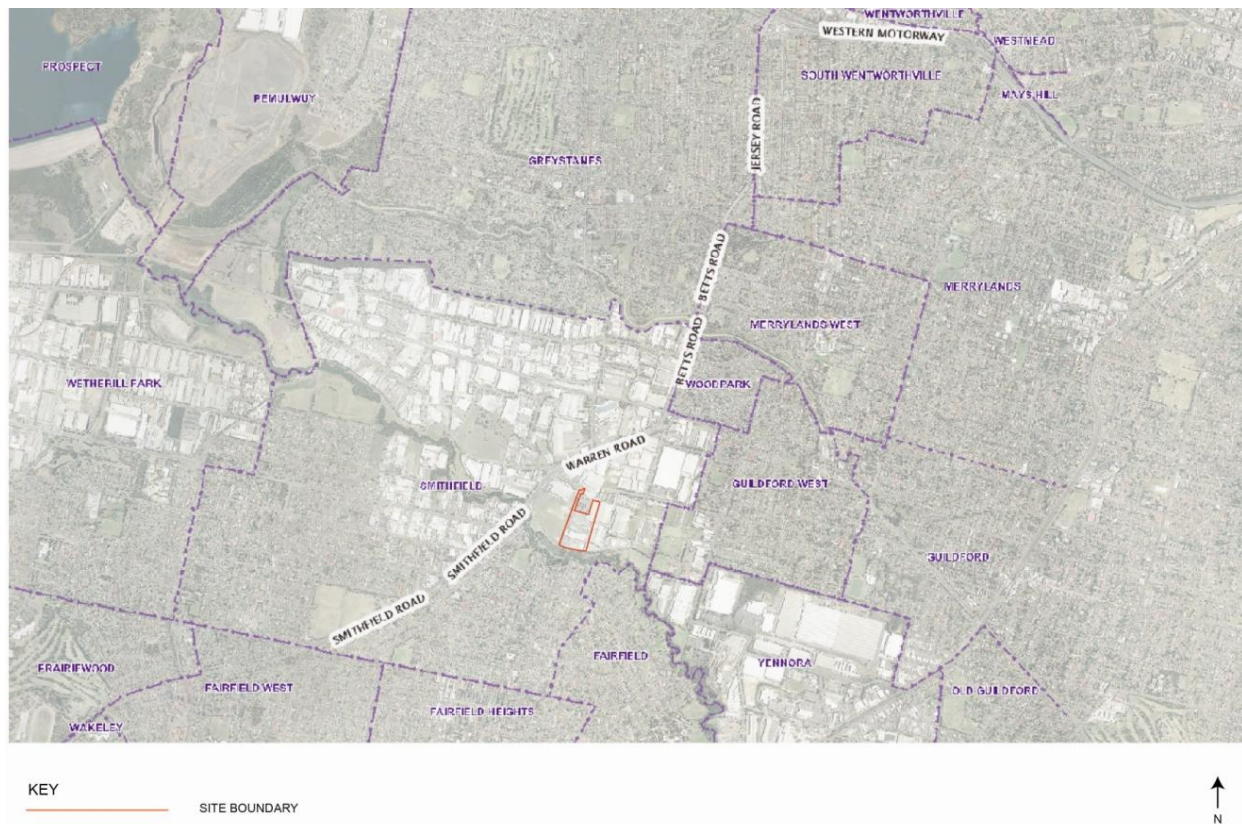


Figure 1 – Location Plan

The property is zoned 4(a) – Industrial General Zone under the Holroyd Local Environmental Plan 1991. Under the exhibited draft LEP for Holroyd City Council, the proposed zoning of the Site is IN1 – General Industrial.

The registered proprietor of the land is McCredie Road Properties Pty Limited which also owns the adjoining properties facing Herbert Place and McCredie Road – being Lots 33 DP850596 (on which Smithfield Energy Facility or Marubeni operates), Lot 12 DP 808195 and Lot 2 DP 849480. Consent for the cogeneration plant at Marubeni on Lot 33 DP 850596 was considered by a Commission of Inquiry in 1994 and granted consent by the Minister under DA 13/373.

There are a number of easements affecting the Site which are relevant to the total plastics processing plant on Lot 2 because the proposed pipebridge crosses over those easements. The relevant easements are:

- A pipeline easement to Alinta DEGP Pty Ltd 6m wide, 10m wide and variable which runs the length of Lot 34 north/south and is shown in DP 1040107. It contains a high pressure gas main.
- Easements for transmission lines along the northern boundary
- Easements to drain water on the western boundary of the lot in favour of Holroyd City Council
- A right of carriageway, easement to drain water and easement for services in favour of Lot 33

A low pressure gas line runs immediately south of the Lot 33 on Lot 34. This pipe is owned by Visy or its affiliated companies.

Appendix A contains copies of DP849480, DP 850596 and the relevant page of DP 1040107 which set out the easements affecting Lot 2 and the Site. A further plan sets out the services affecting the Site and adjoining lands.

The Site is subject to Environment Protection Licence (EPL) 4100 pursuant to the Protection of the Environment Operations Act 1997.

Visy Paper Pty Limited operates a number of facilities at Lot 34 DP850596 and Lot 12 DP 808195. These facilities include Visy Materials Recycling Facility (MRF), Visy Board, Visy Paper, Visy Recycling and a Water Treatment Plant. The location of these facilities is shown in **Figure 2**.

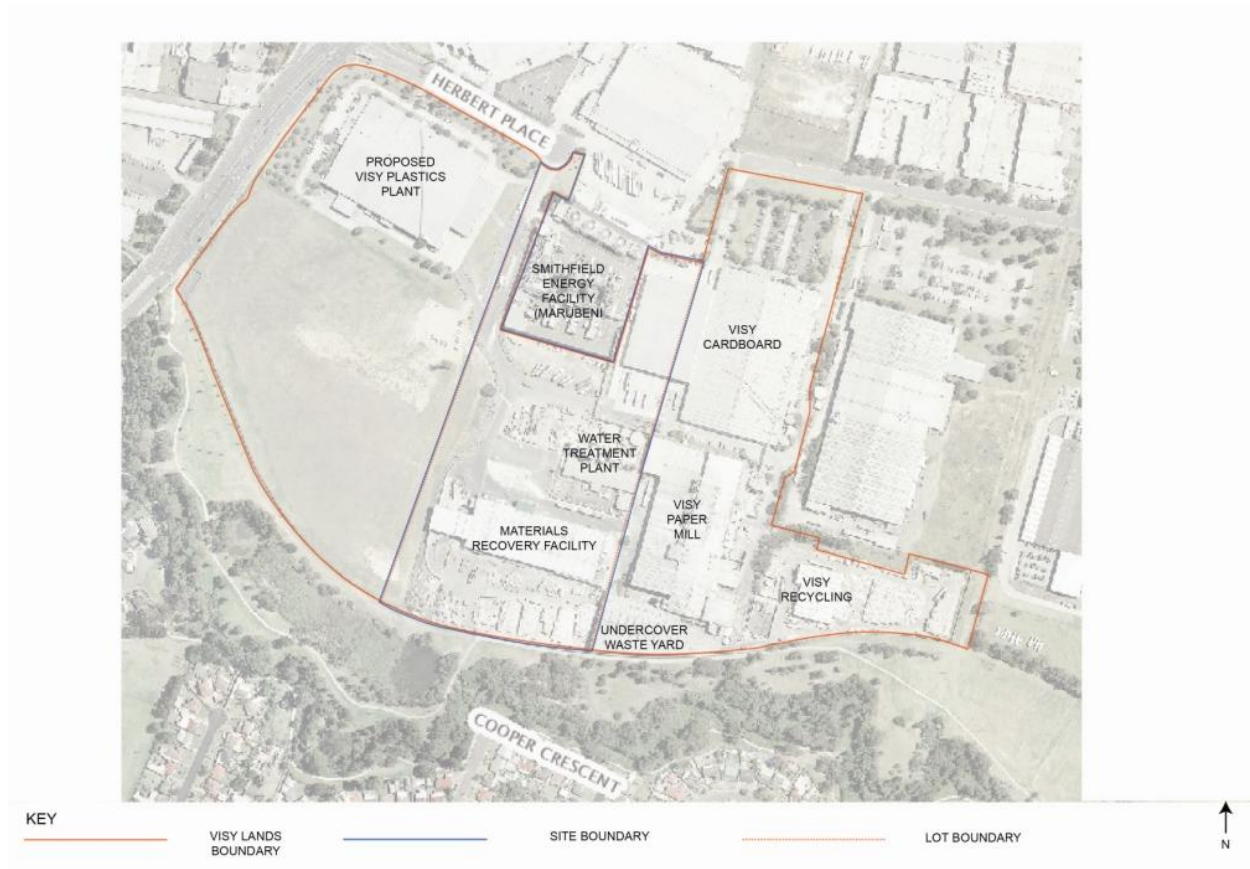


Figure 2 Visy facilities operating in the vicinity of the Site

1.3 The Proposal on Lot 2 DP 849480

The Building on Lot 2 was built pursuant to development consent from Holroyd City Council number 96/372 for the erection of a building for the use of manufacturing cardboard boxes. Visy proposes to alter that Building and its use to establish a plastics processing plant operating 24 hours a day. Anticipated processing is approximately 42,000 tonnes per year with approximately 20,000 tonnes of output.

The proposal will enable baled PET and HDPE bottles received from materials recycling facilities (MRFs) to be cleaned and reformed into plastics pellets of food grade quality for subsequent manufacture into new bottles and other food containers. Visy aims to construct the first plant in the world which can process both PET and HDPE plastic into food grade pellets as raw materials for the manufacturing of new food containers. It is a project which intends to use the most up to date, clean and efficient equipment in the world to reprocess plastics.

Proposed external works on Lot 2 include:

- Constructing a pipebridge for services provision
- Development of a waste-water pre-treatment plant
- An increase in height of over two sections of the Building at the southern side of the Building (the top hats)
- Five exhaust fans to be installed on the roof (including one in each top hat)
- A load conveyor under the existing awning on the eastern side of the Building
- Installation of acoustic insulation on the underside of the eastern awning
- Cooling towers to be erected on the east side of the Building
- Construction of new openings on the eastern façade
- Construction of two electrical transformers on the southern side of the Building
- Installation of two water tanks on the north and southern side of the Building
- A small increase to the paved area to the north east of the Building to facilitate truck manoeuvrability to the north of the eastern awning.
- Minor amendments to disabled and courier car parking
- Increase the width of the driveway closest to the intersection of Herbert Place with the Cumberland Highway to 6 metres to allow two way light vehicle traffic access and egress
- Location of a bin area of on the northern side of the Building
- Removal of three trees (with a possibility of a further 5 trees) and planting of 11 replacement trees
- Provision for 4 containers to the east of the eastern awning on the existing concrete hardstand

Proposed internal works include:

- the installation of equipment to operate the plastics processing, internal silos in the extrusion area and chillers
- the construction of a fire rated HV room adjoining the existing plant room in the south eastern corner of the Building
- The relocation of the bunded chemicals area from the exterior of the southern side of the Building to within the northern section of the Building to allow storage of a 5m3 bunded area for caustic soda, including the removal of existing partitioning and a ceiling in that area
- New wall partitioning around the extrusion area with door openings, crash barriers and bollards
- A small laboratory for quality checks
- Trenching and foundations and footings for the internal equipment.

It is proposed that some of the products of the MRF will be used by the plastics processing plant on Lot 2 and some of the wastes from Lot 2 will be sent to the MRF for further processing.

Holroyd City Council requested provision for an easement for pipebridge and services be made in the Council DA to ensure that the development was still capable of operating if the owner or operator of the facilities on either Lots 2 or 34 differed in future.

The Council DA was lodged with Holroyd City Council on 20 March 2012. That application included a Statement of Environmental Effects, many supporting expert reports (including noise, odour, traffic, SEPP 33 analysis, stormwater management and arborist); various architectural, sediment control and survey plans; and a draft easement and s88B instrument for the proposed easement.

A separate application number 69 of 2012 was lodged with Holroyd City Council on 28 February 2012 for the demolition of ancillary structures on the southern side of the Building, the relocation of a fire hydrant line and the erection of 7 silos on the southern exterior of the Building (the "Silos DA"). That application was made separate to the Council DA because the silos required urgent removal from their existing location in Prestons and the silos need to be stored on foundations to avoid damage.

Particularly relevant to this modification application are the following aspects:

- A new waste water pre-treatment plant is proposed on Lot 2 for the purposes of removing the bulk of the sludge from the washlines in the plastics processing plant. Following pre-treatment, that water is proposed to pass onto the Site (Lot 34) by way of a pipebridge and be treated by the existing waste water treatment plant (WWTP) on the Site (the plant constructed pursuant to Modification 4 and 5 of the consent relating to Lot 34 and Lot 12).
- Electricity will come from the substation existing on Lot 12 DP 808195 and it, together with steam from Marubeni will be used by the plastics processing plant on Lot 2. Pre-treated waste water and steam condensate (arising from the processing) will pass from Lot 2 to Lot 34, the former for treatment in the WWTP and the latter to return to Marubeni.
- Heavy vehicle traffic is proposed to use part of the driveways on Lot 34 for the purposes of ingress and egress to Lot 2.

1.4 The Applicant

Visy is a private, Australian-owned packaging and recycling company. Its operations comprise some 130 sites and employ about 5,500 people across Australia, New Zealand

and South East Asia. Visy's core business is the manufacture of packaging products from paper, plastic, steel and aluminium. Visy collects and reprocesses more than 1.9 million tonnes of used materials a year, and processes over 1 million tonnes of plantation-grown wood fibre.

In NSW, Visy operates a number of major manufacturing and materials-handling facilities including a world-scale pulp and paper mill at Tumut, two recycled paper manufacturing plants at Smithfield, a number of box-making factories, a network of materials collection and recycling plants, and food and beverage packaging facilities.

Visy has been a signatory to the Australian Packaging Covenant (APC) since its inception in 1999 and is part of Visy's broader approach to improve the environmental and social performance of its core product ranges over a five year period. Its environment policy (which can be found on its website) includes to use natural resources responsibly and minimise the environmental impacts of their manufacturing processes, and to reduce their carbon emissions through energy efficiency and the development of clean energy technologies.

Visy is¹ one of Australia's largest manufacturers of PET containers, producing more than 2 billion PET bottles and 2.5 billion PET pre-forms in FY2010-11. In the financial year 2010/11 Visy recovered more than 1.4 million tonnes of paper and cardboard, 489,000 tonnes of glass, 67,000 tonnes of plastics and 30,000 tonnes of metals (including aluminium and steel cans) to be recycled.²

1.5 Need for development

Visy no longer operates the cardboard box making facility on Lot 2. Visy currently operates a plastics processing facility at Prestons on the outskirts of Sydney, however that facility is closing in April 2012 and Visy is required to find alternative premises for the plastics processing plant. Lot 2 being adjacent to existing recycling facilities on Lot 34 and Lot 12 enables a coordination of facilities which will be advantageous for Visy and will reduce the impact on the environment. By locating the new plastics processing plant adjacent to the existing Visy facilities at Smithfield advantages include:

- Internal transfer of recyclable material for some inputs and some unwanted outputs of the processing plant, thereby reducing transport costs and environmental impacts

¹ Visy website <http://www.visy.com.au/packaging/plastics/> 16.2.12

² Visy website <http://www.visy.com.au/recycling/about-recycling/> 16.2.12

- Use of the existing facilities such as the weighbridges and WWTP on Lot 34
- Use of steam and power from Marubeni cogeneration power station
- The ability to use Sydney Water recycled water which is accessible by Lot 2.

The existing WWTP has the capacity to treat the volume of water proposed to require treatment from the plastics processing plant and use of this facility will utilise existing infrastructure for which consent has previously been provided by the Department.

1.6 Consultation

Discussions were held with The Department on 24 November 2011 to discuss the development and to determine the appropriate approval pathway for the development. The Department advised that as the development did not meet the \$30 million threshold it would not consider the proposal under SEPP (State and Regional Development) 2011, that it will require a s75W modification application for the works to be carried out on Lot 34 DP 850596 for which the Department is the consent authority, and that approval for the works and use for the proposed plant on Lot 2 should be sought through the Council (or otherwise by the Codes SEPP).

On 7 December 2011 a meeting was held with Holroyd City Council's planning, engineering and traffic officers to discuss the project. Minutes of that meeting required various aspects to be covered, including the provision of an easement for the proposed pipebridge.

Council also suggested that if the Applicant thought that the plastics processing plant proposal was not designated development legal advice to that effect should be provided to it. Following provision of that advice to Council, discussions were held with the Department (as requested by Council). On 12 March 2012 Holroyd City Council advised the Applicant's planners that "Council is of the view the proposed activity could be considered as a manufacturing facility for the production of PET and HDPE pellets, rather than waste management facilities or works, and accordingly, the proposal would not be designated development."

The Applicant has discussed the proposal with the EPA regarding any changes required to the Environment Protection Licence applying to the Site. The EPA advised that they would discuss any amendments necessary to the licence if consent was obtained.

2. Proposed Development

2. Proposed Development

2.1 General Description

Plans and setting out the proposed works and traffic flows are provided with the application as are the relevant survey diagrams.

2.2 Services Provision

2.2.1 Pipebridge

Construction of a services pipebridge on Lot 34 is proposed to provide the following services for the new plastics processing facility:

- Steam Power to the facility from Marubeni taken from a connection on an existing pipebridge on Lot 34
- Electrical services to the facility taken from the existing substation on Lot 12
- Transfer of waste water from the processes on Lot 2 following pre-treatment on Lot 2 to the existing WWTP on Lot 34.
- Return steam condensate to Marubeni at the connection on the existing pipebridge on Lot 34.

The proposed route of the pipebridge is from the south east corner of the Building on Lot 2, across the existing roadway which provides access to Lot 34 and Lot 12, just inside the northern boundary of Lot 34 DP 850596 (immediately south of Marubeni). The pipebridge will connect to Marubeni via an existing pipebridge which extends south from Marubeni to facilities on Lot 34 and Lot 12. A pipebridge extension will connect the existing pipebridge to the WWTP.

The new pipebridge will extend over two internal roadways - one immediately to the south of the Building and one over the main access road to Lots 34 and Lot 12. The minimum height clearance over the roadway on Lot 34 will be 6.75m.

The pipebridge from the Building to the existing pipebridge on Lot 34 will include:

- 2 x 150mm electrical cable trays
- 2 x 100mm diameter water pipes
- 1 x 150mm diameter steam pipe
- 1 x 100 diameter spare pipe

The existing pipebridge running north / south on Lot 34 will be modified to support the following additional pipework:

- 2 x 150mm electrical cable trays
- 2 x 100mm diameter water pipes
- 1 x 100mm spare pipe

The extension of the pipebridge to the WWTP from the existing pipebridge will support 1 x 100mm diameter water pipe.

Consideration of the existing services and easements has been made regarding placement of the footings and route of the pipebridge. Footings will be outside the existing easements along the boundary between Lot 2 and Lot 34.

The pipebridge will be of a structural steel frame construction with reinforced concrete footings.

This application seeks consent for the pipebridge works to be carried out on the Site. The Council DA sought approval for all pipebridge works to be carried out on Lot 2.

2.2.2 Easement for Services

An easement for services is proposed to be created over Lot 2 DP 849480 and Lot 34 DP 850596. A draft survey of that easement and draft s88B instrument is attached as **Appendix B** and has been drafted in consultation with Visy's property section.

2.2.3 Waste water pre-treatment plant on Lot 2

The Council DA includes a proposal to construct a new waste water pre-treatment plant of 240m³ capacity to the south east of the Building on Lot 2 near the proposed pipebridge. The plant will remove solids, before the water is piped via the pipebridge to the existing WWTP on Lot 34. The pretreatment plant will be connected to the output of the PET and HDPE washline equipment plant to pretreat the effluent.

Following pre-treatment the water will be pumped to a holding/storage tank and then pumped over the pipebridge to the WWTP on Lot 34 for treatment and ultimate discharge to the sewer.

Water samples from the existing plastic processing facility at Prestons operated by the Applicant with the same raw plastic material input as the proposed plastics plant

demonstrate partial test results and the flow rate as set out in **Table 1**. **Table 1** also identifies the required treatment levels as an input into the existing WWTP on Lot 34.

Based on the information presented in **Table 1** the pre-treatment plant has to control:

- pH. This is done by pH adjustment using hydrochloric acid.
- temperature (this will be by heat exchangers if the temperature is not reduced sufficiently by the inflow of cool water into the system)
- total suspended solids by using a kind of clarifier. The pretreatment plant includes a dissolved air floatation (DAF) plant to reduce COD, BOD and suspended solids and other contaminants.

Table 1 Preliminary effluent input water quality and flow

Parameters	Units	Raw Effluent from Prestons	Input to VISY Existing WWTP		
			Minimum	Optimum	Maximum
Flow (actual for the new plant)	L/hr	8,500.00	8,500.00		
	L/day	204,000.00	204,000.00		
	m ³ /hr	8.50	8.50		
	m ³ /day	204.00	204.00		
Temperature	°C	65	<38		
COD	mg/L	5840	6,000	8,000	12,000
BOD	mg/L	1190	3,261	4,348	6,522
TSS	mg/L	2000	0	200	350
Turbidity	NTU	3110	N/A	N/A	N/A
TDS	mg/L	7320	N/A	N/A	N/A
Chlorides	mg/L	76	N/A	N/A	N/A
Sulphate	mg/L	25	N/A	N/A	N/A
Oil & Grease	mg/L	358	N/A	N/A	N/A
pH		12.2	5.2	5.8	6.2
Calcium	mg/L	16	50	800	1,000
VFA	mg/L	392	1,750	2,500	3,500

The proposed pre-treatment plant will include all the associated pumps, pipes, tanks, instrumentation for communicating with the WWTP control system on Lot 34.

The WWTP on Lot 34 was the subject of a modification application to the Department approved on 18 November 2007. A subsequent modification application relocated the plant slightly to the east. In granting consent the Department took into consideration the potential noise and odour impacts of that WWTP. The waste products of the WWTP were considered to be dealt with in a satisfactory manner and it determined that a preliminary hazard analysis was not necessary. The WWTP was deemed necessary

because Sydney Water updated the requirements of biological oxygen demand in the water to be discharged to the sewer.

The existing WWTP on Lot 34 has a capacity of 2 mega litres per day. The operations on Lot 34 and Lot 12 currently use 1.4-1.6 mega litres per day. If the plastics processing plant were to run at its highest capacity, the pretreatment plant would send 10 m³/hour to the WWTP. This constitutes 240 m³/day or 0.25 mega litres per day. The WWTP therefore has sufficient capacity to treat the waste water from the plastics processing plant. During emergency operations around 20-30m³/hour could be processed by the pre-treatment plant, but it is clear that the WWTP will retain sufficient capacity to process this volume in emergency situations as well.

2.3 Heavy vehicle traffic circulation

Intersection Analysis

A traffic report was conducted by Traffix and is set out in **Appendix C**. That report undertook traffic counts to analyse the impacts on the intersection of Herbert Place and the Cumberland Highway, and provided plans for amending the traffic routes around Lot 2 and Lot 34.

Section 5.4 of the Traffix report indicates the number of anticipated truck and car movements per day accessing the road network are estimated at 134 trips per day for staff and 33 truck movements per day. Although it is estimated that the number of trucks accessing Lot 2 per day will be approximately 30 (of which 10 will be B-Doubles and 20 will be articulated vehicles), of these only 16.5 will be accessing the road network and utilizing the turnaround bay on Lot 34, as approximately 13.5 will come directly from or to the MRF on Lot 34.

The existing performance of the Cumberland Highway and Herbert Place intersection is set out in **Table 2**. Analysis of the traffic arising from the Council DA proposal indicates exactly the same results save the intersection delay in the morning is 39.1.

Table 2 Performance of the Intersection of Cumberland Hwy and Herbert Place

Period	Degree of Saturation	Intersection Delay	Level of Service
AM	0.946	39.0 **	C
PM	1.0000	46.4	D

**39.1 during operations of the plastics processing facility

Truck Circulation

The Traffix report includes analysis of swept turning paths (and electronic copies of this are provided with the application). **Figure 3** demonstrates the proposed truck movements of the proposal in the Council DA. Trucks will enter through the main entrance, pass over the weighbridge and then turn around on Lot 34 before entering Lot 2 through the south east corner. Those delivering bales of feedstock will head north under the eastern awning to unload at the conveyor system under the awning, before turning around in the slightly extended pavement area to the north of the awning. Trucks delivering and removing the shipping containers of waste located to the east of the eastern awning on Lot 2 will use the same route. Trucks coming to load the finished product will veer along the southern internal roadway, turn under the existing southern awning and then load from the silos immediately to the south of the Building. Both heavy vehicle traffic streams will proceed to the turn-around bay on Lot 34 and exit over the weighbridge which is on Lot 2's eastern boundary to Herbert Place.

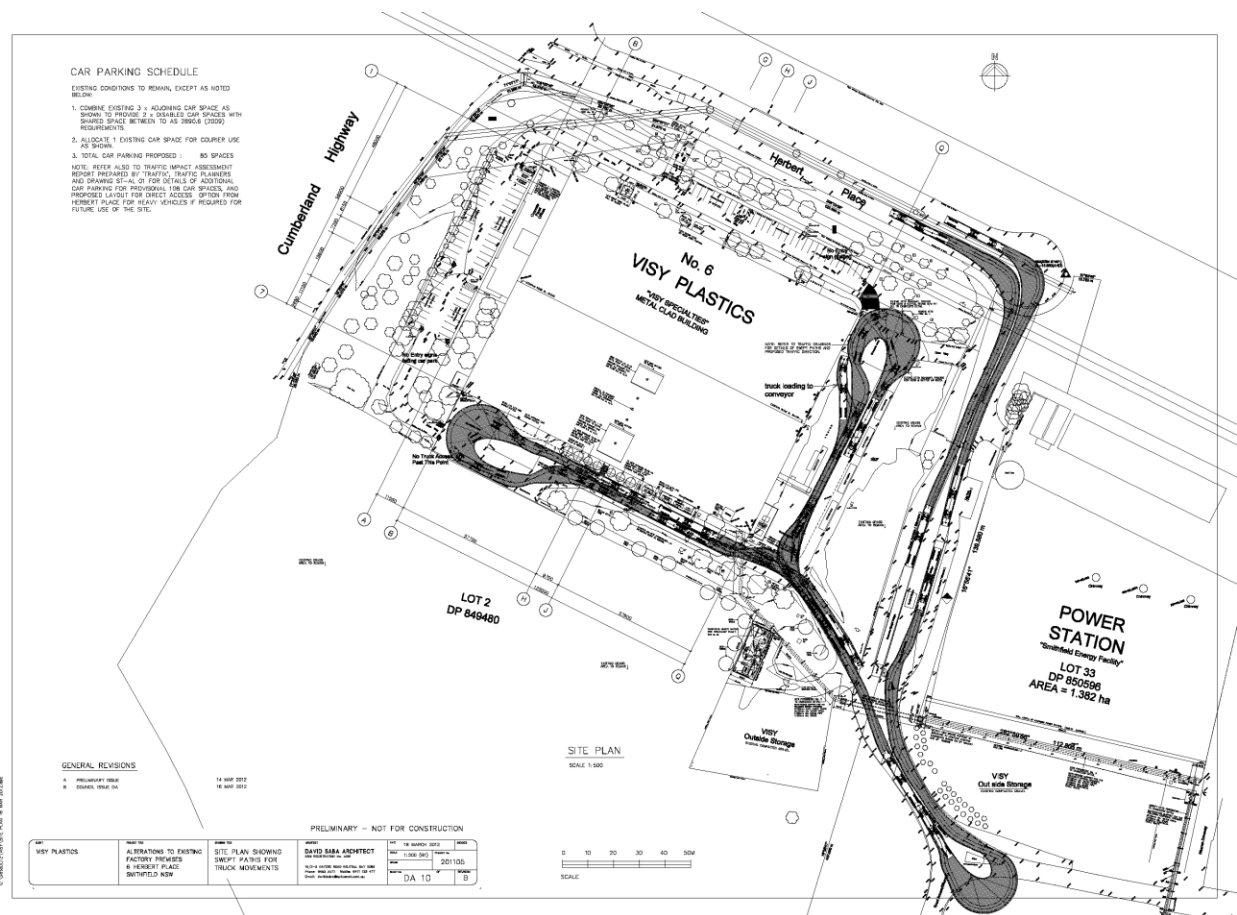


Figure 3 Proposed truck movements

The construction noise report set out in Appendix E and discussed in section 4.1 below identifies that about 10 heavy vehicles per day will access the Site during construction. Observations of traffic at Lot 34 and Lot 12 indicate that between about 300-350 trucks per day enter and the same number leave per day. The impact arising from an additional 10 trucks per day is unlikely to make any measureable difference to the traffic flow around the site. The construction of the pipebridge is mainly on land which is currently not accessed by traffic (immediately adjacent to Marubeni). The pipebridge is to be constructed off site and so it will be put together on site. It is therefore not considered likely that the construction of the pipebridge will impact detrimentally on the existing operations on Lot 34 and Lot 12.

2.4 Construction Time Frame and staging

It is hoped that the pipebridge will be constructed to a stage that connections to the existing pipebridge on Lot 34 can be made during the scheduled shutdown in July 2012. The plastics processing plant's planned commencement of full production is in November 2012.

2.5 Anticipated Employment from the development

Anticipated employment during the pipebridge construction is approximately 8 people.

2.6 Cost

The estimated cost for the purposes of regulation 255 of the EP & A Regulations is \$1,680,000.

2.7 Suitability of the Site for the Proposal

The Site is zoned 4(a) Industrial General under the Holroyd LEP and general industrial IN1 under the draft LEP. The Site is within an industrial area and is adjacent to other facilities owned and operated by Visy. There are environmental efficiencies by enabling the plastics processing plant to utilize the WWTP on Lot 34 as it will use approved infrastructure which has already been environmentally assessed and has the capacity

to process the water from the proposed plastics processing plant. The pipebridge will enable the pretreated water to be efficiently transported to the WWTP.

The pipebridge provides a minimum height above the internal roadway of 6.75m so will not interfere with existing traffic and operations. It is sited adjacent to the Marubeni power station so its visual impact will be minimal.

3. Planning Requirements

3. Planning Requirements

3.1 Environmental Planning & Assessment Act 1979

The existing approval over the Site was made pursuant to *SEPP 34 – Major Employment Generating Industrial Development*. Clause 8J(8) of the *EP & A Regulations 2000* indicates that modification applications made under that SEPP are to be made by lodging a s75W modification application (as previously applied) under the *EP & A Act*.

3.2 SEPP 55 Remediation of Land

SEPP 55 – Remediation of Land provides statewide planning controls for the remediation of contaminated land. A search of the Office of Environment and Heritage website on 22 November 2011 for notices under the *Contaminated Land Management Act 1997* does not identify any notices relating to the Site set out in section 58 of the Act, nor is the Site listed on the List of Sites notified to the Office of Environment and Heritage.

A search of the *Protection of the Environment Operations Act* register on 22 November 2011 for notices does not indicate any notices have been issued in respect of the Site. Clause 42 of the *Holroyd LEP 1991* identifies certain lands requiring remediation before development can be carried out. The Site is not included in that list.

3.3 Holroyd Local Environmental Plan

The Holroyd LEP 1991 applies to the land by virtue of section 79C of the *EP & A Act*. The LEP zones the Site 4(a) Industrial General zone, relevant objectives of which include:

- (a) *to encourage the development and expansion of a wide range of industrial activities which will contribute to the economic growth of, and create employment opportunities within, the City of Holroyd,*
- (b) *to ensure that industrial development creates areas which are pleasant to work in, and safe and efficient in terms of transportation, land utilisation and services distribution, and....*

Only uses which the consent authority is satisfied are generally consistent with one or more of the zone objectives are permissible within this zone. The use of the Site is compatible with the zone objectives identified above because the pipebridge facilitates the expansion of the range of industrial activities being carried on in the LGA by the efficient use of existing water treatment facilities.

The Site is not identified in clause 42 of the LEP as requiring remediation, nor is there anything listed as a heritage item under schedule 1. The proposal does not fall within clause 10 of the LEP requiring advertisement.

Clause 41 places restrictions on land identified as Acid Sulfate Soils. The Acid Sulfate Soils map exhibited as part of the draft LEP does not identify the Site as being with a class for acid sulfate soils.

3.4 Draft Holroyd Local Environmental Plan 2011

The public exhibition of the draft Holroyd LEP 2011 closed on 17 December 2010 with changes exhibited between 13 July to 31 August 2011. The draft Holroyd LEP identifies the Site as being in the IN1 General Industrial zone, the objectives of which are:

- To provide a wide range of industrial and warehouse land uses.
- To encourage employment opportunities.
- To minimise any adverse effect of industry on other land uses.
- To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.

The construction of the pipebridge facilitates the expansion of the industrial uses and using existing water treatment facilities minimizes adverse environmental effects.

Clause 2.6C includes provisions for earthworks and requires consent for those earthworks unless the Council decides they are minor or unless they are exempt under the Codes SEPP. Earthworks are required for the construction of foundations and footings of the pipebridge. Sediment control plans are attached to the application.

Clause 4.3 of the draft LEP requires that the heights of buildings not exceed the heights noted on the building heights map exhibited with the draft. The height of buildings map does not identify any maximum building height for the Site. Additionally there are no heritage items or relevant areas identified in the land acquisition map.

Clause 6.1 relating to flood planning would not apply as the proposed works are above the defined flood planning level.

Clause 6.2 relates to stormwater. A stormwater assessment has been conducted by Storm Consulting relating to the plastics processing plant and was included in the Council DA. It concluded that there will not be any adverse impact on the existing stormwater system. The erection of the pipebridge is highly unlikely to affect either stormwater or flooding impacts in the area given the small footprint of the footings.

3.5 Holroyd Development Control Plan 2007

The DCP applies to all development proposals within Holroyd City Council LGA. Part A sets out various matters relating to the majority of developments including car parking, access, landscaping, erosion and sediment, waste management, services, water management. Part D considers provisions specific to industrial development including building lines, landscaping, construction and building details, pollution controls, factory units, and flood liable land. Objectives are included which should be complied with in the design of development.

General compliance with the provisions of the DCP is achieved by this modification.

3.6 Draft Holroyd Development Control Plan 2007

A draft DCP was exhibited and closed for exhibition on 17 December 2010. Part A of the Draft DCP deals with relevant matters such as car parking, landscaping, biodiversity, soil management, stormwater management, flood prone land, safety and security and waste management. Part D deals with similar matters to that part in the existing DCP.

General compliance with the provisions of the draft DCP is achieved save in respect of:

- overland flows issues (which are being dealt with concurrent to this application directly with Holroyd City Council); and
- it is proposed to stockpile soil from Lot 2 from excavation during construction on Lot 34. The plans attached to this application indicate sediment and erosion control procedures to minimise environmental impacts from that stockpiling during construction.

3.7 Protection of the Environment Operations Act 1997

Environmental Protection Licence (EPL) No. 4100 set out in **Appendix D** operates over the Site to licence a paper and pulp operation. Most relevantly to the Site it contains noise criteria for the whole of the lands under the EPL. Discussions with the EPA have indicated this EPL will be reviewed if consent for this application is obtained.

3.8 Further approvals

The site is owned by McCredie Road Properties Pty Limited ABN 90 005 258 284.

4. Environmental impact assessment

4. Environmental Impact Assessment

4.1 Noise

The Site is controlled by EPL 4100 which specifies noise level limits as set out in **Table 3**. 5dB(A) must be added to the measured noise levels if the noise is substantially tonal or impulsive in character.

Table 3 Noise limits set under Environment Protection Licence 4100

Receiver Site	LA _{10(15 min)} 7.00am-10.00pm 7 days	LA _{10 (15 min)} all other times
Within one metre of any residential boundary at Cooper Crescent, Solo Crescent, Granville Street and Alt Street, Fairfield.	53 dB(A)	43dB(A)
within one metre of any residential boundary at Kiola Street, Fairfield	51 dB(A)	41dB(A)
within one metre of the western plant boundary	70 dB(A)	65dB(A)

Consideration of the operational noise was provided in the Council DA with the conclusion that the noise limits could be met provided insulation was included around cooling towers and on the underside of the eastern awning on Lot 2. This assessment included consideration of the truck movements around Lot 2 and Lot 34.

AECOM undertook an assessment of construction noise and vibration impact to assess the potential for adverse environmental impacts. This report is attached to this report in **Appendix E**. The report considered the construction activities proposed for the Council DA, the Silo DA and this modification. The pipebridge works are referenced in section 2.2.5 of that report. Proposed construction hours are Monday to Friday 7am to 6pm and Saturday 8am to 1pm.

The report indicates that given the sensitive receivers are approximately 350 metres from the proposed development the risk of discomfort, regenerated noise and structural damage from vibration is extremely low, and the risk from additional traffic during construction is insignificant due to the small number of heavy vehicles likely to additionally access the Site during construction (approximately 10 per day).

A qualitative noise assessment was conducted given the construction period and distance to the sensitive receivers. Using predicted sound power levels at the sensitive

receivers, the maximum construction noise levels for the development on both Lot 2 and lot 34 at the sensitive receivers was 51dB(A). Given the current measured ambient noise levels of between 48-63 dB(A) the predicted construction noise of 35-51dB(A) at the sensitive receivers will be similar to or below the current ambient noise levels. Traffic noise was considered inconsequential. Hence the construction works would be unlikely to impact significantly on nearby sensitive receivers.

The report provides mitigation measures including:

- Limiting construction hours to standard hours
- Standard mitigation measures such as turning off machinery when not in use, using smaller capacity machinery where possible, avoiding coincidence of noisy machinery, locating noisy plant away from sensitive receivers etc
- Avoidance of noisy truck movements such as reversing, compression braking, high speeds etc
- Management of reversing alarms
- Notification of affected residents

4.2 Hydraulics, stormwater and flooding

The Site is predominantly flat. Prospect Creek is to the south of the Site and the land slopes gradually to the creek line. There is no evidence of erosion on the Site. Easements to drain water affect Lot 34 DP 850596 for the benefit of Holroyd City Council and also Lot 33. The Site is unaffected by a 100 year flood.

The Holroyd DCP provides in Part A section 8.0 for an erosion and sedimentation control plan and for water management in section 11.0 of Part A – including on site detention systems and hydraulic analysis. The Draft DCP provides in Part A for stormwater management and flood prone land in sections 7 and 8 respectively.

Holroyd City Council has made a request in the pre-lodgment advice of the Council DA that overland flow paths be analysed. Council has agreed that this analysis may be done whilst assessment of the Council DA is progressing. It is felt that the impact of the construction of the pipebridge on the hydraulic capacity of the Site is likely to be so minimal as to not require consideration in this modification application.

Erosion and sediment control

The sediment control plans accompanying this application show the sediment control devices proposed during the construction works to ensure there is effective sediment

control, and infiltration into the stormwater system is minimized. The plans demonstrate the proposed use of sedimentation fencing around the parts of the Site, including the proposed stockpile areas, and straw bales protection around the stormwater pits. These controls would be put in place prior to the commencement of construction works and regularly maintained to remove accumulated sediment.

Stabilised access roads over the area immediately to the south of the proposed pipebridge on Lot 34 made of compacted 30-60mm aggregate will be constructed for temporary use during construction to limit sedimentation flow across the Site.

4.3 Traffic

Section 2.3 of this Environmental Assessment considers the impacts from the proposal to turn vehicles around on Lot 34.

4.4 Waste

During construction some waste will result from excavation for the pipebridge footings and foundations. Twelve column foundations will be dug and foundations for the major road bridge will also occur on the Site. Each foundation is anticipated to require 10m deep x 900mm diameter excavations producing approximately 75m³ of excess soil which will be sent to Kurnell Recycling or other landfill. The Applicant proposes to construct the pipebridge off the Site, reducing the amount of waste coming to the Site.

4.5 Social and Community Impact

No specific community consultation has been conducted for the proposed pipebridge. The noise impacts of construction of the pipebridge are satisfactorily addressed by the construction noise report. The volume of trucks which will be added to the existing truck movements on the Site is very small when compared to the existing traffic, and the noise impacts have been included in the assessment of noise impacts for the Council DA and found to satisfy the required noise limits of the EPL.

Given the position of the Site within an existing industrial area, the position of the pipebridge a significant distance from the residences, the relatively small changes to

the external appearance of Site and the low environmental impacts from traffic, noise, and visual impacts it was not felt necessary to undertake any surveys of community groups.

4.6 Visual

The Site is located within a large industrial area of Smithfield along the very busy Cumberland Highway. Large buildings dominate the immediate environment. The Marubeni power station has very tall chimneys which dominate the skyline in the immediate area of the Site. Those chimneys are shown on the survey and site plan at approximately RR 58 whereas the pipebridge will be at approximately RL26, approximately 5 metres lower than the Marubeni wall to its immediate north. There are only relatively small glimpses of the Site from the Cumberland Highway.

The proposed pipebridge will not be visible from the residences across Prospect Creek. There is dense vegetation along Prospect Creek between the houses and the Site as shown in **Figure 4** and the pipebridge will not be visible from the houses.



Figure 4 View looking north across Prospect Creek from Low Street Smithfield

The pipebridge will cross the existing driveway into the Visy site to the south of the weighbridges. **Figure 5** shows those weighbridges from the entrance point on Herbert Place.



Figure 5 Entrance Driveway to Lot 34 from Herbert Place

4.7 Odour

No odour or air emissions are anticipated from the operation of the pipebridge, and those matters are considered in the Council DA in respect of the proposed plastics processing plant.

The WWTP was approved by the Department in 2007 during which an odour assessment was made using worst case sources of odour. Benbow Environmental have reviewed the proposal and advised in **Appendix F** that there would be minimal increase in ground level odour concentrations caused by the increase in flows to the WWTP from the waste water pretreatment plant on Lot 2.

4.8 Other

No trees will be affected by the construction of the pipebridge on Lot 34. No measureable flooding impacts from the construction of the pipebridge are likely to occur, particularly as the Site is above the 100 year flood level. No chemicals will be

store on the Site by virtue of the construction of the pipebridge. There are no heritage items on the Site or in the vicinity of the Site.

4.9 Alternative Options

Alternatives to the pipebridge would be to pipe the services underground. This would not only be expensive, but could also conflict with the existing easements on the boundary of Lots 2 and 34. Were no services to be provided between Lot 34 and Lot 2, the proposed plastics plant would be required to install a waste water treatment plant on Lot 2 of a similar nature to that existing already on Lot 34, despite the existing WWTP having the capacity to process the waste water from Lot 2. The plastics processing plant would also be unable to take advantage of the steam from Marubeni and upgraded connections to electricity from Herbert Place would be required. The plastics processing facility is aiming to take advantage of existing infrastructure on the adjoining Lot 34 and Lot 12 as a way of minimising the environmental impacts of the plant. The pipebridge is integral to that aim.

5. CONCLUSION

5. Conclusion

The modification application seeks consent for the construction of a pipebridge on Lot 34 to facilitate the efficient use of services and infrastructure between Lots 2 and Lot 34 which are under the same ownership. Examination of the noise, waste and sediment control during construction, the traffic implications and visual impact has indicated that there will be no significant environmental effects from the construction of the pipebridge.

Consideration of the increase in water flow to the WWTP indicates that there would be minimal increase in odour concentration at ground level arising from additional water coming from the waste water pre-treatment plant on Lot 2.

The proposal meets the LEP and draft LEP provisions and largely meets the DCP and draft DCP provisions of Holroyd City Council.

Having regard to topography and local meteorological conditions, there is nothing in the proposal likely to significantly affect the amenity of the neighbourhood by reason of noise, visual impacts, air pollution (including odour, smoke, fumes or dust), vermin or traffic. There is nothing which should preclude the approval of the proposal on environmental or planning grounds.