



Department of
Infrastructure, Planning and Natural Resources

**REPORT ON THE ASSESSMENT OF
DEVELOPMENT APPLICATION NO DA-318-12-2004-i
PURSUANT TO SECTION 80 OF THE ENVIRONMENTAL PLANNING AND
ASSESSMENT ACT, 1979**

**PROPOSAL BY ALLIED MILLS PTY LTD TO CONSTRUCT AND
OPERATE A FLOUR AND MAIZE MIL, 330 PICTON ROAD, LOT 32DP
431013, MALDON IN THE WOLLONDILLY LOCAL GOVERNMENT AREA**

Department of Infrastructure, Planning and Natural Resources

July 2005

EXECUTIVE SUMMARY

On 23 December 2004, the Department of Infrastructure, Planning and Natural Resources (the Department) received a development application from Allied Mills Pty Ltd (the Applicant) to construct and operate a flour and maize mill at Maldon.

The proposal would replace the existing flour mill at Summer Hill, in Sydney, and transfer maize milling from Albury. The proposal would have a capacity to mill approximately 300,000 tonnes per annum of grain and includes:

- The construction and operation of the mill and its ancillary facilities including silos, bulk storage, grain handling, rail handling, loading and unloading facilities, office administration;
- an 800 metre long double rail siding with shunting and turn back facilities;
- a new access road connecting to Picton Road via a new intersection;
- use of treated sewage effluent generated at the site for irrigation on the site; and
- landscaping, creation of a riparian zone surrounding a major watercourse at the site, and realignment of a minor watercourse at the site for stormwater management.

The proposed site is located approximately 500 metres east of the Blue Circle Southern Cement Works, on vacant industrially zoned land. Apart from the Cement Works, surrounding land uses are generally of a rural and/ or residential nature. The site is located at a narrowing of the Main Southern Railway line, and Picton Road. Picton Road provides direct access to the Hume Highway, and the major regional road system.

The proposal is expected to employ approximately 27 people during operation and up to 200 during construction, with a total capital expenditure of approximately \$75 million.

The proposal is a State significant development because it is a type of development (food processing) listed in Schedule 1 of *State Environmental Planning Policy No. 34 – Major Employment Generating Industrial Development*, and involves a capital investment in excess of \$20 million (being \$75 million for this development). The Minister administering the *Environmental Planning and Assessment Act 1979* (Minister for Infrastructure and Planning) is the consent authority for State significant development.

The proposed development is designated development and accordingly, an Environmental Impact Statement accompanied the DA. The proposal is also for integrated development as additional approvals are required from Wollondilly Council (with the concurrence of the Roads and Traffic Authority, the Department, the Mine Subsidence Board and the Department of Environment and Conservation. These agencies have been consulted during the assessment of the proposal.

The DA and EIS were publicly exhibited from 19 January 2005 until 21 February 2005 and a total of nine submissions were received, five being from the local community, of which three objected to the proposal. The Australian Rail Track Corporation raised concerns regarding drainage and surface water impact, and Council raised concerns regarding traffic impacts and strategic planning issues. No agency, or Council, objected to the proposal.

The Department recommends approval of the proposed development, subject to conditions. The conditions of the recommended instrument of consent impose appropriate measures to ensure environmental impacts are mitigated and managed throughout the life of the development, and where relevant, incorporates the general terms of approval from the appropriate integrated agency.

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1. INTRODUCTION

On 23 December 2004, the Department of Infrastructure, Planning and Natural Resources (the Department) received a development application from Allied Mills Pty Ltd (the Applicant) to construct and operate a flour and maize mill at Maldon.

The proposal would replace the existing flour mill at Summer Hill, in Sydney, and transfer maize milling from Albury. The proposal would have a capacity to mill approximately 300,000 tonnes per annum of grain and would be operated 24 hours a day, seven days a week. The proposal includes:

- the construction and operation of the mill and its ancillary facilities including silos, bulk storage, grain handling, rail handling, loading and unloading facilities, office administration;
- an 800 metre long double rail siding with shunting and turn back facilities;
- a new access road connecting to Picton Road via a new intersection;
- use of treated sewage effluent generated at the site for irrigation on the site; and
- landscaping, creation of a riparian zone surrounding a major watercourse at the site, and realignment of a minor watercourse at the site for stormwater management.

The proposal would employ 27 people once operational, (18 shift workers, and 9 day-time office workers).

The proposed development is proposed to be located on land bounded by Picton Road to the north, and the great Southern Railway line to the south, with agricultural land (containing residential properties) to the east and west. Approximately 500 metres to the west of the proposed site is the existing Blue Circle Southern Maldon Cement Works.

This report represents the Department's assessment of the proposed development, in accordance with the *Environmental Planning and Assessment Act 1979*. The Department has assessed the development application and determined that the development could be constructed and operated within appropriate environmental limits. If the Minister agrees, the Department recommends the imposition of conditions as per the draft instrument of consent. It is considered that the conditions of the recommended instrument of consent impose appropriate measures to ensure the environmental impacts associated with the proposed development are adequately managed, mitigated and monitored.

2. DEVELOPMENT PROPOSAL AND SITE CONTEXT

2.1 Site Location and Description

The proposed development site is Lot 32 DP 731012, located at 330 Picton Road, Maldon, in the Picton local government area. Figure 1 illustrates the location of the proposed site within the regional context.

The site is bounded by the Main Southern Railway line to the south, and Picton Road to the north. The eastern and western boundaries are shared with adjacent rural/residential properties, which are currently zoned rural. Further to the south of the site, beyond the railway line, is rural zoned land which is currently undeveloped, and consists of pasture and woodland. The woodland extends to the Nepean River. Approximately 500 metres to the west of the western boundary of the site is the existing Blue Circle Southern Maldon Cement Works. Figure 2 illustrates the local setting of the proposed site.

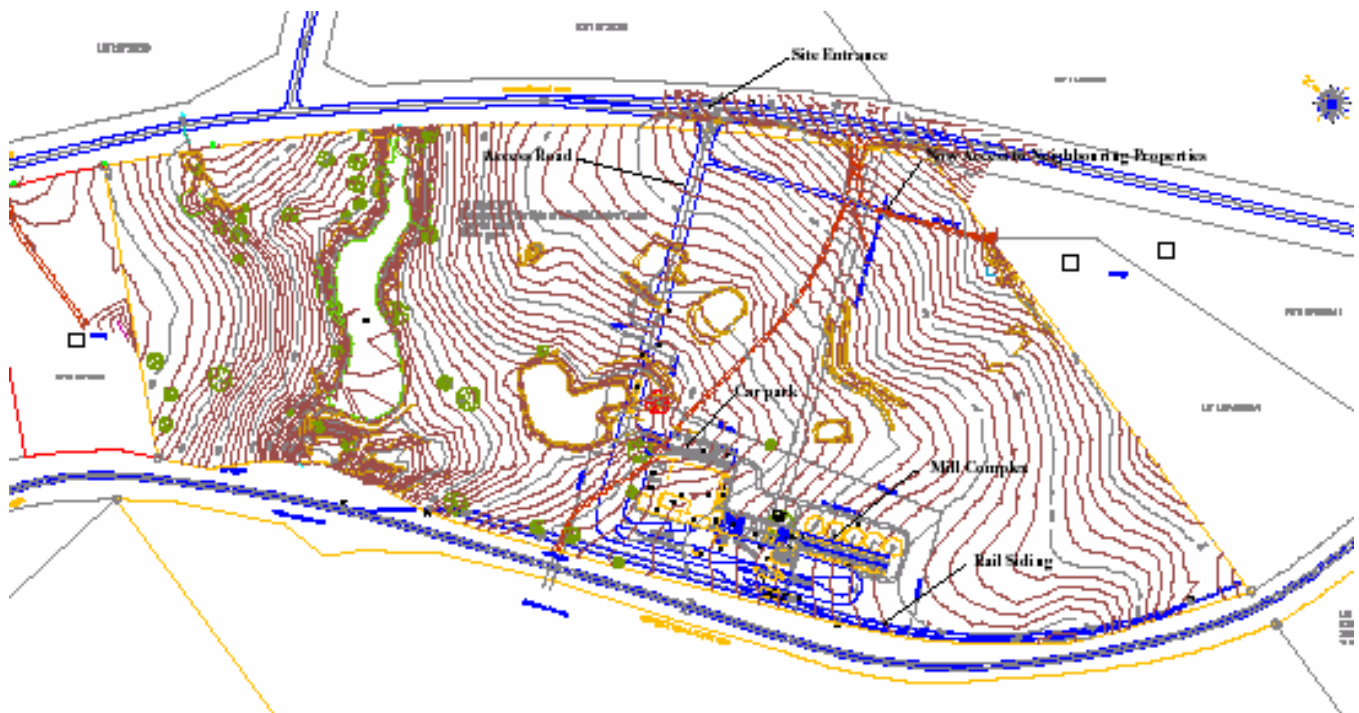
Figure 1(a): Regional setting of the proposed site.



Figure 2: Local setting of the proposed site.



Figure 3: Site layout for the proposed mill



The total site area is 24 hectares, with a gently undulating topography. The land is built up near the railway bridge, and a tributary of Carriage Creek runs through the site in a north-south direction. The creek passes under Picton Road near the Menangle Road intersection and under the railway line to the south. Creek widens within the site to create a large water body. Two smaller water bodies are also located at the site. The Applicant proposes to revegetate and rehabilitate the land surrounding the larger watercourse, while the smaller watercourses would be realigned for drainage purposes.

The land the subject of the development application has been largely used for low intensity agricultural purposes, and remains undeveloped. The Applicant proposes to construct the mill on the southern edge of the site, immediately adjacent to the railway line, where the proposed railway sidings would be located. Figure 3 illustrates the location of the proposed mill development area at the site.

The closest rural-residential properties are located immediately to the east of the site, with dwellings approximately 250 metres from the proposed mill buildings and silos. There is also a private property to the immediate west of the site, the existing building being approximately 500 metres from the proposed mill area. There are a number of residences to the northeast and northwest of the proposed site. To the northwest, the dwellings are between approximately 700 and 900 metres from the proposed development area, while to the north and northeast, dwellings range from 1000 to 1200 metres from the proposed mill buildings. There is also a residence to the north of the site located adjacent to the Ingham's Chickens site approximately 700 metres from the proposed mill. Due to the lay of the land, gently rising to the north of the site, dwellings have an altitude similar or slightly higher (up to 15 metres) than the proposed mill area. The more distant dwellings are up to 40 metre above the level of the land proposed for the mill.

2.2 Outline of the Proposal

The Development

The proposed milling facility includes silos, bulk storage, grain handling, rail handling, loading and unloading facilities, office administration building and ancillary on-site facilities. In addition to the mill, the Applicant proposes to construct an 800-metre long double rail siding with shunting and turn-back facilities, an access road connecting the proposed development to Picton Road, and landscaping and stormwater works. The form and layout of the proposed facility is illustrated in Figure 3.

The grain (wheat and maize) intake for the facility would be via rail. While the facility would have the capability to receive grain via road, it would only be used as a contingency to cover events that may affect the rail network. The facility would accept one train per day, hauling forty 55-tonne wagons with a total length of 640 metres. The intake facility would accommodate approximately 300,000 tonnes per annum of grain. Grain would be received directly from the train into an underground intake pit, and transported to bulk storage pits via underground conduits. Grain would be generally stored at the site in a series of silos.

Pre-cleaning of the grain involves screening to remove metal and other impurities, and drawing air through the grain to extract light impurities. As part of the cleaning process, water is sprayed onto the grain.

Wheat and maize would be processed by separate specialist milling technology. Wheat based products such as fine low ash flour, baker's flour, biscuit flour, wheat semolina, general purpose flour, noodle and wholemeal flours would be produced in the wheat mill.

Maize milling would be designed primarily for the production of flaking grits, semolinas, polenta and residual maize flour. Milled product would be stored separately at the facility in a series of bins.

Approximately 20-40% of the finished product would be dispatched in bags loaded into pallets. The remaining product would be dispatched by tankers, approximately 25-30 per day. All dispatch would be via the road network. The only by-product of the milling operations is the grain husks, which would be stored at the site, prior to dispatch to an off-site pellet mill, to be turned into animal feed. Bag packing, and palletting of bags, would be undertaken by a largely automated system, and would require 24-hour operations.

Employment and Timing

The mill would be operated 24 hours per day, by employees working in three shifts. Each shift would have six employees. In addition to this, the development would employ nine permanent day-time office workers.

The construction period for the mill is estimated to be 15 months, with between 20 and 200 employees depending on the phase of construction. Construction hours would generally be 7:00 am to 6:00 pm Monday to Friday, and 7:00 am to 1:00 pm on Saturdays. However, in addition to these times, the Applicant highlights that there would be up to five separate periods of 8-13 days where continuous concrete pouring would be required. This would require night-time activities during these periods.

The Applicant proposes to construct the rail spur during the same period as railway closures are required by RailCorp for maintenance and repairs. As such, there are unlikely to be any additional rail service interruptions required for the project.

Utilities, Traffic and Ancillary Development

Ancillary components of the development include:

- a small on-site laboratory, for testing the physical properties of raw materials and finished products;
- a control centre area;
- a maintenance area; and an administrative office area; and
- revegetation and rehabilitation of an existing watercourse, and realignment of two other ephemeral watercourses.

As the site is not connected to existing sewerage services, and the timing of any such connection is uncertain, the Applicant proposes to construct an on-site sewerage treatment plant to handle the effluent generated by employees at the development. The proposed treatment plant would provide treated effluent for on-site irrigation.

Electricity supply for the site would be by direct 11 kV connection to the existing Maldon substation (located approximately 300 metres west of the western boundary of the site). The Applicant specifies that Integral Energy would ensure that the substation would be upgraded to accommodate the addition service. While the location of the line would be the subject of Integral Energy's planning and detailed design, the Applicant highlights that the line is likely to be laid underground between the substation and the site, and thereafter potentially underground or above ground. To service the predicted 115.5 kL per day water usage, the Applicant indicates that the existing Sydney Water Picton water mains would be required to be upgraded from a 100 mm pipe to a 150 mm pipe for approximately 905 metres.

As mentioned above, the Applicant proposes to construct an 800-metre long double rail spur off the Main Southern Railway line. The spur would run parallel to the line, and would be able to accommodate train lengths of approximately 640 metres.

The Applicant proposes to construct a 400-metre long, 8-metre wide, access road connecting directly to Picton Road. The existing site access (near the northeast of the site), which also provides access to the adjacent properties, would be closed and access to these properties would be by a new spur from the access road. The existing access to these properties would be closed and revegetated, however would be retained for pedestrian access.

The Applicant estimates that the proposal would generate approximately 33 truck trips per day, and approximately 55-60 car trips per day. The Applicant proposes to provide a total of 40 car parking spaces and service vehicle bays to accommodate 12 heavy freight vehicles.

Construction traffic is estimated to generate approximately 400 cars per day during the peak for employees. Concrete, formwork and reinforcement would be delivered to the site regularly, with typical construction traffic estimated to be 150 vehicles movements per day (75 deliveries), evenly spread throughout the day, generating approximately 14 truck movements per hour. Construction traffic would generally come from the Hume Highway, and from the neighbouring Blue Circle Cement Works. Rail material and equipment would generally be brought in by rail.

2.3 Project Justification and Assessment of Options

Justification for Scope and Location of Proposed Development

The Applicant identifies that there is an existing shortfall of approximately 700,000 tonnes per annum of milled products, currently met by interstate supply. In this context, the Applicant identifies that the existing Allied Mills operations have been located at Summer Hill for approximately 100 years. During that time, the nature of the surrounding land has changed, to one that is now predominantly residential. The Applicant highlights that the existing plant is based on old technology and that upgrading it would require substantial capital investment, and require a significant period of plant closure (and therefore zero production). Furthermore, the Applicant highlights the constraints associated with the location of the existing operations, specifically traffic and noise related restrictions, and the conflict between the freight operations and the passenger services on the metropolitan rail loop that services the site. In light of this, the Applicant asserts that the construction of a new mill (as opposed to upgrading the existing mill) represents the potential to overcome these constraints to increased production capacity, to increase efficiency and reliability, and to minimise environmental impacts. Regarding the production of maize, the Applicant considers that the existing facility at Albury is not sustainable due to the distance between Albury and Sydney.

In light of these considerations, the Applicant considered that the retrofitting of new technology to the existing operations would be complicated, time consuming and expensive, and would not overcome all of the existing constraints. The Applicant therefore investigated the options of developing a new plant at one of four locations, being Newcastle, St Marys, Port Kembla and Picton. The key issues with each proposed site are listed below:

- Newcastle: the site investigated at Newcastle was adjacent to the Cargill oilseed plant. The Applicant considered that co-location of its food facility with this type of development was unacceptable for health related reasons, and highlights that the available land is constrained in terms of size and layout, constraining any potential future expansion.

- St Marys: the site investigated at St Marys was vacant land owned by Graincorp, but was constrained in terms of its size, and restricted access to the railway line.
- Port Kembla: the site investigated at Port Kembla was on land adjacent to the existing Graincorp export terminal. The Applicant highlights that its proposed milling operations would not comply with the Port's charter for port related activities, and that there would be health issues associated with co-location near coal and steel developments.
- Picton: the proposed site at Picton was considered favourably due its size and good location regarding both railway access and access to the regional road network.

Of the four sites, the Applicant highlights that the sites at Newcastle, St Marys and Port Kembla were generally constrained by either limited land availability, poor proximity to the Sydney market, or potential issues associated with locating close to other polluting industries. Notwithstanding this, the Applicant highlights that these sites would provide a good outcome from the point of view of their zoning and location away from residential areas.

The proposed site at Picton was the preferred option based on the size of the site, the good access arrangements, and proximity to the Sydney market. The Applicant considered that there was sufficient distance between the proposed development and existing Maldon Cement Works to allow the potential issues of affecting the food grade products to be overcome. The Applicant highlights that there would be some potential amenity impacts that would need to be addressed at the preferred site due to the existence of some nearby rural residential properties.

Effluent Management

The Applicant highlights that in the absence of connection to the sewerage system, a sewage treatment plant would be necessary at the proposed site. A number of technologies for the management of effluent from the proposed treatment plant were considered. In addition to the Applicant's preferred option for effluent treatment (a primary settling tank, subsurface flow reed bed and UV disinfection), the options considered, and their relative advantages and disadvantages are listed below:

- Onsite storage and periodical removal: storage of effluent in a 20 kL storage tank, with periodical removal (by road tanker) to the Sydney Water sewage treatment plant was considered, however it would not be cost effective in the longer term.
- Membrane reactors: would reduce the total coliform levels in the effluent without the need for disinfection. The Applicant rejected this option based on the higher operating costs and technical expertise required, when compared to the proposed conventional methods.
- Multiple water reuse: uses a dual membrane system instead of biological methods. The disadvantages of this technology is that it is suited to larger volumes of effluent, would create a significant waste stream to manage, and is more costly to install and maintain.
- Chlorine disinfection was considered in lieu of UV disinfection, however the Applicant highlights concerns regarding the handling of hazardous goods, and the increase in total dissolved solids in the recycled water.
- The Applicant considered on-site storage and treatment methods including a facultative lagoon, wetlands, and sludge management ponds. The Applicant highlights the potential odour and insect concerns related with these options.

Conclusion

The Department highlights that it is the Applicant's role to select its preferred option based a transparent evaluation of its operating requirements for the proposed development. The Department notes that for the proposed development, the necessary

requirements included good access to the regional road and rail networks, close proximity to Sydney and a site of suitable size and location to permit efficient operations 24 hours per day. The Department considers that the Applicant has satisfactorily demonstrated that it has considered alternative options and sites for the proposed development.

3. STATUTORY PLANNING FRAMEWORK

3.1 Permissibility

The proposed development lies on land zoned 4(a) Industrial under the *Wollondilly Local Environmental Plan 1991* (LEP). Under the LEP's zoning table, the proposed development is not listed as a prohibited development in this zone, and such is permissible with development consent.

3.2 Legislative Context

In accordance with the provisions of the *Environmental Planning and Assessment Act 1979* (the Act), the proposed development is classified as designated, integrated and State significant development.

As required for this type of advertised development, an Environmental Impact Statement (EIS) was prepared and, in accordance with Section 79(1) of the Act, the development application and accompanying EIS were publicly exhibited for at least 30 days. Exhibition of these documents took place between Wednesday 19 January 2004 and Monday 20 February 2005 at the following locations:

- Department's Information Centre, Lee Street, Sydney;
- Nature Conservation Council; and
- Wollondilly Shire Council.

Nearby landowners and occupiers, 29 in total, were notified in writing about the proposed development. Advertisements were placed in the *Wollondilly Advertiser* on 18 January and 8 February. The newspaper advertisement and public notices provided details of the proposal, exhibition locations and dates, and information on how interested parties could make a submission. Site signs displaying the same information about the proposed development were placed on the development site for the duration of the exhibition period. The Department considers that the requirement of the Act to notify landowners adjacent to the development site has been met.

State Significant Development

The proposal is a State significant development because it is a type of development (food or beverage processing) listed in Schedule 1 of *State Environmental Planning Policy No. 34 – Major Employment Generating Industrial Development* that has a capital investment value in excess of \$20 million. The capital investment required for the proposed development is \$75 million. The Minister is the consent authority for State significant development.

Integrated Development

The proposed development constitutes integrated development, as defined by section 91 of the Act, since, in addition to development consent, the proposed development requires the following additional approvals:

- an Environment Protection Licence under the *Protection of the Environment Operations Act 1997* from the Department of Environment and Conservation (DEC);
- a Heritage Impact Permit under the *National Parks and Wildlife Act 1974* from the DEC;

- an approval from the Mine Subsidence Board under the *Mine Subsidence Act 1961* for development within a mine subsidence district;
- a Part 3A Permit from the Department of Infrastructure, Planning and Natural Resources of the *Rivers and Foreshores Improvement Act 1948*, for works within 40 metres of a water body; and
- approval under the *Roads Act 1993* with the concurrence of the Roads and Traffic Authority (RTA), from the Wollondilly Shire Council, for works within the road reserve of Picton Road (a classified road).

The DEC has issued its General Terms of Approval (GTAs) for the proposed development in relation to the Environment Protection Licence and the Heritage Impact Permit, and these have been incorporated into the recommended conditions of consent. The Department has also reflected the GTAs for the Part 3A permit in the recommended conditions of consent. The Department has not received GTAs from Wollondilly Shire Council for its approval under the *Roads Act 1993*, since it was not identified as an integrated approval body until late in the development assessment period. Council did provide recommended conditions and comments regarding the traffic related impacts of the proposed development. These have been considered in this report, and where relevant reflected in the recommended instrument of consent. Notwithstanding this, the Department has received the terms of the RTA's concurrence. While the Council would be responsible for issuing the *Roads Act 1993* approval, any such approval would need the RTA's concurrence. The Department has reflected the RTA's terms of concurrence in the recommended instrument of consent, and specified that a *Roads Act 1993* approval must be obtained from Council.

The Department is satisfied that the GTAs and RTA's terms of concurrence have been adequately reflected in the recommended instrument of consent.

3.3 Relevant Environmental Planning Instruments

The assessment of the proposed development is subject to the following key environmental planning instruments:

- *State Environmental Planning Policy No. 34 – Major Employment-Generating Industrial Development*;
- *State Environmental Planning Policy No. 55 – Remediation of Land*;
- *Regional Environmental No 20 – Hawkesbury-Nepean River*; and
- *Wollondilly Local Environmental Plan 1991*.

Consideration of the proposed development in the context of the objectives and provisions of these environmental planning instruments is provided below, with further consideration of the relevant instruments in Appendix A.

State Environmental Planning Policy No. 34 – Major Employment-Generating Industrial Development

The proposed warehouse and distribution centre is a development to which *State Environmental Planning Policy No. 34 - Major Employment-Generating Industrial Development* (SEPP 34) applies. This is because the development:

- has an estimated capital investment value of \$75 million, exceeding the \$20 million threshold specified under paragraph (a)(ii) of Schedule 1 of the SEPP; and
- is of a type listed under paragraph (b) of Schedule 1 of the SEPP (that is, development associated with food processing).

The aims of SEPP 34 are to provide for the orderly and economic use and development of land and the economic welfare of the State, by facilitating and co-ordinating the major employment-generating industrial development of State significance. In accordance with

Clause 8 of the SEPP, the Minister is the consent authority for this development application.

State Environmental Planning Policy No. 55 – Remediation of Land

Clause 7(1) of *State Environmental Planning Policy No. 55 - Remediation of Land* (SEPP 55) requires that a consent authority must not consent to the carrying out of any development on land unless:

- it has considered whether the land is contaminated;
- 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
- 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.

The Applicant provides the historical uses of the site as historically being low intensity agricultural uses, and concluded that in light of such passive uses it is unlikely that the soils at the proposed site are contaminated. The Applicant identifies three specific areas of potential contamination at the site. Soil analysis indicates that the site would be suitable for the proposed commercial/ industrial land use and development. The Department is satisfied that the land is suitable for the purpose of the proposed development.

Sydney Regional Environmental Plan No. 20

Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2 – 1997) (SREP 20) aims to protect the environment of the Hawkesbury-Nepean River by ensuring that the impacts of future land uses are considered in a regional context. SREP 20 applies to the Wollondilly local government area, including the proposed site. The SREP identifies various special landuses and features within the area for protection (such as wetlands and environmentally sensitive areas); however, none of these features occurs on the proposed site. As a result, the Department is satisfied that the proposed development is consistent with the relevant provisions of SREP 20. The Department highlights that the matters regarding the rehabilitation and protection of the watercourses and riparian zones are discussed in further detail in Section 6.4 of this report.

Wollondilly Local Environmental Plan 1988

Wollondilly LEP provides development controls for development in the Wollondilly local government area. The Department highlights that the proposed development is permissible with development consent in the Industrial 4(a) Zone, and that the proposal is consistent with the objective of that zone to set aside land in strategic locations for business establishments and employment opportunities in industry other than industries of an offensive or hazardous nature. The LEP includes a number of specific provisions types of development, some of which apply to the proposed development.

Consideration of the relevant clause in the LEP is provided in Appendix A. The Department is satisfied that the proposed development is consistent with the objectives and all relevant provisions of the LEP.

4. CONSIDERATION OF ISSUES RAISED IN SUBMISSIONS

A total of 10 submissions were received as a result of the public exhibition of the proposed development. Submissions were received from Wollondilly Shire Council, the Australian Rail Track Corporation (ARTC), Sydney Water, the Department of Primary Industries (DPI), the Country Labor Wollondilly Branch and four submissions from

nearby landowners. A submission was also received, through Council, from the Wilton progress Association. A summary of the concerns and issues raised by each entity is provided below. Where necessary, the issues raised have been further discussed in the relevant part of Section 6 of this report. The Department has considered the general issues raised in submissions in Section 5d) of this report.

4.1 Submissions from Agencies and Council

Sydney Water Corporation highlights that there are currently no plans to provide sewerage services to the proposed site, and that the Applicant's proposed water supply upgrades are in accordance with the Corporations requirements. The ARTC raised concerns with the management of water flows at the site, specifically that increased water flows could undermine the integrity of the culverts under the Main Southern Railway line. The ARTC proposes that scour protection measures may be necessary on some of the upstream watercourses, and that until areas the subject of construction works are stabilised on-going monitoring of the watercourses and culverts would be required. The DPI indicates that the volume of treated effluent requiring disposal is small, and that the proposed area of 1 hectare would be sufficient. The DPI also highlights that while the Applicant has not specifically tested the soil in the proposed irrigation area, the loading rate of the effluent is quite low and is unlikely to affect plant growth, and that site wide soil tests indicate that the soil in the area is suitable for irrigation pastures.

Wollondilly Shire Council determined to support the proposed development due to the significant investment to the local economy that it would represent, subject to further consideration of a number of issues raised by Council. Council raised the following matters:

- further consideration of sewerage management facility being provided to Council;
- consideration of the management of sewage during the construction period;
- strategic planning issues associated with the future development on land surrounding the proposed mill site, and the possible future re-alignment of the rail corridor;
- provisions for landscaping, including that only native species should be used;
- an impact assessment on the access road/ Picton Road intersection during the construction period;
- consideration of the impacts of the development on Menangle Road, with specific consideration of obtaining funding from the Applicant for infrastructure upgrades to intersection between Menangle Road, Picton Road and the Hume Highway.
- that car parking and internal access roads comply with AUSTROADS standards and the RTA's guidelines.

Council made a supplementary submission clarifying the future strategic direction for the land surrounding the site. Council highlights that it is currently drafting an Economic Development Strategy, which includes a proposal to investigate future zoning changes in the Maldon locality. Council further states that at this time it has not identified which properties may be included in such an investigation, and that the process to review the LEP is likely to be commenced within three years.

In addition to the various submission, the Department received requests for additional information from the DEC and the RTA. General Terms of Approval have been provided by the DEC, and the RTA has provided the terms of its concurrence. The recommended instrument of consent reflects these terms. The Department has received correspondence from the Mine Subsidence Board stating that it has already issued its approval for the proposed development, and providing the conditions of that approval.

The recommended instrument of consent requires the Applicant to carry out the development in accordance with Boards approval.

4.2 Submissions from the General Public

The Country Labor Wollondilly Branch supports the proposal subject to consideration of the impact on nearby residential properties. The Branch also supports the rezoning of surrounding properties to create an industrial area around the proposed site. The Wilton Progress Associated provided a submission via the Council, raising traffic impacts as a key concern, but did not specifically object to the proposal. Council's submission included two questions from local residents, raising issues associated with traffic and noise impacts of the proposed development. Of the four other submissions from the public, three objected to the proposal and one did not state a position. The key issues raised in these submissions related to noise (including traffic noise), visual and amenity related concerns, as well as air quality, health and safety and socio-economic issues. A summary of the key concerns is provided in Table 1 below:

Table 1: Summary of key issues raised in public submissions.

Broad Issue	Specific Issue
Noise	Night-time noise affects during the 5 periods of 9 days where 24-hour construction of silos is to be undertaken.
	Noise impacts, suggests that the neighbours houses should be noise proofed.
	Who would conduct noise testing; and who to contact when noise is unacceptable.
	Noise from trains stopping/ starting and carriage shunting will be unacceptable.
	Number of train movements have not been adequately identified in EIS. Neighbours should notified of night time train movements.
Noise and Traffic	Noise and traffic issues on Picton Road, suggests sound barrier along Picton Road and reduction of speed limit to 80 kph.
	Increased road traffic noise impacts.
Traffic	Concern regarding impacts to passenger train movements.
	Increased congestion on Picton Road and its intersection with the Hume Highway.
Visual	Concern that visual impacts from neighbours properties have not been addressed in EIS.
	Does not consider that screening will be sufficient to ease visual impact.
Noise and Visual	The proposed privacy/ noise buffer of earth mound and trees along the mutual boundary is only half way along. Should be extended the whole way along.
Air Quality	Extra truck fumes.
	Impact to water tanks, which are the only source of drinking water for neighbours.
Health and Safety	Safety to pedestrians on the internal access, especially the speed limit. Should have a secure fence along the boundary to ensure children do not wander across boundary into truck roads.
	Potential for increased vermin from having flour and other feed materials available.
Amenity	Impacts to rural life style and living standard due to noise, air quality impacts, traffic and real estate values.
Strategic Planning	Concern regarding future industrial development in area and future expansion of the Mill.
	Suggests that it would be more appropriate to turn the whole valley into an industrial estate.
	Should be located on the other side of the railway line.

5. CONSIDERATION UNDER SECTION 79C OF THE ACT

Section 79C of the Act sets out matters that a consent authority must take into consideration when it determines a development application. The Department has assessed this development application in the context of Section 79C of the Act, having regard to the identified heads of consideration. This consideration is provided below. The Department is satisfied that the merits of the proposed development warrant approval subject to the recommended measures outlined in this report, and reflected in the recommended instrument of consent. In particular, Section 79C of the Act requires that the consent authority must take into consideration the following:

a) the provisions of:

i) any environmental planning instrument

Consideration of the proposed development in the context of the objectives and provisions of the relevant environmental planning instruments is provided in section 3.4 of this report. Consideration of the proposal against the specific relevant provisions of Wollondilly LEP is provided in Appendix A.

ii) any draft planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority

Draft Amendment No. 5 to the Wollondilly LEP (Riparian Zone) is currently under consideration. The draft amendment aims to declare a Riparian Buffer Zone along the Nepean River, and to require consideration of the potential impact of new development on water quality and habitat areas of the River. The proposed site is outside of the proposed Buffer Zone, and detailed consideration of water quality and riparian zone management is provided in Section 6.4 of this report.

iii) any development control plan

Development Control Plan 20 – Industrial Development (DCP 20) would apply to the development. DCP 20 aims to ensure that industrial developments do not have an adverse environmental impact on surrounding land use; to ensure that industrial developments and areas are suitably designed and landscaped, to ensure good access, circulation and loading facilities on sites, and adequate services and the disposal of waste, and to ensure that adequate on-site parking is provided. DCP 20 includes general provisions relating to industrial development in the local government area including: site access, floor space ratio, water and sewerage services, fencing, landscaping, access and car parking. DCP 20 also provides specific issues for consideration for industrial development in the Maldon area, which apply to the proposed development, including:

- the design of the site access road, intersection treatments and the possible need for improvements to the Picton Road/ Menangle Road intersection;
- provision of water and electricity, and disposal of effluent and stormwater water;
- building design; and
- landscaping.

In all cases, the proposed development complies with the standards set in the DCP 20. In particular, the Applicant highlights that the only access to the

site is via Picton Road. The Department has consulted with the RTA, and suitable measures have been recommended to manage and mitigate potential impacts resulting from that connection. The Applicant asserts that the proposal will not affect traffic usage of Menangle Road, due to the small workforce and the location of its markets, and therefore the Picton Road/ Menangle Road intersection would not require any upgrading as a result of the proposal. Access and traffic impact assessment is considered in further detail in Section 6.3. The Applicant undertook a consideration of options for the management of effluent at the site. The outcomes of this assessment is provided in Section 2.3. The Department has considered in detail the potential impacts associated with the Applicant's preferred management option (on-site treatment and irrigation) in Section 6.4, and considers that it represents an appropriate management option.

Development Control Plan 7 – Off-street Car Parking (DCP 7) also applies to the proposed development. DCP 7 specifies that a total of 172 car parking spaces would be required for the proposed development. The Applicant has provided only 40 spaces in its proposal, arguing that the small workforce does not demand so many spaces. Car parking requirements would be fully met at the site with 40 spaces. The Council, in its submission, agreed with the Applicant that compliance with DCP 7 on this issue was not necessary due to the small workforce. The Department also agrees with this assessment. The proposed development would comply with all other relevant provisions of DCP 7.

Where necessary specific conditions have been included in the recommended instrument of consent to ensure compliance with DCP 7 and DCP 20.

iv) *the regulations (to the extent that they prescribe matters for the purpose of this paragraph) that apply to the land to which the development application relates.*

Clause 92 of the *Environmental Planning and Assessment Regulation 2000* requires the following matters to be taken into consideration by a consent authority in determining an application

- *The Government Coastal Policy (where relevant)*
- *In the case of a DA for the demolition of a building, the provisions of Australian Standard AS 2601-1991: The demolition of structures, as in force 1 July 1993*

The Government Coastal Policy does not apply to the proposal, and the proposed development does not include any demolition.

b) *the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.*

The Department has undertaken a detailed review of information supplied by the Applicant in the EIS and additional information, as well as the issues raised in submissions. In light of these considerations, the Department has been able to complete a preliminary screening of environmental planning and assessment issues associated with the proposed development. Issues have generally been considered in the context of the assessed environmental planning significance of matters outlined in the EIS (and additional information), and the level of interest, concern or complexity of matters raised in submissions. A combination of these considerations has been used to develop the preliminary screening table

reproduced as Table 2 (over). The primary purpose of the preliminary screening is to ensure focussed consideration of key issues associated with the proposed development, with an appropriate level of detail applied depending on the relative importance of the issue under consideration.

From review of the EIS, and the additional information, the Department has nominated environmental planning issues as either key, major, moderate or low significance in the context of environmental planning and assessment. In all cases, a conservative approach has been applied and in the case of any doubt, a precautionary approach has been taken to ensure that at worst, issues have been overestimated rather than assigned a lower significance. As a general indication, levels of environmental planning and assessment significance have been applied as follows:

- **Key significance** – those issues of fundamental importance to the proposal. Resolution of these matters is considered fundamental to achieving acceptable environmental and public health and amenity outcomes, and in some cases may include tests or requirements that must be met by the proposal before it could be determined.
- **Major significance** – those issues representing the most significant environmental impacts associated with the proposal. Assessment has either indicated that relevant criteria or outcomes cannot be met, or compliance is predicted to be marginal. These issues also include matters for which there remains some doubt as to the assessment approach or outcomes.
- **Moderate significance** – those issues assessed as meeting relevant criteria or outcomes, but with a significant residual impact that needs to be mitigated and managed.
- **Low significance** – those issues that are either not associated with the proposal, clearly within acceptable environmental criteria, and/ or are the subject of well-established and applied environmental management measures. These issues also include those matters that could be easily and effectively addressed through conditions of consent, should the Minister determine to approve the proposed development.

All issues identified as having major or key significance as a result of the Department's consideration of the EIS have been carried forward for further assessment. In addition, issues raised in submissions have been considered both in the context of the frequency of occurrence and the level of concern expressed. Similar definitions have been used to characterise the significance of issues raised in submissions:

- **Key significance** – issues raised in the majority of submissions, issues representing primary public concern or the subject of detailed public comment or criticism.
- **Major significance** – issues raised in most submissions or subject to specific comment on a fundamental component of the proposal.
- **Moderate significance** – issues raised in detail in some submissions or as a general statement across the majority of submissions.
- **Low significance** – not raised in submissions, or only noted in a cursory manner.

Regardless of the assessed significance of issues any matter identified as being of major or key significance from public submissions has been carried forward for further detailed assessment. Preliminary screening, including comments on the screening and identification of matters for further assessment, is outlined in Table 1.

Table 1 - Screening of Environmental Impacts for Detailed Consideration

Issue	Assessed Environmental Significance	Assessed Public Interest/ Concern	Comment
Noise	Key significance	Key significance	The Applicant's revised noise impact assessment identified that the proposed development would cause exceedances of the governing noise criteria at four of the six nearby sensitive receivers during the night-time period. In light of this, the Applicant considered the reasonable and feasible noise mitigation measures that could be implemented at the site. These measures include limitations to activities at the site during the night-time period, and noise attenuation of approximately half of the exhaust fans. Implementation of these measures reduces all noise emissions to below the relevant criteria, except for a predicted 3 dB(A) exceedance of the night-time criterion at location 1. The DEC has agreed that the exceedance is relatively marginal, and that the proposed mitigation measures represent all the reasonable and feasible measures able to be imposed. The DEC has specified noise limits on the development consistent with what the predicted noise emissions, and these are reflected in the recommended instrument of consent. In addition, the recommended instrument of consent includes stringent provisions for the minimisation of noise impacts during the operation of the development, a comprehensive complaints handling and response protocol. Construction noise impacts are generally acceptable, accept during the four concrete pours that require night-time construction activities. The Department highlights that these four separate occasions would last for one to two weeks each, and would cause noise impacts at the two closest noise receivers, by up to 12 dB(A). While this is a very short term impact, the Department requires that the Applicant implement all reasonable and feasible measures to minimise it. In particular, the Department recommends that the Applicant be required to notify potentially affected residents and install temporary noise barriers around night-time activities. The Applicant estimates that the noise reduction associated with the implementation of the identified strategies could be between 10 and 20 dB(A), thereby reducing the noise impact in line with the relevant criteria. Carried forward for further assessment – see Section 6.1 below
Landscaping, and Visual Amenity Impacts	Major significance	Key significance	The Applicant proposes to locate the building at the south of the proposed site, adjacent to the Main Southern Railway line. This would also increase the distance between the facility and nearby residences. This would ensure that the setback distances in DCP 20 would be complied with. The Applicant proposes to comply with

			the landscaping requirement of DCP 20, and provide a mounded vegetation strip (30 metres wide) along most of the frontage of the site with Picton Road. There would be an unmounded strip of vegetation along most of the remaining boundaries of the site (except for the boundary with the railway line). There has been concern from the nearby residents that the vegetation strips should be extended along all the shared boundaries. The Department notes that components of the elevated sections of the facility would remain unscreened by the proposed vegetation. The Department recommends that the vegetation screening be extended beyond that proposed by the Applicant, and that the Applicant provide details of final design measures for the approval of the Director-General to ensure materials are used that would improve the appearance of the mill, and blend it into the background when viewed from a distance. The Department highlights that the proposed development is located near the Blue Circle Southern Maldon Cement Works, and that as such the viewscape is not pristine. Carried forward for further assessment – see Section 6.2 below
Traffic and Transport Impacts	Major significance	Major significance	The Applicant undertook traffic and intersection modelling for the proposed facility. The proposed access to the site is via a single entry off Picton Road. The Applicant proposes to construct a standard seagull intersection treatment at this intersection. The RTA has specified the requirements for the proposed intersection treatment in its terms of concurrence. The terms of the RTA's concurrence have been reflected in the recommended conditions of consent. The Applicant has also undertaken modelling of the likely traffic split during operations to determine whether there are impacts to the broader road network, in particular the intersection between the Hume Highway, Picton Road and Menangle Road. The Applicant's modelling indicates that in all cases there is unlikely to be any significant impact at the intersections, and has not proposed any further mitigation measures. Council have requested further consideration of the potential need for improvements to the Menangle Road/ Picton Road intersection. The Department is generally satisfied that the proposal would not significantly impact on the local or regional road network. Carried forward for further assessment – see Section 6.3 below
Hydrology, Water Management and the Riparian Zone	Major significance	Low significance	The Applicant proposes to create a riparian zone around the major tributary to Carriage Creek to rehabilitate and conserve that riparian habitat and the tributary. The Applicant also proposes to realign two smaller ephemeral watercourses at the site for drainage purposes. Suitable rehabilitation and protection of the riparian ecosystem and vegetation is also of key concern to the Department. The Department considers that with the implementation of stringent conditions, and by limiting the scope of the development activities within the riparian zone, there will be substantial benefits associated with riparian corridor rehabilitation and minimal adverse impacts.

			The Applicant also proposes to utilise treated effluent from the development for irrigation of crops/ pasture at the site. The proposed area for irrigation is to the north of the mill, and to the east of the access road. The Applicant has satisfactorily demonstrated that the area proposed for irrigation is suitable for that purpose, subject to ongoing monitoring and management, which the Department has included in the recommended instrument of consent. The recommended management measures include conditions relating to the integrated approval under the <i>Rivers and Foreshores Improvement Act 1948</i>. Carried forward for further assessment – see Section 6.4 below
Archaeology and Heritage	Major significance	Low significance	The Applicant's assessment identified a number of Aboriginal artefacts at the proposed site. The Department has obtained General Terms of Approval from the DEC identifying those items that would be permitted to be destroyed for the development. The DEC also requires that two heritage conservation zones (one surrounding a scarred tree, and the other surrounding the Carriage Creek Tributary extending to the western edge of the site) be established at the site, and that a cultural salvage excavation be undertaken by the Aboriginal community for the western end of the building footprint, prior to commencement of construction activities on that part of the site. The DEC's General terms of Approval have been reflected in the recommended instrument of consent. There was also identification of the heritage significance of the culverts underneath the Main Southern Railway line. The Applicant proposes to carry out the development without affecting the original fabric of the culverts. Not carried forward for further assessment
Hazards and Risk Impacts	Moderate significance	Low significance	The proposed development is generally below the thresholds of <i>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development</i>. Notwithstanding this, the Department highlights off-site risks associated with the potential loss of containment from the chlorine cylinder in the chlorine room. The Applicant highlights that the design of the chlorine room is preliminary at this stage, and has recommended measures to ensure it is designed in a manner which would reduce that risk. In particular, the EIS recommends that the design of the chlorine room be reviewed prior to construction to ensure that it complies with the Australian Standard, and that the ventilation system is sufficiently strong to provide extraction, even if the door is open. The Department has reflected these recommendations in the recommended instrument of consent. Not carried forward for further assessment
Air Quality	Low significance	Moderate	The proposed distribution facility would not generate any significant air emissions,

		significance	apart from those related to traffic movement. Potential emission of dust during bulk earthworks and construction activities would be addressed by measures to be detailed by the Applicant in the Construction Environmental Management Plan. There is also concern from the local community regarding flour dust getting into the drinking water tanks. The Department notes that the Applicant has incorporated air quality filters to ensure that dust emissions comply with the DEC's emission limits. The Department is satisfied that there is unlikely to be any off-site impact associated with flour dust, and has included conditions to minimise wind generated or operational dust emissions, and to verify dust emissions once the mill has commenced operations. Not carried forward for further assessment
Socio-Economic Impacts	Low significance	Moderate significance	The proposed development would employ a total of 18 people per day (in three shifts) in the mill operations, with nine people in the administration area. The proposed development would contribute significantly to the local and regional economy, with a capital investment of approximately \$75 million. Further, the proposed development would permit increased efficiency and access to markets, with growth potential, for grain products in the Sydney region. Local residents have concerns that the increase of industrial developments in the area would impact on their property values. The Department notes the close proximity of the Blue Circle Southern Maldon Cement Works, and highlights that detailed and comprehensive mitigation measures have been recommended to address concerns regarding visual and noise amenity impacts. Further, the Department identifies that the proposed development is not of a type of heavy industry similar to the Cement Works, but rather an industry processing agricultural goods. The Department does not consider that storage silos and milling operations are out of place in the context of the surrounding rural zoning. In light of these considerations, the Department does not consider that there is likely to be any significant impact to the value of local property near the proposed facility. There has been a suggestion made by local residents that the surrounding land should be rezoned for industrial purposes, a possibility which is currently being investigated by Council. The potential future rezoning of land in the vicinity of the proposed site is, at this early stage, beyond the consideration of this development application. Not carried forward for further assessment
Mine Subsidence	Low significance	Low significance	The proposed development is within a Mine Subsidence District, and requires an approval from the Mine Subsidence Board. The Board has already issued its approval, and the recommended instrument of consent requires that the Applicant carry out the development in accordance with that approval.

			Not carried forward for further assessment
Impacts on Flora and Fauna	Low significance	Low significance	The Applicant highlights that the development site has been largely cleared for pasture, and is unlikely to provide habitat for any threatened or regionally significant terrestrial animals. The area of the site proposed to be developed for the mill is currently pastureland with scattered trees. The area of highest habitat significance is around the Carriage Creek tributary at the site. The Applicant proposes to rehabilitate and manage the riparian corridor surrounding this tributary. The recommended instrument of consent provides detailed specifications and management measures for the carrying out of works near the riparian zone and the establishment, rehabilitation and maintenance of the riparian zone. Not carried forward for further assessment
Land Contamination and Capability	Low significance	Low significance	The Applicant identifies that there is no evidence of historical activities likely to cause contamination being undertaken at the site. Historical records indicate that the site has been used for low intensity agriculture. Three areas of potential contamination were identified at the site during inspection, being potential cattle dip sites and where fill material had been placed. Soil sampling results show that the level of contaminants at these areas of concern are all less than 20% of the relevant Commercial Land Use Criteria established by the <i>National Environmental Protection Measure (Assessment of Contamination)</i>. The Applicant has not undertaken soil-sampling tests to confirm the suitability of the area proposed for treated effluent irrigation. However, the site tests indicate that soils in the area would be suitable for such irrigation pastures. Further, the Department of Primary Industries has submitted that the salt load to the proposed irrigation is so low that it is unlikely to detrimentally affect plant growth. Not carried forward for further assessment
Waste Generation and Management	Low significance	Low significance	The Applicant highlights that since the land is generally flat and would not require no import or export of fill material, and that the structures for the proposed mill would be pre-cast specialist components, there would be minimal waste generated by the proposal during construction activities. Operation wastes would comprise of office and general employee wastes (such as food and packaging waste), and chemical wastes from the laboratory, to be removed by specialist contractors. Husks from the grain are reused for animal feed. Not carried forward for further assessment

c) the suitability of the site for the development

The proposed development site is zoned under the Wollondilly Local Environmental Plan for industrial uses. The proposed development complies with all the relevant provisions of the LEP and other environmental planning instruments that apply to the site. The site is conveniently located between the Main Southern Railway line and Picton Road, which provides direct access to the Hume Highway and the regional road system. The proposed site is located approximately 500 metres away from the existing Blue Circle Southern Maldon Cement Works. When considering these factors, being the zoning, access to regional transport infrastructure (road and rail), and the close proximity of existing industrial development, the location of the proposed development is considered suitable for the proposed development. Notwithstanding this, the Department highlights that much of the surrounding land is zoned rural, and is currently occupied as rural/ residential. This represents challenges to the Applicant in terms of managing environmental and amenity issues, such as noise and visual affects of the development. The proposed site is also located adjacent to a major tributary to the Nepean River, and the Applicant proposes to modify the flow regime from the site. The Department is satisfied that the recommended instrument of consent satisfactorily addresses these issues.

d) any submissions made in accordance with this Act or the regulations

The Department received 10 submissions in accordance with the Act as a result of exhibition period. A summary of the issues raised in submissions is provided in Section 4 of this report, and the details of issues raised in submissions are discussed in the relevant sub-section of Section 6 of this report. Issues that are raised in submissions but not fully addressed in Section 6 of this report relate to air quality, health and safety and strategic planning. The table below describes the issue, and provides the Department's consideration.

Table: Issues not addressed in Section 6.

Air Quality: Extra truck fumes, and impacts to water tanks from flour dust.	The amount of traffic generated by the proposed mill is small compared to the existing traffic along Picton Road. The Department has included a requirement for the implementation of management measures to minimise exhaust emissions. The Department considers that the likelihood of dust emissions causing significant impacts to drinking water tanks as being extremely unlikely, due to the measures to be employed by the Applicant. Further, if there was an incident that caused such an impact the Department notes that there would be no real risk of serious adverse affect, and that the situation could be remedied through relatively straightforward measures.
Safety: Safety of pedestrians on the internal access road, especially for children. Should have a secure fence along the boundary to ensure children do not wander across boundary into truck roads.	The facility would be surrounded by appropriate security fencing. While this fencing would not encompass the entire internal access road, the Department considers such a requirement unreasonable. There is considerable distance between the boundary of the property and the access road, and the Applicant would be required to comply with RTA and AUSTROADS standards. Further, the Department would require the issue of internal traffic safety to be generally addressed in the Traffic Management Strategy for the site.
Health: Potential for increased vermin from	The Applicant proposes to implement pest control measures and food storage methods that would ensure no vermin

having flour available.	would be attracted to the site. The Applicant highlights the success of these methods and measures at the existing Summer Hill site.
Strategic Planning: No assessment of future co-location of businesses to surrounding area, and no consideration of short term and long term passenger and freight rail movements.	The Department identifies that the potential co-location of other development's to the surrounding area would be the subject of further development applications. The proposal incorporates one rail movement daily, and would not alter the existing rail movements on the Main Southern Railway line during construction or operation. Consideration of possible changes to the passenger/ freight rail system in the long term are not appropriately considered at this time, due to the high degree of uncertainty.
Potential future expansion of the Mill.	There is no indication from the Applicant that the proposed mill would be expanded in the near future.
There is a mixture of support and concern regarding future industrial development in the area, and further rezoning of land for industrial purposes.	The Department notes that the Council is currently investigating areas for future industrial development, and that the area surrounding the subject site is being considered. However, there has been no commitment at this stage. The Department has undertake its assessment of the proposal based on the existing surrounding land uses and zonings, being residential and rural.
Should be located on the other side of the railway line.	The Applicant has selected the site based on its requirements. The Department must assess the Applicant's development proposal, including assessment of the Applicant's analysis of options.

e) the public interest

The Department highlights that the advantages of the proposed site, being located adjacent to the Main Southern Railway line and an arterial road with direct access to the Hume Highway. Further, the Department highlights that the proposed development represents the relocation of a major food production facility outside of the inner suburbs of Sydney, reducing the environmental impacts associated with the existing location and also reducing the constraints to efficient operation that the existing location imposes. In addition, the proposed development would allow for expansion of flour milling capacity in the metropolitan region and would permit the relocation of maize milling from Albury to Sydney (the proposed development), further improving efficiencies and reducing transport costs. The proposal would employ approximately 27 people during operation, and would provide significant opportunities during the construction phased with up to 200 construction workers, and a capital expenditure of approximately \$75 million. Conversely, and as mentioned above, the Department notes the challenges associated with locating the proposed development adjacent to existing rural/ residential land uses. The Department's assessment concludes that there are no significant adverse environmental impacts that cannot be satisfactorily mitigated or managed through appropriate conditions of consent, and that the proposed development is consistent with the relevant provisions of applicable environmental planning instruments. Subject to the imposition of appropriate conditions, as reflected in the recommended instrument of consent, the Department therefore concludes that the proposed development represents a net benefit in the context of the greater metropolitan region.

6. ENVIRONMENTAL IMPACT ASSESSMENT

6.1 Noise Impacts

The Applicant undertook a detailed noise impact assessment for the proposal as part of the EIS. In response to requests for additional information by the DEC and the Department, the Applicant provided an additional assessment of noise mitigation and management options for both construction and operation, with advice from the DEC regarding the appropriate interpretation of the *Industrial Noise Policy*. The assessment below takes into account the revisions to the noise impact assessment that were required throughout the course of the assessment of the proposal.

Applicant's Position

Construction

The Applicant identifies that construction of the proposed development would largely be undertaken during regular work hours (7:00 am to 6:00 pm, Mondays to Fridays, and 7:00 am to 1:00 pm on Saturdays), however would require four separate concrete pours which required night-time activities. These four occasions would each last for approximately 8-13 days each. The activities would require approximately two concrete trucks per hour, with a boom pump established each evening and approximately 80 construction workers. Continuous campaign concrete pouring is required to minimise the seams in the building, to reduce the potential for contamination of food produce, and to reduce the potential for vermin.

The Applicant undertook modelling of the worst-case noise emissions during night-time construction activities. The modelling identifies that there could be exceedances at two neighbouring residential locations by up to 12 dB(A) above the appropriate construction period noise criteria. The modelling also indicates that maximum noise could exceed the sleep disturbance criteria by up to 6 dB(A) at one location. The Applicant highlights that the noise model is a worst case impact, and that the background noise would generally be higher than the value used for establishing the criteria, reducing the severity of the predicted impact.

The Applicant has identified a number of noise mitigation strategies. Such measures include:

- selection of plant and equipment based on acoustic performance;
- selection of quiet construction methods and use of more efficient silencers and exhausts;
- carrying out of all maintenance and delivery activities during daytime hours, where feasible;
- installation of temporary noise barriers where feasible;
- minimising the duration of noisy activities; and
- consultation with the potentially affected community

The Applicant highlights that it is difficult to undertake a specific assessment of the noise mitigation provided this range of mitigation measures, however asserts that the measures would result probably result in noise reduction by between 10 and 20 dB(A) depending on the specific site constraints.

Operation

In consultation with the DEC, the Applicant identified the project specific noise criteria for the development, in accordance with the EPA's Industrial Noise Policy. In accordance with that Policy, the surrounding residences were considered as rural, as opposed to urban or suburban settings, even though the proposed site is zoned as general industrial. The Applicant's assessment identifies that the proposed development would

comply with the relevant criteria at all times during the day and evening periods, however that there would be exceedances of the criteria at four of the six closest residences during the night period, by up to 11 dB(A). At the request of the Department and the DEC, the Applicant investigated all reasonable and feasible measures to minimise and mitigate noise from the development. The Applicant highlighted the following key noise treatments that could be implemented during the night-time period:

1. restrict trucks from reversing to eliminate reversing alarm noise;
2. confine forklift movements to be within the building envelope;
3. restrict train break up, shunting and wagon unloading activities (although if a train arrives it would still need to be manoeuvred onto the siding and parked, taking approximately 20-30 minutes);
4. provide additional noise attenuation to approximately half of the exhaust fans at the development; and
5. provide additional attenuation to the remaining exhaust fans.

The Applicant specifies that the implementation of measures 1-4 ensure compliance at all receiver locations except for a 3 dB(A) exceedance at the closest residence. Implementation of the fifth measure as well does not significantly alter this result, with the single exceedance becoming 2 dB(A). The Applicant considers that the additional noise mitigation associated with measure five is unreasonable due to the minimal noise reduction affect. However, the Applicant does identify that where reasonable and feasible mechanical plant with lower noise impacts would be selected during the detailed design phase of the project.

Traffic related noise would marginally increase along Picton Road, by approximately 0.5 dB(A), due to small vehicle generation from the proposed facility, compared with the existing traffic rates on Picton Road. Sleep disturbance criteria are predicted to be complied with at all nearby residences. In particular, the noisiest activity at the site, wagon shunting, would not be permitted during the night-time (in accordance with the above), further reducing the potential for sleep disturbance.

Issues raised in submissions

The DEC has provided General Terms of Approval (GTAs) for the proposal. In particular, the DEC has specified operational noise criteria for the proposed development consistent with the implementation of noise mitigation measures 1-4 (listed above). The DEC also requires the Applicant to periodically assess best management practice and best available economically achievable technology with a view to minimise noise emissions below 33 dB(A) at the closest residence. The DEC's GTAs also include the requirement to implement a Traffic Noise Management Strategy to minimise noisy activities associated with truck and rail movements, including details of corrective action and auditing. Regarding construction noise, the DEC requires that a Construction Noise Management Protocol be prepared and implemented to address noise management and mitigation measures, as well as community consultation and complaints handling, particularly for night-time construction activities.

All of the four submissions from the public, raised noise issues in their submissions. Particular noise issues raised include the night-time construction noise impacts, general operational noise impacts and traffic noise impacts during both the day and night periods.

Department's Position **Construction**

Construction noise impacts are generally acceptable, except during the four campaign concrete pours that would be undertaken during night-time construction activities. The Department highlights that these four separate occasions would last for one to two

weeks each, and would cause noise impacts at the two closest private properties, by up to 12 dB(A). While this is a very short-term impact, it is potentially considerable. In the first instance, the Department requires that the Applicant implement all reasonable and feasible measures to minimise night-time noise impacts. The Applicant has identified these measures. The Department considers that the proposed measures reflect those that are reasonable and feasible and supports the Applicant's commitment to implementing them where it is feasible. In particular, the Department recommends that the Applicant be required to notify all potentially affected residents prior to night-time activities, install temporary noise barriers around night-time activities and ensure that noisy activities are scheduled so as not to coincide with each other.

The Applicant estimates that the noise reduction associated with the implementation of the identified strategies could be between 10 and 20 dB(A), thereby reducing the noise impact so that it would meet the relevant criteria. However, the Department accepts that these measures generally depend on the timetabling and specific details of the construction activities, and as such, it is not possible to accurately undertake a comprehensive noise impact assessment to establish the likely noise mitigation associated with the measures. The Department considers that rigorous consideration of this issue during the detailed design for construction, prior to any construction activities, would ensure that such a noise reduction would be achieved. The DEC recommends the submission of a Construction Noise Management Protocol. The Department has spelt out in detail the expectations of the Applicant in this regard, to be addressed in the Protocol, and submitted before any construction activities commence at the site, including:

- a clear description of the construction activities (and timing of those activities) likely to affect the acoustic amenity of nearby residents; especially for night time construction activities, and identification of construction noise objectives;
- details of the community notification measures that have been undertaken prior to construction, the outcomes of any consultation that has arisen from that notification, and any proposed future notifications or consultations;
- management methods and procedures to ensure that all reasonable best practice noise mitigation measures are applied during construction works, which for night-time works must include as a minimum:
 - construction timetabling to minimise noise impacts;
 - installation of noise reduction barriers around night time work areas;
 - selection of plant and equipment on acoustic performance, and quiet methods of construction;
 - as far as practicable, restrictions to the unnecessary simultaneous operation of noisy plant and equipment;
- a pro-active and reactive strategy for dealing with noise complaints, including how noise complaints would be followed up and a response provided to the complainant as soon as practicable; and
- noise monitoring, reporting, compliance auditing and response procedures.

Operation

Implementation of the Applicant's proposed noise mitigation measures would reduce all noise emissions to below the relevant criteria, except for a predicted 3 dB(A) exceedance of the night-time criterion at the closest residence. The Applicant argues, and the DEC has agreed, that the exceedance is relatively marginal, and that the proposed mitigation measures represent all the reasonable and feasible measures able to be imposed. The DEC has specified noise limits for the development, consistent with what the predicted noise emissions, and these are reflected in the recommended instrument of consent. In addition, the recommended instrument of consent includes stringent provisions for the minimisation of noise impacts during the operation of the

development, on-going consideration of best noise management practices, a comprehensive complaints handling and response protocol.

The Department highlights that the noise impact would only occur if a train arrived during the night-time period, and then for only a short period while a train was received at the site. As such, the potential worst case noise impact is not an on-going continuous noise impact but a sporadic and short lived impact. Notwithstanding this, the DEC has recommended that the Applicant be required to undertake periodic consideration of further noise mitigating technology or activities at the proposed development in line with best available technology that is economically achievable, if the Minister approves the proposal. The Department supports this recommendation, and has included it as a condition in the recommended instrument of consent.

Regarding traffic noise, the Department highlights that Applicant's predicted additional 33 heavy vehicle movements per day would result in a marginal 0.5 dB(A) noise increase on Picton Road. This is less than the permitted increase of up to 2 dB(A) established in the EPA's *Environmental Criteria for Road Traffic Noise*. To ensure that any road traffic noise is appropriately minimised, the Department would require that noisy movements and truck scheduling be considered as part of the Traffic Management Strategy.

6.2 Urban Design, Landscaping and Visual Amenity Impacts

Applicant's Position

Landscaping

The Applicant has proposed two landscape treatments (L1 and L2) to ensure that the proposed development complies with Council's Development Control Plan 20 – Industrial Development and that the development is suitably screened from the existing residences. The landscape treatment L1 is proposed to extend the length of the boundary of the site with Picton Road, between the eastern end of the proposed site and the Carriage Creek tributary that traverses the site. Treatment L1 comprises of a mound approximately two to four metres in height and approximately 30 metres wide. The mounded area would be planted with native trees and shrubs on its elevated sections, and on its lower section on the side of the mound away from Picton Road. Vegetation maturation would screen the mill from traffic on Picton Road. Treatment L2 is proposed to extend along Carriage Creek tributary, approximately half of the eastern boundary and the portion of the site fronting Picton Road that is north of the Carriage Creek tributary. The treatment is similar to L1 except that it does not include the mound. The location of the landscape treatment L2 is proposed to provide generally screening of the development from residents to the east of the site and northwest of the site, as well providing revegetation along the tributary (see Section 6.4).

Building Design

The Applicant identifies three key aspects of the proposed development. Component A includes the five 30 metre high silos on the eastern side of the facility (facing Picton Road) proposed to be made of corrugated galvanised steel; the eighteen 45 metre high silos on the western side of the facility, and the main mill building some 40 metres in height, to be constructed of concrete. Component B is the warehousing area, which is considerable in bulk and scale, however is significantly lower in height than component A. Component C includes the low-level structures that would only be able to be viewed whilst on the site.

Visual Amenity

The Applicant's visual impact assessment primarily considered the impact to views from passing motorists and rail passengers. At the request of the Department, the Applicant undertook an additional visual impact assessment with consideration of the nearby residential properties. The Applicant's assessment identified that the nearest properties to the proposed site generally contain on-site screening near the dwelling so that there would be very little impact to residents when in the dwelling. The assessment also indicated that where this existing screening did not exist (as in the case of a couple of the nearby residences), or once the residents had left the dwellings (while still on the property), the proposed landscape treatments (described above) would generally screen the lower portions of the mill. It is likely that the elevated sections of the mill and silos would still be observable from these properties, even after the screening plantings had matured.

Issues raised in submissions

Council raised the issue of landscaping in its submission. In particular, Council requested that it be consulted regarding the species proposed to be used as part of any landscaping works, and recommended that only native species, and that a weed management plan should be included with the landscape plan.

Visual amenity impacts were raised in three of the four submissions from the public. Specific issues included the lack of visual amenity impact assessment regarding neighbouring properties, and the inability of the proposed landscape treatments to suitably screen the proposed development from neighbours' properties. Neighbours also requested that the landscape treatments be extended the entire length of shared property boundaries.

Department's Position

Landscaping

The Applicant proposes to locate the building at the south of the proposed site, adjacent to the Main Southern Railway line. This would also increase the distance between the facility and nearby residences and ensure that the setback distances in Council's *Development Control Plan 20 – Industrial Development* (DCP 20) would be complied with. The Applicant proposes to comply with the landscaping requirement of DCP 20, and provide a mounded vegetation strip (30 metres wide as specified in DCP 20) along most of the frontage of the site with Picton Road. There would be an unmounded strip of vegetation along most of the remaining boundaries of the site (except for the boundary with the railway line). The Department is satisfied that the proposed landscaping would comply with the requirements of DCP 20, and considers the proposed landscaping acceptable. The Department recommends that the Applicant prepare and implement a Landscape Management Plan to ensure consultation with Council and the DEC to determine appropriate species for landscaping on the site; and maximisation of flora species endemic to the locality, as well as a program to ensure that all landscaped areas are maintained in a tidy, healthy and weed free state. The Department also highlights that the revegetation and management of vegetation in the riparian zones at the site would also be addressed by the implementation of a Vegetation Management Plan for those areas (see section 6.4 below).

Building Design

The Department notes that the higher portions of the facility would be visible from certain vantage points within the locality, even after the proposed screening plantings have matured. Further, the Department highlights that the elevated sections of the buildings would be generally composed of plain concrete, without any external features that would reduce the bulk of the buildings and improve the appearance of the structures. If the

Minister approves the proposed development, the Department recommends that the Applicant be required to further consider potential building façade treatments to generally improve appearance of the development, and to minimise potential visual impacts of the development. The Department recommends that an external finishing board be provided by the Applicant for the approval of the Director-General. The finishing board would illustrate the materials and external finishes proposed to be used on the various elements of the building to minimise the bulk of the buildings and to ensure materials and external treatments would aid in minimising obtrusive visual affects.

Visual Amenity

The Department highlights the concern of neighbours regarding the visual amenity impact from the proposed facility. In particular, nearby residents are concerned that the proposed facility will not be fully screened from nearby residences. On this matter, the Department raises four considerations. Firstly, the proposed screening by the Applicant is unlikely to fully screen the entire development from all vantage points. There would be a number of nearby residences that would be able to view parts of the facility (generally the elevated components) from their residence or from their property. These residences range from 250 metres way to over 1 kilometre away. Secondly, a number of these residences have screen plantings on their property that would mean the proposed development would generally not be able to be viewed from within the dwelling. Notwithstanding this, the development would be able to be seen once an observer had stepped away from such screening vegetation. Thirdly, the closest residences have specifically requested that the landscape treatments proposed by the Applicant be extended the entire length of shared property boundaries, such that the visual amenity impact from the properties are minimised. The Department highlights that extensions to the proposed screening plantation would not necessarily reduce the magnitude of any visual amenity impact from any particular residence, as the extended plantings would not be within any particular line of sight. However, the broader plantings that would eventuate would, in the Department's opinion, further soften any views that may be impacted from nearby properties. Lastly, the Department highlights that the proposed development is one that signifies agricultural production, as opposed to heavy industry. The components of the development that would be able to be viewed above the screening vegetation generally include silos and some parts of the mill. The Department notes that while the subject site is zoned for industrial purposes, the surrounding land is zoned rural. It is considered that the proposed development would not necessarily be out of character in the existing rural environment. Further, the Department highlights the close proximity to the Blue Circle Southern Maldon Cement Works (500 metres), indicating that the existing viewscape is not pristine, and that there will be further improvements to the building façade as specified above.

In light of these considerations, the Department draws two conclusions. The first is that while the elevated components of the mill and silos would be able to be viewed from a number of the local residential properties, whether from within the dwelling or from outside the dwelling, such a visual impact would not be significant, when the nature and existing context of the proposed development are considered. Notwithstanding this, the Department considers it reasonable for the Applicant to reduce any visual amenity impact to as low as is reasonably possible. In addition to the improved building façade treatments specified above, the Department considers that a key activity in reducing this impact is to broaden the extent of the landscape treatments to extend the full length of common boundaries (except along the railway line). This would result in additional screening to nearby properties (generally while outside the dwelling) minimising the overall visual amenity impact to these residents. It would also have the effect of further

softening the broader viewscape surrounding the proposed development, further minimising any visual amenity impact.

6.3 Traffic and Transport Impacts

Applicant's Position

The proposed site would access Picton Road directly. There is an existing access road, which would be downgraded for use by pedestrians, but not vehicles. The existing access road is shared with neighbouring adjacent properties, and the Applicant intends to continue this arrangement on the proposed new access road.

The Applicant identifies the worst case scenario of employee traffic generated as 54 trips per day, assuming that all employees drive to and from work individually. Based on historical data it is likely that approximately 28 of these trips would arrive at/ leave the site from/ to the west, while 26 of these trips from/ to the east (and the Hume Highway). The Applicant estimated that approximately 33 heavy vehicle movements would be generated per day, of which 100% would utilise the Hume Highway. Heavy vehicle traffic would therefore be required to turn right onto Picton Road, and proceed to the east to access the Hume Highway. Due to this, the Applicant identifies that the intersection between the proposed new access road and Picton Road would require a traffic control treatment to ensure safe operation. The Applicant proposes to construct a Type C intersection in accordance with the RTA's design guidelines.

The Applicant has also undertaken an analysis of the performance of existing intersections and how that might be affected by traffic from the proposed development, during morning and afternoon peak periods. During the morning peak, the proposed development is estimated to generate 21 passenger vehicle trips and heavy vehicle trips, whilst during the afternoon peak, 21 passenger vehicle trips and 2 heavy vehicle trips. The Applicant has analysed the impact by modelling the level of service of the Picton Road/ Hume Highway intersection during peak hours with and without the proposed development. The Applicant's analysis demonstrates that the additional vehicles from the proposed development would only marginally influence vehicle delays (in all cases less than 0.8 of a second) and would have no affect to the level of service of the intersection operation. The Applicant does not predict any heavy vehicle movements that would proceed to the west along Picton Road, and as such, no heavy vehicles would affect the Picton Road/ Menangle Road intersection.

Regarding construction traffic, the Applicant highlights that there would be a peak of approximately 360 employee movements per day, and approximately 150 heavy vehicle movements per day. Construction employees are expected to come from the Metropolitan area, utilising either the Hume Highway or Menangle Road to access the site and would generally be travelling against the peak flows. Heavy vehicles (construction material deliveries) are predicted to be consistent across the day, with a slightly higher proportion arriving at the site during the morning period. The Applicant considers that the split of the traffic and the current spare capacity on the relevant access roads and intersections would mean that there would be no significant impact resulting from construction traffic.

Issues raised in submissions

Both the Council and the RTA submitted the issues raised by the Southern Regional Development Committee. Council, in particular, highlights the following issues raised by the Committee:

- no assessment of construction traffic related impacts at the site access/ Picton Road intersection (including potential traffic associated with sewage trucks);
- no 10 year forecast of the access road/ Picton Road intersection undertaken;

- site distances, loading/ unloading, on-site parking and internal roads should comply with the relevant RTA and AUSTROADS guidelines; and
- that the Applicant should further consider that the potential need for an improvement to the Menangle Road/ Picton Road intersection, as projected in the Wollondilly Development Control Plan 20.

The RTA has subsequently provided the terms of its concurrence under the *Roads Act 1993*, agreeing with the Applicant that a Seagull Layout intersection is appropriate for the proposed development during operation. In its terms of concurrence, the RTA included a number of traffic related conditions including:

- that the site access road have safe intersection sight distances of 225 metres in both directions, that landscaping or fencing should not restrict any vehicular sight lines on Picton Road and that vehicles must enter and the leave site in a forward direction only;
- the requirements that road traffic noise be minimised in accordance with EPA and RTA guidelines, and that suitable drainage be provided across the driveway in accordance with RTA and AUSTROADS guidelines;
- restriction on advertising or signage in the road reserve; and
- administrative arrangements ensuring that detailed design is approved by the RTA prior to commencement of construction, and that costs are appropriately covered by the Applicant.

The Wilton Progress Association raised concern that the increased traffic associated with the proposed development would cause further congestion on Picton Road and the Hume Highway, and would impact on passenger train services.

Department's Position

The Department notes that the traffic generated by the proposed development is small, and that heavy vehicle trips tend to be reasonably well distributed throughout the day, with peak hour heavy vehicle movements of 3 heavy vehicles. The low level of traffic is predicted to have minimal effect to Picton Road and the Picton Road/ Hume Highway intersection. The Department notes the terms of the RTA's concurrence, which require the construction of a Seagull Layout intersection at the intersection of the proposed access road and Picton Road. The Department supports this, and has reflected the RTA's terms in the recommended instrument of consent. Considering the RTA's terms of concurrence, and the relatively low level of generated traffic, the Department does not consider that a 10 year projection of the level of service of the proposed intersection to be necessary. In addition to this, the Department highlights that the only traffic required to wait at the proposed intersection is traffic exiting or entering the site, where the intersection would operate as a B level of service (for traffic entering the site) and an A level of service (for traffic exiting the site) during peaks. The design of the intersection would not restrict through traffic along Picton Road.

Regarding the construction period, the Department highlights that the RTA's terms of concurrence include a requirement for the intersection to be construction within three months of the commencement of construction works at the site, and that construction traffic shall remain below 10 cars per hour and one truck per hour until the intersection is completed. It is highlighted that the level of construction during the early stages would be significantly below that of peak construction activities, and the Applicant has indicated that it would be able to comply with this requirement. The Department also acknowledges that the construction workforce is likely to peak outside of peak hour times, and that there is sufficient capacity in the road system to accommodate the peak level of temporary construction traffic. Additional assessment carried out by the Applicant demonstrates that the level of service would remain as either A or B during the construction period for both the proposed new intersection and the Hume Highway/

Picton Road intersection. The pump out of sewage during the construction period would generate approximately one truck journey per day, which is insignificant in the context of up to 150 construction trucks accessing the site per day.

The Department acknowledges the issue highlighted by Council regarding the Menangle Road/ Picton Road intersection. The Department notes that DCP 20 requires consideration of the potential need for improvements to that intersection for new development in the area. In this context, the Department reiterates that the proposed development is a relatively low traffic generator due to its small workforce, and that being shift workers, there would be a maximum of 21 vehicles accessing the site during peak hour. Finally, the Applicant highlights that while some of the employees might use Menangle Road, all heavy vehicles would turn right onto Picton Road, to access the Hume Highway, thereby avoiding the subject intersection all together. In light of these considerations, the Department does not consider it necessary for the Applicant to provide any funding towards a potential future upgrade of the Menangle Road/ Picton Road intersection. Regarding concern about passenger train services, the Department highlights that the proposed development is out side the metropolitan rail loop and would receive only one train per day, and as such would not interfere with passenger train movements.

The Department is satisfied that the proposed car parking and site access arrangements are suitable, subject to conformance with the relevant RTA and AUSTROADS guidelines and standards.

With regards to the integrated approval under the *Roads Act 1993*, the Department notes that the appropriate integrated approval authority is Wollondilly Council, with the RTA's concurrence. The Department has received the terms of the RTA's concurrence, but no general terms from Council. The Department highlights that it would remain the obligation of the Applicant to obtain an approval under the *Roads Act 1993*, however, that the Council's approval would be required to be consistent with the terms of the RTA's concurrence. The terms of the RTA's concurrence have been reflected in the recommended instrument of consent.

6.4 Hydrology, Water Management and the Riparian Zone

Applicant's Position

The Applicant identifies that the proposed site is located at the lower end of a catchment that drains into Carriage Creek, which in turn drains into the Nepean River. The site includes a major tributary to Carriage creek, and a number of ephemeral water courses. Along the tributary is a reservoir, and there are three small ponds elsewhere on the site. All water flow from the site passes underneath the railway lines via one of two culverts. Water from the tributary and reservoir pass through culvert 1, while water from other drainage lines and ephemeral watercourses pass through culvert 2. Both culverts are located to the west of the site. There are three particular aspects of the proposed development with potential have an impact on the hydrology and water management of the site. These are:

- creation of a hardstand environment on land that it currently grassed and realignment of ephemeral watercourses on the site, changing the drainage characteristics of the land,
- use of treated sewage effluent as irrigation on the site; and
- rehabilitation of a riparian corridor surrounding the major onsite tributary to Carriage Creek.

Drainage

During construction, the Applicant identifies that possible impacts would arise from earthworks increasing sedimentation, construction of culverts over the proposed site

drainage channel, and the possibility of spills of paints, solvents, oils and fuels. To ensure such impacts are minimised the Applicant proposes to prepare and implement a Soil and Water Management Plan. The Applicant proposes to use one of the existing ponds at the site as a temporary sedimentation basin during the construction phase. The basin would include a primary outlet, an emergency spillway, internal batter and outlet protection to minimise scouring. Further details would be provided in the Plan. The Applicant also proposes to implement a number of salinity mitigation measures to ensure that ponding of surface water or groundwater seepage is minimised.

The Applicant proposes to redirect the course of the flow from the site drainage channels into the reservoir, meaning that much of the site water that would normally flow through culvert 2 would flow through culvert 1. The Applicant has identified the site water balance for the site, with an average monthly rainfall of approximately 21,000 m³. The Applicant calculates that the proposed changes to the drainage scheme would increase the catchment of the reservoir from 229 hectares to 249 hectares. For a 100 year flood event this represents an additional 14 m³ of water passing through culvert 1. The Applicant considers that there is a sufficient amount of capacity at the head of culvert 1 to accommodate the additional flows. In addition to this, the hardstanding of the proposed development site is predicted to increase the flow of water during a 100 year flood by only 1 m³. The increased flow of water into the reservoir is predicted to increase the amount of pollutants being conveyed into the reservoir and through culvert 1 proportionally.

The proposed drainage design concept is based on efficient transfer of water away from the proposed mill, and the use of bioswales to convey water to the reservoir. To prevent contamination of surface waters the Applicant proposes to ensure stormwater runs away from the buildings, as well as bunding of the waste storage area and appropriate location of chemicals. To ensure there is no adverse impact to the receiving waters, the Applicant proposes to undertake periodic water sampling of the reservoir.

Effluent Management

Since the site is not connected to sewerage services, the Applicant undertook an analysis of options for management of the sewage effluent at the proposed development (see also Section 2.3). The preferred option includes on-site management and treatment of sewage, with on-site irrigation.

The Applicant identifies that the preferred option is generally low cost and low maintenance sewage treatment without generation of odours, and capable of handling the small flow of wastewater. The Applicant predicts the likely flow of wastewater to be approximately 3000 litres per day, from the nine office staff and three sets of six shift workers per day, and eight 8 visitors per day. The Applicant proposes to install a 10,000 litre (10 kilolitre) primary settling tank to ensure that higher than normal use would also be accounted for. The primary settling tank would allow sedimentation and digestion of settleable solids and flotation of oils and fats. The second stage of treatment would be via a subsurface flow reed bed, where the wastewater is passed through specially selected soils (selected for their microbial activity, absorptive capacity and permeability) planted with sufficiently tolerant plants/ reeds. The treated wastewater would then pass to a 100-kilolitre storage tank. The size of the storage tank is based on the site water balance, and the amount of irrigation water that could be used at the site, taking account of wet weather. The final stage of treatment involves the use of ultraviolet radiation to reduce the level of faecal coliforms in the treated effluent. The proposed treatment results in water generally consistent with, or of better quality than, the licences Sydney Water targets for the Picton sewage treatment plant.

The Applicant has also undertaken an assessment of the ability of the land to accept the nutrients, and the size of irrigation area needed. Based on the 100 kilolitre storage proposed the Applicant identifies that an area of 1 hectare is a sufficient area for irrigation. Based on nutrient loading, the area required is approximately 0.125 hectares. The Applicant has undertaken a detailed salinity and irrigation assessment and identified a number of management measures, including:

- no irrigation during inappropriate meteorological conditions (such as heavy winds);
- monitoring of soil profile to prevent over watering, and collection of seepage for return to the treatment plant;
- monitoring of pasture health, water run-off, subsurface seepage and salt levels to ensure early warning of any change to salinity in the soil profile.

Issues raised in submissions

The Department received submissions from the Australian Rail Track Corporation (ARTC) and the Department of Primary Industries (DPI) regarding the management of water/ effluent at the site.

The ARTC highlighted concerns regarding the increase in flows through the railway culverts and the potential impacts of this to the culverts, and regarding scouring of the watercourses at the site, resulting in increased sedimentation at the culverts. In particular, the ARTC considers that the surface water assessment was not sufficiently conservative, potentially underestimating the flow rates. The ARTC recommends regular inspection and monitoring of the development site and the culverts until the site is no longer erosion prone, to ensure no adverse effects are identified.

The DPI noted that the volume of wastewater is low and that the proposed 1-hectare irrigation area is sufficient based on hydraulic load and nutrient balance. The DPI further notes that plant growth in the irrigation area is unlikely to be affected by salt, and the load is relatively low, however recommends that the recommendations made in the salinity report (in the EIS) are implemented. Finally, the DPI states that the area proposed for irrigation is likely to be suitable for that purpose.

Department's Position

Drainage and Riparian Corridors

The Applicant proposes to modify ephemeral streams at site, with no significant changes to the major watercourse at the site, or its reservoir. The Department's principal objective regarding the changes to the drainage system at the proposed site is the creation of a suitably restored and revegetated areas surrounding the Carriage Creek tributary and its reservoir. The Department is required to issue a Part 3A Permit under the *Rivers and Foreshores Improvement Act 1948* for realignment works. The General Terms of the Department's integrated approval, as reflected in the recommended instrument of consent, are summarised below.

The Department requires that a dedicated Riparian Zone, at least 40 metres on each side of the tributary/ reservoir be created surrounding the tributary/ reservoir. The Riparian Zone would require at least 1 tree or 1 shrub (in approximately equal numbers) alternately planted at 1 plant per square metre and groundcover plants at 4 plants per square metre; such that it would be fully structured and consist of a diverse range of native plant species and communities local to the area. The Riparian Zone would be protected from non-ecologically functioning activities or works shall have no non-ecologically functioning work or activity so that it could emulate the original natural ecosystem. The recommended instrument of consent includes a number of other requirements to ensure the Riparian Zone is restored, revegetated and maintained in an appropriate manner, including:

- scour protection and limits to slopes;
- detailed design for works to be approved by the Department;
- a Vegetation Management Plan to provide details of revegetation, rehabilitation maintenance and monitoring activities;
- the requirement for salinity management proposed in the EIS to be implemented.

The Department is generally satisfied that the riparian zone would be suitably rehabilitated by the Applicant, however has proposed a number of conditions to provide additional certainty.

Drainage and Culverts

The Department notes that a significant proportion of the surface water from the site in its existing state would pass through culvert 2, and that this would be largely directed to the reservoir and culvert 1 under the proposed realignments to the drainage system. While additional 20 hectares represents a significant proportion of the site, it is relatively small compared with the entire catchment of the reservoir, which is currently 229 hectares. As such, the additional 20 hectares represents an increase of less than 9%. Volumes and flow rates during peak flows are predicted to increase proportionally (by approximately 9%). The Department acknowledges the concerns raised by the ARTC regarding increases to erosions and flow rates, with potential ramifications to the railway culverts. However, the Department highlights that the modelling undertaken by the Applicant demonstrates a minimal increase in flow rates underneath the culverts, and that the impacts to the culverts would be minimal. The Department also notes the ARTC's concerns that the Applicant may have underestimated the potential increase in the site flow rates. When considering landscaping around the hardstand areas (such as car parking areas) the Department considers that the Applicant's estimate is sufficiently accurate, and notes the area proposed to be hardstanded is very small compared to entire site (24 hectares). The Department also highlights that the Applicant has not included any storage capability of the reservoir. Notwithstanding this, the Department considers that the ARTC's proposed management measures are reasonable and includes in the recommended instrument of consent the requirement that appropriate measures to ensure the continued integrity of the culverts are implemented, in consultation with the ARTC.

Effluent Management

The Department is satisfied that the Applicant has demonstrated that the area proposed for irrigation is of a suitable size. While the Applicant did not specifically undertake soil sampling at the location of the proposed irrigation area, the Applicant has demonstrated that the soil type across the site (Ashfield Shale in Wianamatta group) is consistent. The soil type is moderately saline, and as indicated by the DPI, is suitable for irrigation. Subject to the implementation of the measures provided in the EIS, a requirement reflected in the recommended conditions of consent, the Department considers that the use of treated effluent, as proposed would be acceptable. The Department also notes potential issues associated with the location of the irrigation area adjacent to one of the drainage lines, and that it is on the north of the site near Picton Road and adjacent residences. Again, the Department supports the recommendations in the EIS, relating to restrictions on irrigation during adverse weather conditions (such as wind or rain), and considers that the use of the treated effluent for irrigation would be acceptable. The Department would also require that the Applicant provide additional details of these proposed management and monitoring measures as part of a Water Management and Monitoring Plan.

7. RECOMMENDED CONDITIONS OF CONSENT

Should the Minister determine to approve the proposed development, the Department recommends the imposition of a number of conditions to mitigate, manage and monitor environmental impacts, as outlined in the recommended instrument of consent. The conditions incorporate the General Terms of Approval under the *Rivers and Foreshores Improvement Act 1948*, and reflect the terms of the RTA's concurrence under the *Roads Act 1993*. The other issues raised by Wollondilly Shire Council, the Australian Rail track Corporation and all other submitters including nearby land owners, have been considered in this report, and where relevant conditions have been included in the recommended instrument of consent. Key matters covered by the recommended conditions include:

- **Noise impacts** – noise limits during operation of the development, and noise goals for both construction and operation, as well as on-going consideration of best available management measures to mitigate noise from the development, and the requirement to undertake noise compliance monitoring;
- **Landscaping and visual amenity** – screening plantings over and above those proposed by the Applicant to minimise visual impacts of the development and requirements for the Applicant to further consider measures to improve the appearance of the development (especially those elevated section that are unlikely to ever be entirely screened);
- **Riparian and water quality** – conditions relating the restoration, rehabilitation, maintenance and on-going management of the riparian corridor surrounding the major on-site tributary and reservoir;
- **Cultural heritage** – conditions relating to conservation and management of identified Aboriginal Heritage Items, in consultation with the DEC and the local Aboriginal community, by establishing Heritage Conservation Zones;
- **Road traffic** – limits on the design, timing and usage of the upgraded intersection between the proposed new access road and Picton Road, in accordance with the terms of the RTA's concurrence under the *Roads Act 1993*;
- **Environmental management** –, especially relating the erosions and sediment control and noise management during construction, and water monitoring and management, noise management, heritage conservation vegetation management, traffic management and landscaping.

8. CONCLUSION

The proposed development represents a major opportunity for the Applicant to improve the efficiency of its milling operations, while remaining close to the Sydney market. Improved efficiency would eventuate by relocating flour milling from the ageing facility at Summer Hill, and relocating maize milling from Albury to Sydney. The proposed development would also overcome existing operational constraints at the Summer Hill facility relating to road and rail traffic and noise restrictions, due to the close location to residential areas.

The Department considers that the proposed development is consistent with the objectives and provisions of the *Wollondilly Local Environmental Plan 1991*, as well as the *Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River* and relevant Development Control Plans adopted by Council. The Department notes that there are environmental issues that require management during construction and operation of the development, especially noise and visual impacts, for which recommended conditions of consent have provided.

The Department considers that the recommended conditions of consent provide a rigorous and strict framework for the on-going environmental management of the

development, and considers that all environmental planning concerns would be satisfactorily addressed by the conditions. It is therefore recommended that the development application be approved subject to the conditions of the recommended instrument of consent.

9. RECOMMENDATION

It is recommended that the Minister

- (i) consider the findings and recommendations of this assessment report, for DA-318-12-2004-i; and
- (ii) agree that the proposed development could be carried it within acceptable environmental limits, subject to the implementation of the conditions reflected in the recommended instrument of consent; and
- (iii) grant consent to the development application DA-318-12-2004-i by the signing the recommended instrument of consent.

APPENDIX A

CONSIDERATION OF THE RELEVANT PROVISIONS OF WOLLONDILLY LOCAL ENVIRONMENTAL PLAN 1991

Following are considerations of the proposed development in the context of the objectives and provisions of the Wollondilly LEP.

2 Aims, objectives etc

This plan aims:

- (d) to conserve the environmental heritage of the Shire of Wollondilly, and*
- (e) to integrate heritage conservation into the planning and development control processes, and*
- (f) to provide for public involvement in the matters relating to the conservation of the Shire of Wollondilly's environmental heritage, and*
- (g) to ensure that new development is undertaken in a manner that is sympathetic to and does not detract from the significance of heritage items and their settings, as well as the streetscapes and landscapes of Picton and Thirlmere and the distinctive character that they impart to the Shire of Wollondilly, and*
- (h) to ensure that development does not compromise the protection and maintenance of water quality within water supply catchment areas, and*
- (i) to ensure that development reflects the integrated resource management principles of total catchment management, and*
- (j) to reduce the incidence of rural land use conflict by introducing appropriate planning controls, and*
- (l) to ensure that agricultural uses are considered to be equally as important as urban and rural residential uses, and*
- (m) to maintain the rural natural landscape character of the Wollondilly local government area by providing a balance between agricultural and other land uses, and*
- (o) to protect areas of identified ecological significance, and*

The proposed development includes a number of management measures to ensure that environmental heritage and water quality are protected. The Department is satisfied that the development can be suitably controlled to ensure the rural landscape of area is not significantly impacted. On this issues, the department highlights that the proposed development is for processing of agricultural produce, it includes silos which are characteristic of agricultural development, and incorporates a significant amount of screening vegetation and revegetation of watercourses.

10 Zone objectives and development control table

- (1) The objectives of a zone are set out in the Table to this clause under the heading "Objectives of zone" appearing in the matter relating to the zone.*
- (2) Except as otherwise provided by this plan, in relation to land within a zone specified in the Table to this clause, the purposes (if any) for which:*
 - (a) development may be carried out without development consent, and*
 - (b) development may be carried out only with development consent, and*
 - (c) development is prohibited,**are specified under the headings "Without development consent", "Only with development consent" and "Prohibited", respectively, appearing in the matter relating to the zone.*
- (3) Except as otherwise provided by this plan, the council shall not grant consent to the carrying out of development on land to which this plan applies unless the council is of the opinion that the carrying out of the development is consistent with*

the objectives of the zone within which the development is proposed to be carried out.

Zone No 4 (a) (Industrial Zone)

1 Objectives of zone

The objective of this zone is to identify land to be set aside in strategic locations for business establishments and employment opportunities in industry other than industries of an offensive or hazardous nature.

2 Without development consent

Nil.

3 Only with development consent

Any purpose other than a purpose included in Item 4.

4 Prohibited

Abattoirs; agriculture; boarding-houses; commercial premises and multiple dwellings; (other than those used in conjunction with industry and situated on the land on which the industry is conducted); dwellings (other than those used in conjunction with an industry); educational establishments; extractive industries; granny flats; hospitals; institutions; mines; motels; offensive or hazardous industries; places of assembly; professional consulting rooms; roadside stalls; shops (other than shops that are ancillary to, and used in conjunction with, manufacturing purposes permissible within the zone which serve the daily convenience needs of the workforce of the industrial area or which are used for the sale of bulky goods); stock and sale yards; turf farming.

The proposed development is consistent with the objectives of the zone, and is permissible with development consent, by virtue of not being listed as prohibited development.

20 Development within proclaimed mine subsidence district

(1) *This clause applies to land situated within an area which has been proclaimed as a Mine Subsidence District under section 15 (1) of the Mine Subsidence Compensation Act 1961.*

(2) *The council shall not consent to the carrying out of development on the land to which this clause applies unless it has first obtained the concurrence of the Mine Subsidence Board to the carrying out of the development.*

(3) *In deciding whether concurrence should be granted as referred to in subclause (2), the Mine Subsidence Board shall take into consideration:*

- (a) the potential use of the land for mining purposes, and*
- (b) whether coal resources will be sterilised by the proposed development and the measures, if any, to be taken to prevent that sterilisation, and*
- (c) whether conditions to prevent the surface effects of mine subsidence should be imposed on the granting of consent to the carrying out of the development, and*
- (d) whether granting concurrence to the carrying out of the development is likely to encourage development applications which, if granted, would be likely to sterilise coal resources.*

The recommended instrument of consent requires the Applicant to comply with the terms of an approval issues under the *Mine Subsidence Compensation Act 1961*.

22 Supply of services in Zones Nos 2 (a), 2 (d), 4 (a) and 4 (c)

Notwithstanding any other provision of this plan, no development shall be carried out on an allotment of land within Zone No 2 (a), 2 (d), 4 (a) or 4 (c) unless and until arrangements satisfactory to the Water Board have been made with that Board for the provision of a water supply to the allotment.

The Department has received comments from Sydney Water that the proposed development satisfies its requirements.

29 Development along arterial roads

- (1) *The council shall not consent to an application for consent to carry out development on land which has frontage to an arterial road unless:*
- (a) *access to that land is provided by a road other than the arterial road, wherever practicable, and*
 - (b) *in the opinion of the council, the safety and efficiency of the arterial road will not be adversely affected by:*
 - (i) *the design of the access to the proposed development,*
 - (ii) *the emission of smoke or dust from the proposed development, or*
 - (iii) *the nature, volume or frequency of vehicles using the arterial road to gain access to the proposed development.*

The intersection between the proposed new site access road and Picton Road has been agreed to by the RTA in the terms of its concurrence under the Roads Act 1993. The proposed intersection would result in minimal impact to road users on Picton Road, providing dedicated turning bays. The Department also notes that the proposed development is a relatively small traffic generator during peak periods (up to 21 vehicles) with heavy vehicle movements being evenly spread out during the day, generally avoiding peak periods. Access directly onto Picton Road is the only practicable access for the proposed site, and the Department is satisfied that it is unlikely to effect the safety or efficiency of Picton Road.

30 Heritage items

- (1) *A person must not, in respect of a heritage item:*
- (a) *demolish or alter the building or work, or*
 - (b) *damage or move the relic, or*
 - (c) *excavate for the purpose of exposing the relic, or*
 - (d) *damage or despoil the place or tree, or*
 - (e) *erect a building on or subdivide land on which the building, work or relic is situated or that comprises the place, or*
 - (f) *Damage any tree on land on which the building, work or relic is situated or on the land which comprises the place,*
- except with the consent of the council.*
- (2) *The council must not grant consent to a development application required by subclause (1) unless it has taken into consideration the extent to which the carrying out of the proposed development would affect the heritage significance of the item and any stylistic or horticultural features and its setting.*

The Department has received General terms of Approval from the DEC regarding the destruction of Aboriginal Items. These general terms have been reflected in the recommended modifying instrument.

45 Development of unsewered land

The council must not consent to the carrying out of development on unsewered land unless the applicant demonstrates that the land is capable of supporting the development having regard to the capability of the soil for effluent disposal and buffer distances to watercourses and drainage depressions.

The Applicant proposes to treat the sewage effluent from the development by subsurface reed bed and UV radiation. The Department is satisfied that the proposed treatment plant would provide suitable water for irrigation purposes. The Applicant has also demonstrated that the land is suitable for accepting the quantity and quality of water required, subject to the implementation of appropriate management measures specified in the EIS and the recommended instrument of consent.