



NSW GOVERNMENT
Department of Planning

MAJOR PROJECT ASSESSMENT: Southern Distribution Business Park, Goulburn



Director-General's
Environmental Assessment Report
Section 75I of the *Environmental Planning and
Assessment Act 1979*

November 2007

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EXECUTIVE SUMMARY

Southern Distribution Hub Pty Ltd (SDH) has sought concept plan approval for an integrated logistics, service, warehousing and distribution park, known as the Southern Distribution Business Park (SDBP). The proposed site, consisting of approximately 430 hectares, is located 4 kilometres from the city of Goulburn. The proposal includes the subdivision of the site into four precincts for a variety of land uses including warehousing and distribution, road transport terminals, industry and bulk stores, as well as the provision of infrastructure such as an interchange with the Hume Highway, water supply, sewerage system, stormwater management system and other utilities.

The site has been chosen by SDH due to its proximity to the Sydney and Canberra markets, main freight corridors, and potential to connect to rail. Additionally, SDH considers that any increase in transport costs can be offset by lower storage costs, due to the lower price of land in Goulburn compared with Sydney.

The concept plan proposal has a total capital investment value of \$1 billion, and would generate employment for an estimated 3,000 people once fully operational.

The Department received 165 submissions on the project during exhibition, with 7 from public authorities and 158 from members of the general public. The Roads and Traffic Authority, the Sydney Catchment Authority, the Department of Water and Energy, Australian Rail Track Corporation, the Department of State and Regional Development, the Heritage Council of New South Wales and Goulburn Mulwaree Council did not object to the project, but raised issues such as traffic and road works, rail linkages, noise, water supply, wastewater management, flooding, riparian rehabilitation and heritage and provided recommended conditions of approval to address these issues.

Approximately 70% of the submissions received from the public objected to the proposal, raising concerns about a broad array of potential impacts including site suitability, visual, lighting, traffic noise, dust, heritage, water supply and flora and fauna. Submissions in support of the project generally cited employment and socio-economic benefits as reasons why the proposal should be approved.

The Department notes that the proposal would result in changes to the area south of Goulburn, particularly for the 13 private properties adjoining the site. The proposal, however, offers a substantial investment for Goulburn, which would promote economic growth and employment. Furthermore, the location of the site, adjacent to the Hume Highway provides connection to the main road freight route between Sydney, Canberra and Melbourne, and the potential for linkages to the region's rail infrastructure, in particular the main Southern Railway Line. The Department considers the concept plan for the site is consistent with the draft *Sydney-Canberra Corridor Regional Strategy* and the *Goulburn Mulwaree Strategy 2020*, in that it would facilitate economic growth and future employment land within the Goulburn local government area.

The Department considers that the proposal can be developed in a manner that would ensure that all relevant amenity, health and environmental criteria are met. As the proposal is a concept plan, a number of aspects are still at preliminary planning stage. At this stage, the Department considers that the planning and detailed design of the SDBP must be refined further prior to any physical works being carried out on site. In particular, the Department recommends that aspects relating to the proposed onsite water and sewerage systems and development controls for the site should not be approved, and that further studies relating to rail connection, infrastructure options and upgrade requirements, refinement of the development controls and the overall staging and sequencing of development be presented in a pre-development staging plan for the Director-General's approval, prior to the submission of any project or development related applications.

The Department considers that this predevelopment staging plan would enhance the overarching framework for the development of site, and importantly, would provide a valuable opportunity to improve its intermodal capabilities, and reduce its impacts further.

The Department also acknowledges that there are a number of impacts associated with the proposal that need to be managed and mitigated, particularly related to traffic, noise, water and visual amenity. The Department has therefore recommended key controls that should be implemented to mitigate the proposal, including: a capping of traffic movements generated by the facility; construction, operation

and traffic noise limits; water runoff controls; and, revision of the development control and landscaping plans. Furthermore, the Department believes that it is important that safeguards are in place to protect the amenity of nearby residences. Therefore, the Department has recommended that the Proponent develop an Off-Site Mitigation Strategy to specifically address and ameliorate the impacts on residences adjoining the site.

The Department is satisfied that environmental and amenity criteria could be met through appropriate design and the implementation of other mitigative measures. However, in this instance, the Department recommends that voluntary acquisition clauses and appropriate arbitration mechanisms should be considered in the Off-site Mitigation Strategy, particularly given significance of the project to the region and the State. This would ensure a safety net is in place where the adoption of all reasonable and feasible mitigation measures do not adequately protect local amenity.

On balance, therefore, the Department considers that the concept plan is an appropriate development for the region which would provide considerable economic and social benefits for its community, within a defined and managed framework. Additionally, the Department is satisfied that the proposal can generally meet the relevant amenity, health and environmental criteria through its detailed design and implementation of mitigation measures. Consequently the Department believes the proposal is in the public interest, and should be approved subject to conditions.

1 PROPOSED DEVELOPMENT

Southern Distribution Hub Pty Ltd (SDH) is seeking concept plan approval for an integrated logistics, service, warehousing and distribution park at Goulburn (see Figure 1).

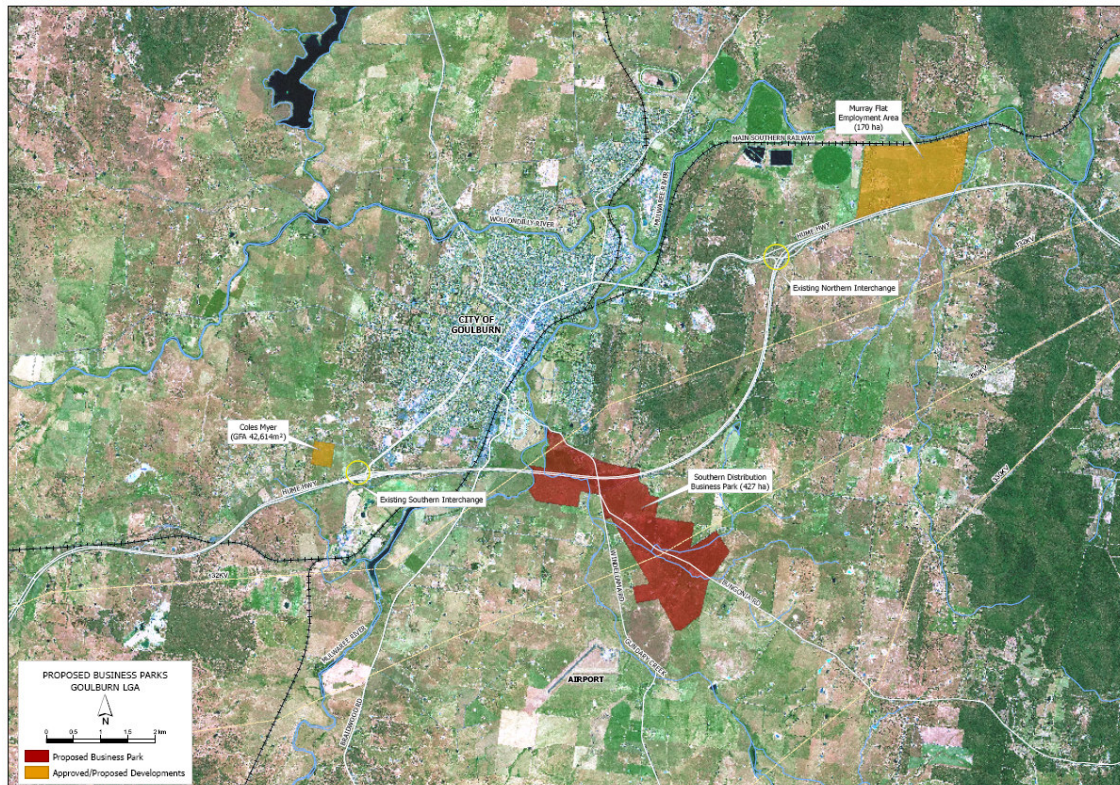


Figure 1: Proposed Site

The proposed site, known as the Southern Distribution Business Park (SDBP), consists of approximately 430 hectares. SDH proposes to subdivide the site into:

1. four precincts with a total maximum gross floor area of 1,500,000 square metres. Each precinct would consist of lots from 10,000 square metres to 100,000 square metres;
2. a community property lot; and
3. a lot for the proposed interchange with the Hume Highway.

The major components of the proposed SDBP are detailed in Table 1 and illustrated in Figure 2 and Figure 3. The remaining components of the proposed concept plan involve the development of subsequent buildings. The timing of the development of these buildings would be dependent on securing clients and would be subject to further project/development applications. The concept plan is described in full in SDH's Environmental Assessment (EA), which is attached as Appendix F.

The concept plan proposal has a total capital investment value of \$1 billion, and would generate employment for an estimated 150 people during construction and approximately 3,000 people once fully operational.

Table 1: Major Components of the Concept Plan

Aspect	Description
Project Summary	Concept plan for an integrated logistics, service, warehousing and distribution park located on a 430 hectare site and associated infrastructure works.
Land uses	SDH is seeking approval for a number of land uses including: <ul style="list-style-type: none"> • industries (except hazardous and offensive); • warehouses; • road transport terminals; • bulk stores; and • ancillary development to the above land uses.
Subdivision	Subdivision of the land into four development lots (Precincts 1 – 4), one community property and a lot for the interchange with the Hume Highway.
Gross Floor Area	Total gross floor area of approximately 1,500,000 square metres (buildings only) plus an addition 70 ha of hardstand area and 13 ha for internal roads and landscaping.
Interchange and Associated Roadworks	An interchange to the east of Bungonia Road providing direct access to the site from the Hume Highway. Associated road works would include the relocation of Rosemont Road and modifications to the Bungonia Road overbridge. A roundabout is proposed at the intersection of the Interchange exit/entry ramps and Mountain Ash Road.
Access	Access to Precinct 1 would be via the relocated Rosemont Road (T-intersection), while access to Precincts 2-4 would be via Mountain Ash Road.
Utilities	<ul style="list-style-type: none"> • Water to be supplied from on site collection (see below). • Sewage to be treated on site (see below). • Electricity to be provided via new aerial lines from the Rocky Hill substation. The connection of electricity to the site does not form part of the concept plan. • Gas could be provided via a 3.5 km extension from the Sydney to Moomba Gas Pipeline. The connection of gas to the site does not form part of the concept plan.
Potable Water System	On-site collection and distribution of water. System would include the following components: <ul style="list-style-type: none"> • rainwater collection system consisting of a 40ML below ground reservoir, a centralised collection system¹ for Precinct 1 and an attenuated centralised collection system for Precincts 2, 3 and 4²; • water treatment plant (WTP); and • potable water distribution system to each of the Precincts.
Sewerage System	All sewage would be treated on-site with reuse of treated effluent on site. The system would consist of: <ul style="list-style-type: none"> • wastewater treatment works (WWTW) with tertiary treatment; and • a third pipe system providing treated effluent to all premises for non-potable purposes. Treated effluent would be stored in reservoirs prior to being piped to individual premises.
Stormwater Management	Stormwater management system would consist of on-site detention (excluding rainwater collected from roofs) with a storage capacity of 100 m ³ per hectare. Treatment of stormwater would consist of grass swales, bio-retention trenches, bio-retention basin system and if required artificial wetlands.
Hours of operation	24 hours, 7 days per week.

¹Direct transfer of roof water to the WTP²Temporary storage of water at each building prior to being piped to the WTP

1.1 Project Setting

The project site is located approximately 4km south of the city of Goulburn, adjacent to the Hume Highway, in the Goulburn Mulwaree local government area.

The site is situated within the Goulburn plains and is predominantly surrounded by agricultural land, with surrounding land uses comprising of low intensity agriculture (grazing). Thirteen agricultural residences are located adjacent to the site: 7 to the east, 4 to the west and 2 to the south (refer to Figure 6 in Section 4). The majority of urban residential areas are located to the north of the site within the city of Goulburn (~4km).

Key infrastructure in the surrounding area includes:

- the Hume Highway which provides a direct route between Sydney, Canberra and Melbourne;
- local roads including Mountain Ash Road, Windellama Road, Rosemont Road and Bungonia Road which connects the site to Goulburn and local surrounding areas;
- the Southern Railway Line which links Sydney and Melbourne via Goulburn. The nearest siding is approximately 4km to the north of the site;
- Goulburn Regional Airport located 1.5 kilometres from the site;

- a sewerage and potable water system managed Goulburn Mulwaree Council, however, the site is currently not connected to this infrastructure;
- a 132kv electricity transmission line to the Rocky Hill substation crosses the site, along with a 330kv transmission line linking Sydney and southern NSW; and
- the Sydney to Moomba Gas line which provides gas for Goulburn.

1.2 Need for the Project

To determine the need and commercial viability of the proposal, SDH undertook independent research to establish the user demand and modelled the cost effectiveness of locating this facility within regional NSW.

SDH considers that the proposal is required to address:

- the predicted increased demand for road freight services on the eastern seaboard, with the quantity of road freight expected to increase by 80% between 2002 and 2015;
- an increased demand for rail freight services of containerised goods and non-bulk freight;
- the growth of the warehouse industry and the associated consolidation of single-user warehouses into distribution centres; and
- a decrease in the availability of industrial/commercial land within the Greater Sydney Metropolitan Region.

SDH also consider that Goulburn is an appropriate location for a warehousing and distribution centre for the following reasons:

- proximity to Sydney, Canberra, Wollongong, Melbourne, Wagga Wagga and Albury/Wodonga markets;
- proximity to key transport corridors including the Sydney to Melbourne corridor and Sydney to Brisbane corridor;
- proximity to rail links to Port Kembla and Port Botany;
- key centre on the road freight route linking Sydney, Canberra and Melbourne;
- limitations associated with industrial land in ACT; and
- lower land costs than the identified employment lands in Sydney, and therefore additional transport costs could be offset by lower storage costs.

The Sydney to Canberra corridor (including the local government areas of Wingecaribee, Goulburn Mulwaree, Upper Lachlan, Yass Valley, Palerang and Queanbeyan) is experiencing population growth and the Department recently released the draft *Sydney-Canberra Corridor Regional Strategy* for the management of employment, housing and infrastructure, as well as the protection of the environment within the region.

It is anticipated that the region will experience a population growth of 44,200 over the next 25 years, with the population in the Goulburn Mulwaree local government area (LGA) expected to grow by 3,400. To accommodate this growth approximately 2,100 new jobs would need to be generated within the LGA, with logistics and warehousing the main focus due to Goulburn's location between Sydney and Canberra and its proximity to major transport corridors including the Hume Highway and the Southern Railway. There is currently 150 hectares of employment land within the local government area (LGA), however, the draft regional strategy identifies that a further 270 hectares of employment land needs to be established and protected to cater for future job growth in the region.

Council has prepared the draft *Goulburn Mulwaree Strategy 2020*, to provide a framework for planning and land use within the LGA. The draft strategy recognises that Goulburn would remain the main employment centre in the LGA and identifies the need for additional employment/industrial lands to accommodate employment growth in the LGA. The draft strategy has formed the basis of a comprehensive, new draft Local Environmental Plan for the LGA. The draft LEP is yet to be exhibited.

The Department considers that the location of a warehousing and distribution centre in Goulburn is consistent with the objectives outlined in the draft *Sydney-Canberra Corridor Regional Strategy*. In particular, the proposal would facilitate the provision of land to support economic growth and to provide capacity to accommodate new jobs, particularly in the area of transport and logistics. The Department also considers that the proposal is consistent with the draft *Goulburn Mulwaree Strategy 2020* in that it addresses the demonstrable need for future employment lands within the Goulburn Mulwaree LGA.

Consideration about the specific site suitability of the proposal and its associated impacts are addressed in Section 4 of this report.

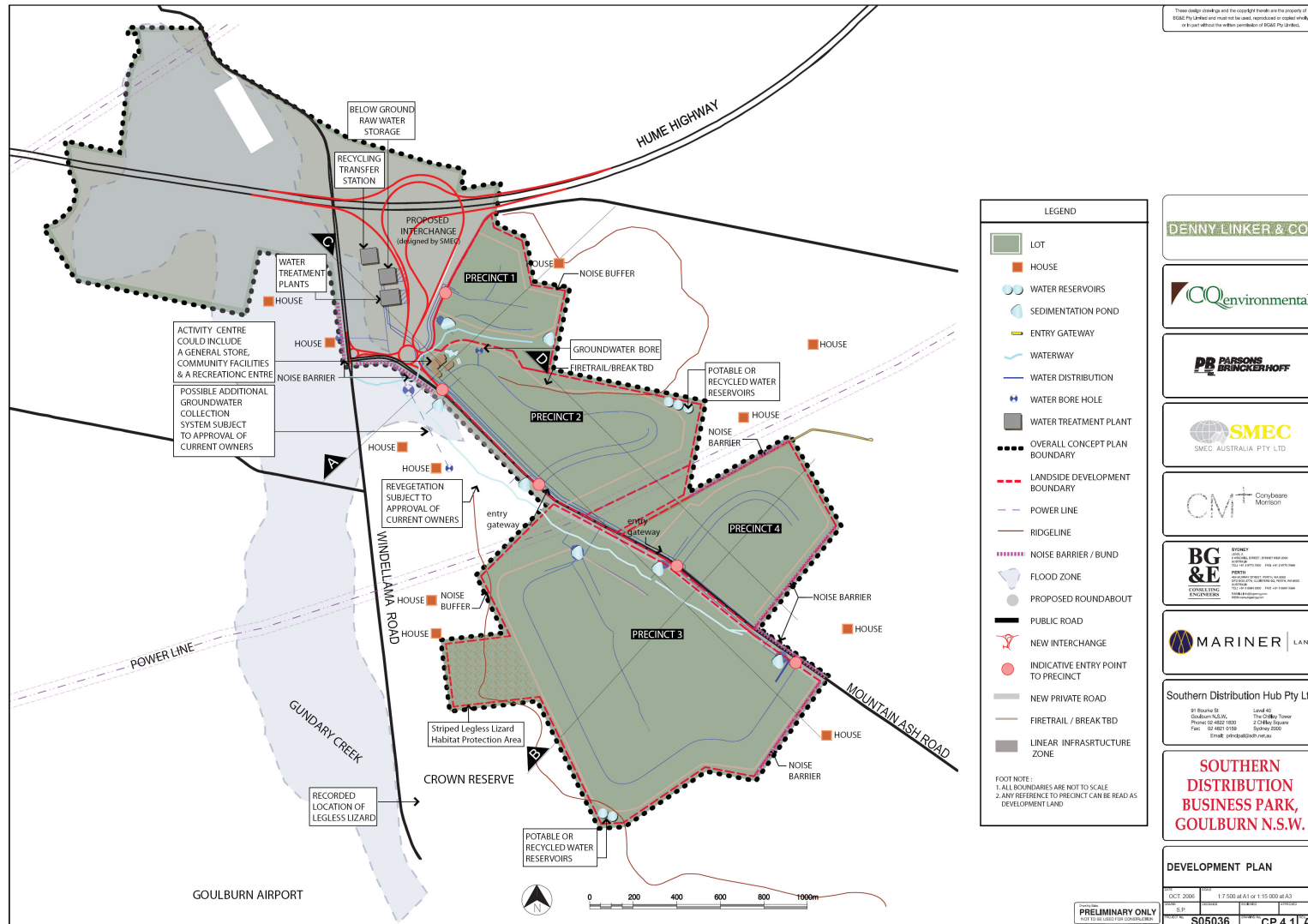


Figure 2: Proposed Concept Plan and Subdivision

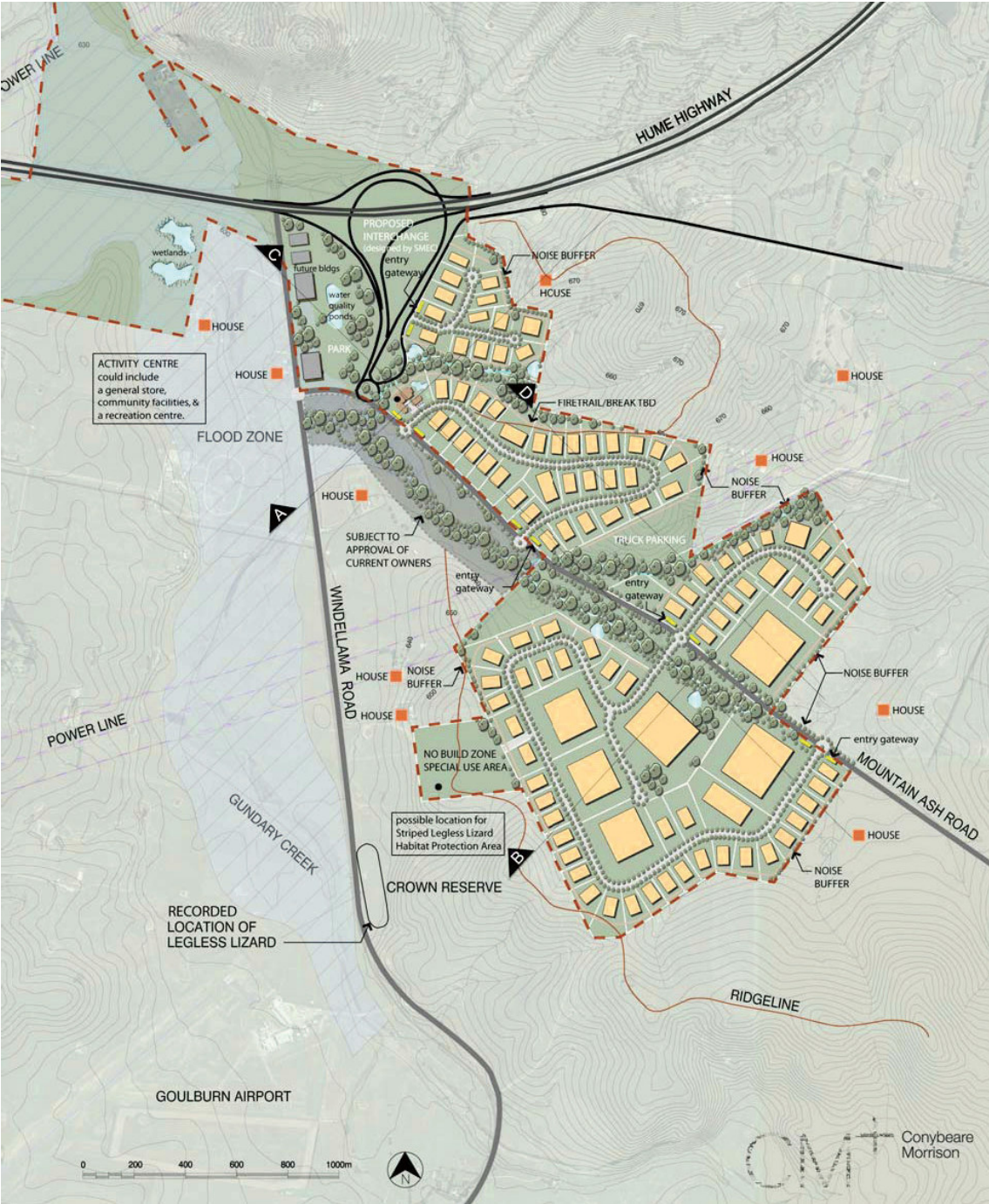


Figure 3: Proposed Concept Masterplan

2 STATUTORY CONTEXT

2.1 Major Project

The proposal is classified as a major project under Part 3A of the EP&A Act as it complies with the criteria in Schedule 1 of *State Environmental Planning Policy (Major Projects) 2005*, being development for the purpose of storage or distribution centres with a capital investment of more than \$30 million. Consequently, the Minister is the approval authority for the project.

2.2 Concept Plan

On 27 September 2006, the Minister authorised the Proponent to submit a concept plan for the proposal. The concept plan is seeking approval for the broad parameters of the project. The detailed design and development of the proposed facility and associated infrastructure would be subject to future project/development applications.

2.3 Permissibility

Under Section 75J of the EP&A Act, the Minister cannot approve the carrying out of a project that would be wholly prohibited under an environmental planning instrument.

The proposed site is within the Goulburn Mulwaree LGA and the majority of the site is zoned 1(b) Rural – Urban Investigation under the *Mulwaree Local Environmental Plan 1995* (Mulwaree LEP). The southern portion of the site is zoned 1(a) General Rural under the Mulwaree LEP, while portions of the northern section of the site are zoned 1(a) General Rural and 1(d) Rural (Flood Hazard) under the *Goulburn Local Environmental Plan 1990*. The proposal is permissible under these zonings.

The Department notes that a new comprehensive LEP, the *Goulburn Mulwaree Local Environmental Plan* for the LGA has been drafted and will be exhibited in the near future. As the site would be developed over an extended period of around 15 years, consideration of the proposed zonings and the permissibility of the future project/development applications associated with the proposal was considered necessary, even if not statutorily required.

Under the draft Goulburn Mulwaree LEP, the majority of the site would be zoned RU1 – Primary Production, with a portion of the site zoned RU2 – Rural Landscape. It is noted that the majority of the proposed development would predominantly occur on land to be zoned RU1, with a portion of the interchange proposed to be constructed on land to be zoned RU2. The majority of land uses proposed by SDH would be permissible under these zonings, however, land uses such as bulky goods premises and heavy industry would not be permitted.

The Department is satisfied that the Minister may determine the project, however, considers that approved land uses should be consistent with those activities that would be permitted under the draft Goulburn Mulwaree LEP. These include warehousing, distribution, freight transport, light industry, and associated infrastructure and services.

2.4 Exhibition

Under Section 75H(3) of the EP&A Act, the Director-General is required to make the environmental assessment of a project publicly available for at least 30 days.

After accepting the EA for the proposal, the Department:

- made the EA publicly available from Wednesday 14 February 2007 until Monday 19 March 2007:
 - on the Department's website, and
 - at the Department's Information Centre and the offices of Goulburn Mulwaree Council and the Nature Conservation Council;
- notified relevant State and local government authorities by letter; and
- advertised the public exhibition in the Goulburn Post.

This satisfies the requirements in Section 75H(3) of the EP&A Act.

During the assessment process the Department also made the following documents available for download on the Department's website:

- project application;
- Director-General's environmental assessment requirements; and
- SDH's response to issues raised in submissions.

2.5 Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the objects of the Act, as set out in Section 5 of the Act. The Minister's consideration and determination of the project application must be consistent with the relevant provisions of the EP&A Act, including the objects of the Act. The objects of most relevance to the Minister's decision on whether or not to approve the Project are found in Section 5(a)(i),(ii),(vi)&(vii). They are:

"The objects of this Act are:

- (a) to encourage:*
 - (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
 - (ii) the promotion and co-ordination of the orderly and economic use and development of land,*
 - (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
 - (vii) ecologically sustainable development"*

With respect to ecologically sustainable development (ESD), the EP&A Act adopts the definition in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD 'requires the effective integration of economic and environmental considerations in decision-making processes' and that ESD 'can be achieved through' the implementation of the principles and programs including the precautionary principle, the principle of inter-generational equity, the principle of conservation of biological diversity and ecological integrity, and the principle of improved valuation, pricing and incentive mechanisms. In applying the precautionary principle, public decisions should be guided by careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment and an assessment of the risk-weighted consequences of various options.

The Department has fully considered the objects of the EP&A Act, including the encouragement of ESD, in its assessment of the concept plan.

This assessment has integrated the significant economic, social and environmental considerations and has sought to avoid potential serious or irreversible damage to the environment, based on an assessment of risk-weighted consequences.

SDH has also considered a number of alternatives to the proposal, including alternative sites, undertaken an environmental risk analysis of the project, and considered the project in the light of the principles of ESD.

2.6 Environmental Planning Instruments

Under Section 75I of the EP&A Act, the Director-General's report is required to include a copy of or reference to the provisions of any *State Environmental Planning Policy* (SEPP) that substantially governs the carrying out of the Project.

The Department has considered the project against the relevant provisions of several SEPPs:

- State Environmental Planning Policy No. 11 – Traffic Generating Developments;
- State Environmental Planning Policy No. 44 – Koala Habitat Protection; and
- State Environmental Planning Policy No. 55 – Remediation of Land.

The Department has considered the proposal against the relevant provisions of these SEPPs (refer to Appendix C) and is satisfied that none of these SEPPs substantially govern the carrying out of this project.

2.7 Statement of Compliance

Under Section 75I of the EP&A Act, the Director-General's report is required to include a statement relating to compliance with the environmental assessment requirements with respect to the Project. The Department is satisfied that the Director-General's environmental assessment requirements have been complied with.

2.8 Land Owner's Consent

Land owner's consent for a concept plan application is required under clause 8F of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) and must be obtained prior to the determination of the application.

In seeking concept plan approval, SDH required consent from a range of land owners including private land owners, the RTA and Council. At the time of lodging the concept plan application, SDH had written consent from all land owner's to the application, except Council. Council provided consent to the application, as land owner, on 22 August 2007, that is, after the lodgement of the concept plan application.

Until recently, the interchange was proposed to be located on land owned by the RTA. However, during the assessment process, RTA decided to sell the land and sought tenders on the purchase of the land. SDH tendered for the purchase of the land, however, was unsuccessful with its bid, with RTA ultimately accepting an offer from Mycorp Investments Pty Ltd (Mycorp).

On 27 September 2007, the Department received a letter from Mycorp purporting to withdraw its consent to the concept plan application, as a new land owner. As discussed, land owner's consent is required for a concept plan application. At the time the application was lodged, RTA was the land owner and land owner's consent was provided by the RTA. The Department considers that the Minister is entitled to rely upon the consent provided by the RTA, given that RTA was the land owner at the time land owner's consent was obtained and the concept plan application was lodged. Therefore, the requirements of clause 8F of the EP&A Regulation have been met for the piece of land that has been sold by the RTA. That is, Mycorp's purported withdrawal of consent to the concept plan application does not affect the Minister's power to determine the concept plan application.

The Department notes that a concept plan approval does not allow a Proponent to commence any physical works on site. Should the Minister grant concept plan approval for the SDBP, SDH would be required to seek project/development approval(s) to allow the construction and operation of the various components of the concept plan. In seeking this approval(s), SDH would be required to obtain land owner's consent for any future project/development application. As the conditions of approval require SDH to seek approval for an interchange prior to seeking approval for other components of the concept plan, development of the site can not proceed until the interchange, or an appropriate alternative, is approved. The onus is therefore on SDH to form an agreement with Mycorp for the use of its land, or make suitable arrangements for an alternative access to the site from the Hume Highway. The Department understands that a number of alternative access routes are currently being investigated. In the event an alternative access is proposed, it would be subject to a modification application.

3 ISSUES RAISED IN SUBMISSIONS

During the exhibition period, the Department received a total of 165 submissions on the project:

- 7 from public authorities; and
- 158 submissions from the general public, including 128 form letters.

A summary of the issues raised in submissions is provided below. A copy of these submissions is attached in Appendix E.

3.1 Public Authorities

The **Roads and Traffic Authority** (RTA) and the **Heritage Council of New South Wales** (Heritage Council) did not object to the proposal and provided recommended conditions of approval.

The **Sydney Catchment Authority** (SCA) considers that SDH has not adequately addressed water quality issues, particularly in regards to construction, wastewater management and creek realignments. SCA requested to be involved in the further assessment of the proposal, including future project applications.

The former Department of Natural Resources, now known as the **Department of Water and Energy** (DWE), requested further information on flooding impacts, riparian rehabilitation measures and sustainability of groundwater bores.

The **Australian Rail Track Corporation** (ARTC) and **Department of State and Regional Development** (DSRD) raised no objections to the proposal. ARTC provided information on the leasing of railway lands, while DSRD highlighted several logistical advantages of the proposal. DSRD noted that the concept plan included some innovative water harvesting and reuse measures. It also noted that the provision of rail access from the Main Southern Rail Line to the site could be difficult.

Goulburn Mulwaree Council (Council) initially objected to the proposal for the following reasons:

1. the proposal does not comply with Council's preferred location for business parks/ employment lands;
2. traffic impacts on local roads;
3. uncertainties regarding the on-going maintenance and operation of water and sewerage infrastructure;
4. inconsistencies between the Control Plan (detailing design objectives and criteria for any development on site) for the proposal and design criteria proposed in the visual assessment and urban design report; and
5. noise impacts, and in particular traffic noise. Council notes that the use of wall/fence barriers to minimise noise is not appropriate for rural areas.

However, on the 20 March 2007, Council resolved to provide in principle support for the proposal. Notwithstanding, the Council reiterated its concerns relating to traffic, water/wastewater/stormwater management, urban design and amenity.

3.2 Community

Of the 158 submissions from the community, 111 (70%) objected to the project, 4 (3%) did not object but raised concerns, and 43 (27%) supported the project. The main grounds for objection were:

- site suitability, with Murray Flats identified as a more suitable site for industrial and employment lands;
- inconsistency with Council's draft *Goulburn Mulwaree Strategy 2020* and the surrounding rural character;
- visual and lighting impacts of the proposal;
- amenity impacts including noise and dust;
- traffic impacts, particularly on local roads;
- lack of rail access;
- adverse impact on a number of historical houses in the area;
- water quality impacts and concern about the sustainability of groundwater use; and
- impacts on flora and fauna.

Submissions that supported the project, generally cited the employment and socio-economic benefits associated with it.

3.3 Response to Submissions

SDH has provided a response to the issues raised in submissions (see Appendix D), as well as a revised statement of commitments. These have been made publicly available on the Department's website.

The Department has considered the issues raised in submissions, and SDH's response to these issues, in its assessment of the concept plan.

4 ASSESSMENT

4.1 Strategic Justification

Issue

One of the key issues raised in submissions related to the suitability of the site, and in particular that the proposal is inconsistent with the Council's draft *Goulburn Mulwaree 2020 Strategy* for the preferred location for employment lands. Submissions opposed to the proposed location of the SDBP cited Murrays Flat site as a more suitable site for the location of employment/business lands. Murrays Flat is located 7km to the north east of the centre of Goulburn, adjacent to the Hume Highway (see Figure 1).

It is not the Department's nor the Minister's role to assess alternative locations for the SDBP, however, the merits of the concept plan and in particular the strategic justification for the proposal and site suitability has been considered and assessed.

Consideration

Firstly, the Department notes that SDH is seeking concept plan approval for the SDBP. That is, SDH is seeking approval for the broad parameters of the facility. The Department acknowledges that due to the conceptual nature of the proposal, further refinements to the planning and design of the facility are required, and therefore recommends that SDH should be required to undertake further investigations before any development could occur on site. Additionally, the Department has recommended a number of conditions of approval to address the concerns raised in submissions, to ensure order is imposed on the development of the site, all infrastructure requirements including any infrastructure upgrades are provided, and that environmental limits are complied with. These requirements are discussed in more detail below.

As discussed in Section 1.2, strategic plans have been prepared for the region and LGA including the draft *Sydney-Canberra Corridor Regional Strategy* and the draft *Goulburn Mulwaree Strategy 2020*. While these strategic plans have not been finalised, they detail the framework for future land use and development within the LGA and region, and as such, consideration of the proposal against the objectives of these plans has been undertaken.

Both strategies identify the need for additional employment lands within the Goulburn Mulwaree LGA to accommodate future job growth in the region and LGA. As previously mentioned, the SDBP would meet the economic/employment objectives of the above strategies by securing employment lands in the Goulburn area and facilitating job growth in the area by providing an estimated 3,000 jobs when fully operational.

The Department notes that the draft *Goulburn Mulwaree Strategy 2020* identifies Murrays Flat as a potential location for employment lands in Goulburn due to its proximity to road and rail infrastructure. Although, it is recognised in the draft strategy that further investigations would be required to be undertaken to determine the suitability of Murrays Flat to accommodate employment lands.

The draft *Goulburn Mulwaree Strategy 2020* also recognises that opportunities for additional employment areas also exist to the south and north of the Hume Highway and these areas would also be suitable locations for employment lands due to accessibility to major transport infrastructure and distance (i.e. separation) from the city centre. Therefore, while the draft strategy identifies Murrays Flat as a potential location for employment lands, the Department considers that it is not the intent of the draft strategy to limit future employment lands to that area alone. The Department believes that the intent of the draft strategy is to provide a framework to govern planning and land use in the LGA, and in relation to employment/industrial developments provide criteria that future proposals can be assessed against to inform the planning/assessment process.

Therefore, the Department considers that the proposal is consistent with the draft *Goulburn Mulwaree Strategy 2020* and does not object to the proposed location of the SDBP, as detailed below.

Firstly, the proposal is permissible with consent under the Goulburn and Mulwaree LEPs. Additionally, the land uses including warehousing, distribution, freight transport and light industry, and associated infrastructure and services are permissible with consent under the draft comprehensive LEP. The Department recommends that any approved land uses on site should be consistent with uses permitted with consent under the draft comprehensive LEP.

Secondly, the site is suitably located adjacent to a major transport corridor, with the potential for linkages to both rail and air. The Hume Highway is a key state and national corridor providing a link between Sydney, Canberra and Melbourne. The Southern Railway Line also provides links to Sydney and Melbourne, providing access to major ports at Port Botany and Port Kembla.

Thirdly, the site is suitably located between the major centres of Canberra and Sydney, and therefore, the proposal is well positioned to service a wide range of markets. Additionally, the site is situated in close proximity to Goulburn, a regional service centre for the area, providing access to existing infrastructure and a local workforce.

Finally, the site is separated from the main urban areas of Goulburn including the city centre. However, the Department recognises that adjacent residential properties would be affected by the proposal. This is discussed in more detail below.

The Department is satisfied that sufficient information has been provided by SDH in the environmental assessment documentation (EA and response to submissions), to demonstrate the appropriate environmental limits for the proposal can be identified and met, and thereby considers that the Minister can determine the application, subject to conditions including a cap on vehicle numbers to ensure that impacts remain acceptable. Notwithstanding, the Department recognises that the planning and design of the SDBP is presently conceptual and that the detailed design of the facility is at a preliminary stage, particularly in regards to the key aspects relating to the staging and co-ordination of development and the orderly sequencing of that development, rail linkages, provision of infrastructure, and develop control (i.e., design controls and development guidelines).

The Department considers that the development of the site must be planned in an orderly manner. Additionally, the Department considers that linkages to the Goulburn Rail Yards need to be investigated further, in consultation with the ARTC, to enhance the project's intermodal capabilities and maximise opportunities for rail transportation and connection. In this regard, the Department recommends that SDH should be required to submit a Staging Plan prior to seeking any approval(s) for the implementation of the various components of the concept plan. The purpose of this Staging Plan is to provide a framework for the sequential development of the site, ensuring that relevant environmental limits and infrastructure requirements of the consent are met as the development progress.

The Department recommends that further details on the following should be provided as part of the Staging Plan:

1. how the development of the site would be staged;
2. feasibility of connecting the site to the Goulburn Rail Yards and integrating the proposed operations on site with the region's railway infrastructure;
3. the arrangements for providing infrastructure on site including the off-site infrastructure upgrades required to facilitate the development of the project, the arrangements that would be put in place to ensure upgrades are implemented in a timely manner, and the co-ordination of the provision of infrastructure on and off site;
4. landscaping to address the visual impacts of the SDBP on adjacent land owners; and
5. appropriate development controls for the design and development of individual allotments (covering visual management, subdivision, stormwater management and drainage, access and parking, landscaping, waste removal and storage, and energy and water conservation) to ensure relevant environmental limits are met at all times.

In regards to staging, the Department recommends that SDH should be required to prepare a Masterplan for each stage of the development detailing the implementation of each stage (i.e., infrastructure required, bulk earthworks required, proposed layout of the stage, development controls, and landscaping). This requirement allows SDH to stage the lodging of each Masterplan but restricts SDH's capability to lodge any applications seeking approval for the development of any components of a stage of the project until the Masterplan for that particular stage has been approved. That is, SDH must demonstrate that the detailed planning for a specific stage has been completed prior to seeking approval to develop that stage.

The Department notes that SDH is proposing to construct and operate an on-site water and sewerage system. A number of agencies have raised concerns about privately operated water and wastewater treatment plants and this is discussed in more detail in Section 4.4. Notwithstanding, the Department considers that there are adequate alternatives available to connect to services and infrastructure. As

such, the Department recommends that SDH should be required to exam the costs and benefits of connecting the site to Council's existing sewerage and potable water reticulation systems compared to the proposed "stand alone" systems. The recommended conditions of approval require that this study must be submitted with the Staging Plan, ensuring that all feasible options for water supply and wastewater treatment are investigated prior to SDH seeking approval for implementation of the preferred option.

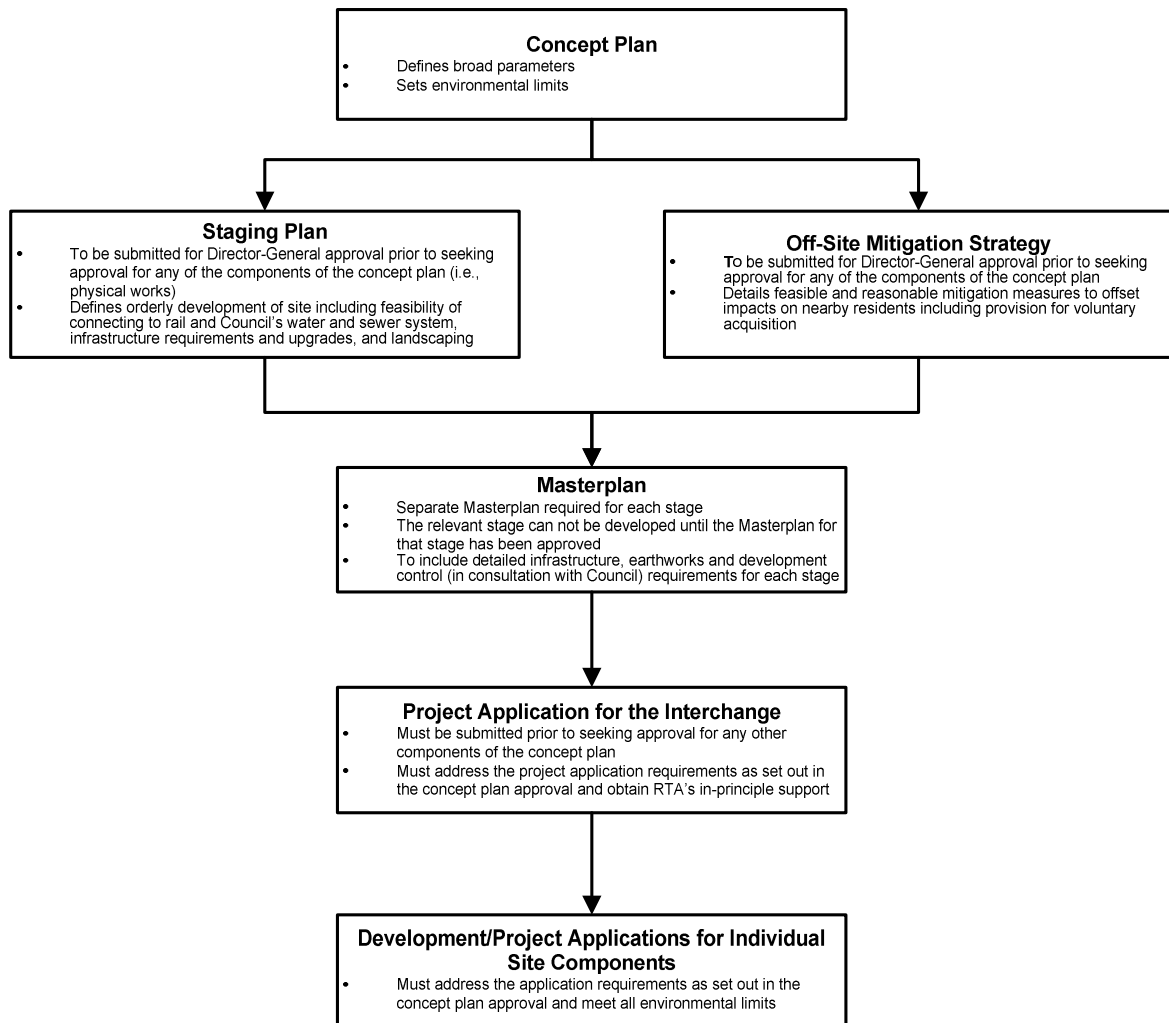
As discussed, the SDBP is separated from urban residential areas, however, the Department notes that there are 13 rural residences surrounding the site. The Department acknowledges that the project is likely to impact on these residents in some manner, whether it be noise, visual impacts, traffic and access or water supply. The Department considers that there is a range of measures available (e.g., engineering, landscaping, limiting the location of specific end uses on site, building location and orientation etc) to minimise impacts commensurate with relevant standards. Additionally, the recommended conditions of approval would ensure any residual impacts are also minimised, including:

- limiting the number of heavy vehicles and service vehicles that can be generated from the site;
- setting of noise limits (operation and traffic) in accordance with Government Policy to protect amenity;
- the requirement for SDH to prepare an Off Site Mitigation Strategy, in consultation with the adjacent land owners and Council, to identify measures that would be implemented, either on site or on the adjoining properties, to minimise the potential visual, noise, and in some cases, access and water impacts of the project. The Department believes it is important that safeguards are in place to protect the amenity of nearby residences. Therefore, given the significance of the project to the region and State, the Department recommends that options for mitigation should include consideration of voluntary acquisition for potentially affected residences;
- ensuring flows off site to Gundary Creek and adjacent properties remain unchanged by the development; and
- the requirement for SDH to lodge project/development applications seeking approval for the construction and operation for the various components of the concept plan. Specific requirements have been recommended for each component to demonstrate compliance with the limits specified in the concept plan approval and to identify measures to mitigate any potential impacts of each component.

An outline of the concept plan approval process detailing the above recommendations is provided on the following page.

In summary, the Department is satisfied that the proposal is consistent with the objectives of regional planning strategies and that suitable justification for the proposal has been provided. The Department also considers that the proposal can generally meet the relevant amenity and environmental criteria. Notwithstanding, the Department acknowledges the concerns raised in submissions and has therefore recommended a number of conditions of approval to ensure that the proposal is developed in an orderly manner and that further mitigation and/or management measures are provided to offset the impacts of the concept plan.

A detailed assessment of the key issues is provided below.



4.2 Traffic

4.2.1 Traffic Generation

Construction

SDH's assessment of traffic impacts from the construction of the facility has been restricted to the construction of the interchange. No assessment has been undertaken on the traffic impacts associated with the construction of the other components of the concept plan. As the construction of the facility will be staged gradually, however, the Department is satisfied that these investigations could be undertaken as required, at the relevant project/development application stage. Therefore, the Department recommends that in seeking approval for other components of the concept plan, SDH be required to include a construction traffic management plan outlining measures to minimise impacts on local and regional roads from construction activities on site.

SDH predicts that the construction of the interchange would generate up to 100 heavy vehicles per day and between 30-60 employees would access the site during this 10 – 12 month period. The construction of the interchange would require speed restrictions on the Hume Highway.

The Department recommends that SDH be required to seek project approval for the construction and operation of the interchange and has outlined requirements for this project application as part of the concept plan approval, including the management of construction traffic. The Department concurs with RTA's recommendation that SDH lodge a traffic management plan, detailing measures to manage construction traffic in order to minimise impacts on other road users and access to neighbouring properties. This recommendation has been incorporated into the conditions of approval, requiring SDH to lodge this plan as part the project application for the implementation of the

interchange. The Department is satisfied that traffic associated with the construction of the interchange can be managed to minimise any impacts on the Hume Highway and local road network.

Operation

Traffic generated during the operation of the facility (i.e, once fully operational) was estimated based on two scenarios:

1. types of development on site predominantly limited to warehousing (normal case scenario): and
2. mixed land uses on site including industry (26.9 ha), warehouses (52.5 ha), road transport terminals (27.3 ha), bulk stores (30.3 ha) and ancillary development (7.7 ha) (worst case scenario).

The predicted daily traffic movements for the both cases at full operation are provided in Table 2 and 3.

Table 2: Predicted Daily Traffic Movements – Normal Case

Type	AM Peak	PM Peak	Daily Total
Passenger	1,942	1,942	4,370
Service (light)	194	194	2,557
Heavy	278	296	6,230

Table 3: Predicted Daily Traffic Movements – Worst Case

Type	AM Peak	PM Peak	Daily Total
Passenger	1,942	1,942	4,370
Service (light)	488	488	3,911
Heavy	1,250	1,310	22,703

During the operation all heavy vehicles and 40 percent of service vehicles would access the site via the Hume Highway. As the current Annual Average Daily Traffic (AADT) for the Hume Highway is 29,600 vehicles, the worst case scenario would result in an almost two fold increase of vehicles utilising the Hume Highway. While the worst case scenario is unlikely to eventuate, the RTA and the Department do not, therefore, support the worst case scenario due to its potential impacts on the level of service on the Hume Highway. Furthermore, the Department has significant concerns about other amenity impacts resulting from the worst case scenario, particularly in relation to traffic impacts on local roads and on noise levels.

The Department has therefore recommended that the daily number of heavy vehicles movements and service vehicle movements generated by the facility be capped at 6,230 and 2,557 respectively, consistent with the normal case scenario. The Department is satisfied that the normal case scenario would not adversely impact traffic flow on the Hume Highway and amenity impacts associated with this could be adequately identified and managed. Furthermore, a capping on vehicle movements will further encourage opportunities for integration of rail in the project. SDH has agreed to this limitation and is aware that the scale and intensity of proposed facilities could be constrained by this limit. SDH is confident, however, that a sufficient range of facilities could be developed on the site within this framework.

Bungonia Road would form the primary link road between Goulburn and the site. Traffic counts indicate that approximately 1,800 vehicles per day utilised Bungonia Road during 2002. Under the normal case scenario, approximately 60 percent of the service vehicles and 79 percent of passenger vehicles would utilise Bungonia Road, resulting in an additional 4,986 vehicles movements per day. Therefore, even with the traffic levels restricted to the normal case scenario, the SDBP would significantly increase the number of vehicles utilising Bungonia Road.

As the facility is likely to take up to 15 years to develop, the identified traffic increases along Bungonia Road would be incremental. At this stage, SDH has not identified the upgrades required to support the traffic increases along Bungonia Road, nor the impacts on, and associated upgrades required for, the other local roads in the vicinity of the site, in particular Rosemont Road, Mountain Ash Road and Windellama Road. The Department understands, however, that there are a variety of engineering solutions available to cater for the increased traffic including traffic signals, intersection improvements and an upgrade and/or replacement of Lansdowne Bridge. As part of this, the RTA has recommended that SDH assess the impact of the proposal on the Lansdowne Bridge in its current form, as the RTA's scheduled replacement of it, may not occur prior to the commencement of operation on the site.

While the Department is satisfied that the level of traffic increases could be accommodated without affecting serviceability, further investigations are required to identify the road upgrades required as a result of the SDBP and how these upgrades would be implemented. The Department recommends that these investigations be undertaken prior to SDH seeking approval for the various components of the concept plan. Therefore, the Department recommends that SDH be required to provide the following information as part of the pre-development Staging Plan:

1. identification of all infrastructure upgrades (including road upgrades) that are required off-site to facilitate the orderly and economic development of the project;
2. a description of the arrangements would be put in place to ensure these upgrades are implemented in a timely manner; and
3. a description of how the upgrades would be co-ordinated prior to the development of each stage of the concept plan.

This requirement has been incorporated into the recommended conditions of approval and would ensure all necessary upgrades of local roads are identified and provided, prior to the SDBP becoming fully operational.

4.2.2 Access

As detailed in Figure 1 and Figure 2, the Hume Highway traverses the northern portion of the site. The site is positioned approximately mid-way between two interchanges on the Hume Highway, with the nearest interchange located approximately 4.5 km to the west of the site. Therefore, the proposal requires a new interchange to be constructed to provide access to the site from the Hume Highway.

Access to the site from the interchange would be provided through four exit/entry ramps that would be connected to Mountain Ash Road via a new roundabout, as illustrated in Figure 4. Associated road works would include the realignment of Rosemont Road, the construction of a second roundabout at the intersection of Mountain Ash, Bungonia and Windellama Roads and modifications to the Bungonia Road overbridge including the provision of a pedestrian and cycle path along Bungonia Road.

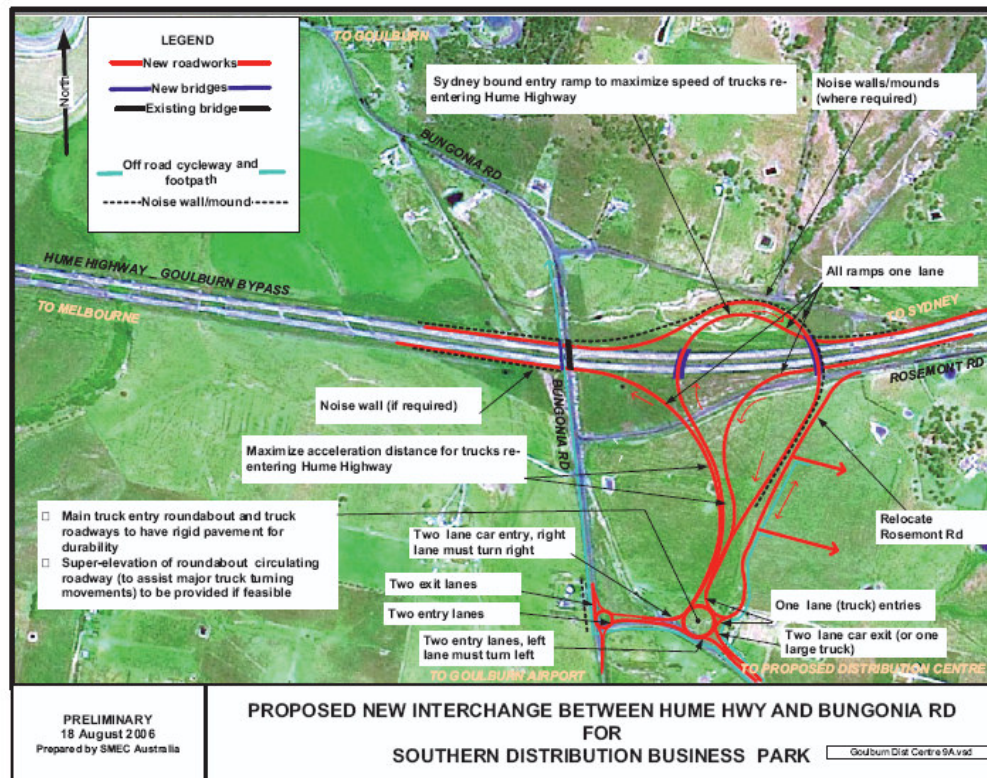


Figure 4: Proposed Interchange

The RTA does not object to the proposed interchange in principle. Notwithstanding, the RTA considers that SDH should provide a more detailed design for the proposed interchange. Additionally,

the RTA requires that the design and subsequent project application for the interchange address the following issues:

- allowance for the future provision of three lanes in both directions on the Hume Highway, in addition to acceleration and deceleration lanes;
- appropriate setbacks to allow necessary maintenance activities within the road reserve;
- as the Hume Highway is a declared access road, provision of a cadastral survey to define the amended controlled access boundaries and proclaimed access points;
- submission of a traffic management plan and an application for a Road Occupancy Licence (ROL); and
- no advertising signs or structures being allowed within the Hume Highway road reserve.

The Department concurs with these requirements, which have been incorporated into the recommended conditions of approval. In addition to the above requirements, the Department requires that the project application for the interchange include: details of the proposed pedestrian and cycle bridge over the Hume Highway to encourage alternative modes of transport to the site; and details of the measures to be implemented to ensure access is maintained into residences adjoining the site during construction, and the methods to ensure these measures are in place, prior to construction of the interchange.

The operation of the facility also has the potential to impact on the safety of vehicles accessing surrounding properties, particularly where properties are accessed from Mountain Ash Road and Rosemont Road. SDH propose that access to the facility would be via roundabouts on Mountain Ash Road and off the relocated Rosemont Road. SDH has also committed to providing separate, safe access ways into the adjoining properties, away from these project related roundabouts. Access arrangements for the facility and their relationship to the surrounding properties are outlined in Figure 5.

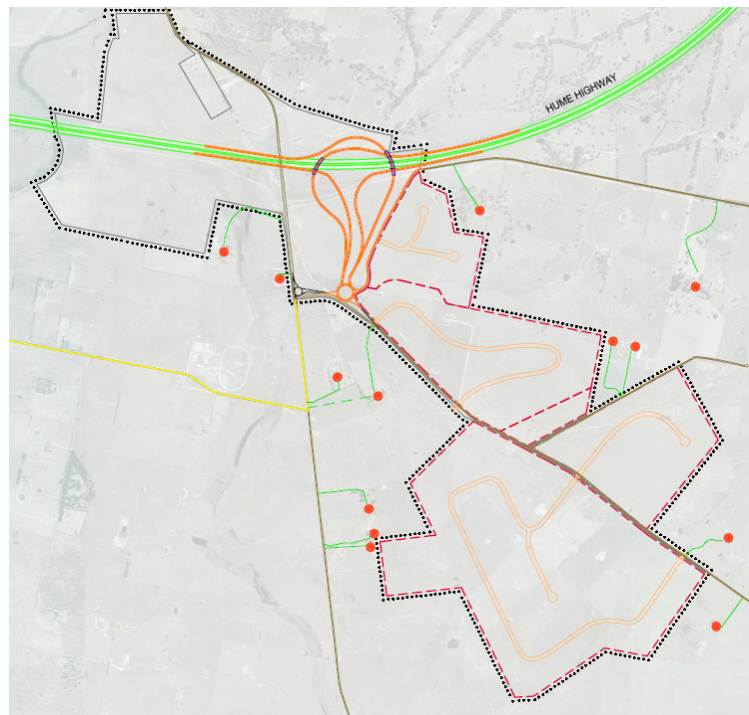


Figure 5: Proposed Access Arrangements

The Department considers it vital that safe and convenient access into properties surrounding the site is maintained. The Department therefore recommends that SDH be required to consult with affected land owners and Council, to identify feasible measures that could be implemented to minimise access impacts resulting from the operation of the SDBP. This consultation is required to be undertaken as part of the preparation of the Off-Site Mitigation Strategy (as detailed in Section 4.1), and the Director-General would need to be satisfied that suitable arrangements would be in place prior to approving the Off-Site Mitigation Strategy. The Department considers that these measures should ensure that safe

and convenient access is maintained for residences adjoining the site, with residents input being provided as part of the design process.

4.2.3 Rail

The connection of the site to rail does not form part of the concept plan application, however, the Department recognises the importance of linking the site to the region's railway infrastructure. Demand for road freight continues to increase, particularly along the Canberra to Sydney Corridor. As discussed above, the Department is concerned that the proposal has the potential to impact on the level of service of the Hume Highway and therefore considers that heavy and service vehicles accessing the site should be capped and detailed investigations to connect the site to rail should be undertaken.

SDH has indicated that the site could be connected to the Goulburn Rail Yard by a rail spur or by road. SDH has stated that rail linkage is an integral component of the SDBP enabling the facility to be a "fully integrated inter-modal transport system". Additionally, SDH claim that considerable research and analysis has been undertaken on the viability of linking the rail to the site.

The Department considers that such a link would not only enhance the project's intermodal capabilities, it would promote an increased rail share for freight transportation, and thereby reduce broader impacts associated with heavy vehicle transportation. Options for inclusion of a link in the concept plan would therefore provide a valuable opportunity to further reduce impacts of the proposal. Therefore, the Department recommends that SDH should be required to undertake a feasibility study to assess the options to connect the site with Goulburn Rail Yard and to integrate the proposed operations on site with the region's railway infrastructure. This study should be undertaken prior to SDH seeking approval for the development of the various components of the concept plan as part of the Staging Plan.

4.3 Noise

4.3.1 Construction

SDH's assessment of construction noise was limited to the initial construction activities for the provision of infrastructure, including the construction of the interchange, other roads upgrades and provision of the water and sewerage systems. Whilst the timeframe for the initial construction period was not defined, the scope of works is likely to exceed 26 weeks. The assessment therefore indicates that the noise emissions for the initial construction works would be between 50 – 60 dBA, thereby exceeding the relevant noise criteria from DECC's *Environmental Noise Control Manual* by up to 5 dB(A) for residences near Precinct 1 (Location A and B) and up to 18 dB(A) for residences near Precinct 2, 3 and 4 (Locations C – F). The location of these residences is depicted in Figure 6.

The Department notes that the noise assessment of the initial construction activities is only preliminary, with the specific components and sequencing of each construction phase, and the associated construction methods, still to be outlined through the staging plan and each subsequent project and development application. The Department considers, however, that there is a sufficient range of measures available to minimise the construction noise impacts of each stage of the proposal, including early construction of noise barriers, limitation on construction hours and management and restrictions on noisy construction activities. Furthermore, as these construction activities would be intermittent and restricted to daytime hours, their impacts are likely to be limited and acceptable.

The Department is therefore satisfied that there is sufficient scope in the approval to enable construction to be phased and mitigation measures implemented, so that the relevant construction noise criteria would be met. To ensure this occurs, the Department has recommended that each project and development related application, demonstrate compliance with the relevant construction noise criteria, and outline methods to manage and monitor construction noise impacts for adjacent residences through a construction noise management plan.

4.3.2 Operation

As discussed in Section 1, SDH is seeking approval for a range of uses on site (including industry, warehousing, distribution, transport terminals and bulk stores), with the site to operate 24 hours a day, 7 days a week. Therefore, likely operational noise sources would include plant and equipment, reversing alarms, forklift movements and vehicles.

Thirteen residential properties (sensitive receivers) adjoining the site, have the potential to be impacted by operational noise from the site, namely:

Location A	94 Rosemont Road, Gundary, Goulburn
Location B	260/262 Windellama Road, Brisbane Road, Goulburn "Badger's Holt" 298 Windellama Road, Brisbane Grove, Goulburn
Location C	"Pine Lodge" 411 Windellama Road, Brisbane Grove, Goulburn "Birrong" 439 Windellama Road, Brisbane Grove, Goulburn 441 Windellama Road, Brisbane Grove, Goulburn
Location D	"Dambreezi" 361 Windellama Road, Brisbane Road, Goulburn "Homedon" 46 Mountain Ash Road, Brisbane
Location E	"Wyoming" 55 Barretts Lane, Brisbane Grove, Goulburn 57 Barretts Lane, Brisbane Grove, Goulburn "Kevorma" 194 Rosemont Road, Gundary, Goulburn
Location F	"Pindarra, 257 Mountain Ash Road, Brisbane Grove, Goulburn "Crossfolds" 298 Mountain Ash Road, Brisbane Grove, Goulburn

The location of these sensitive receivers is outlined in Figure 6 below.

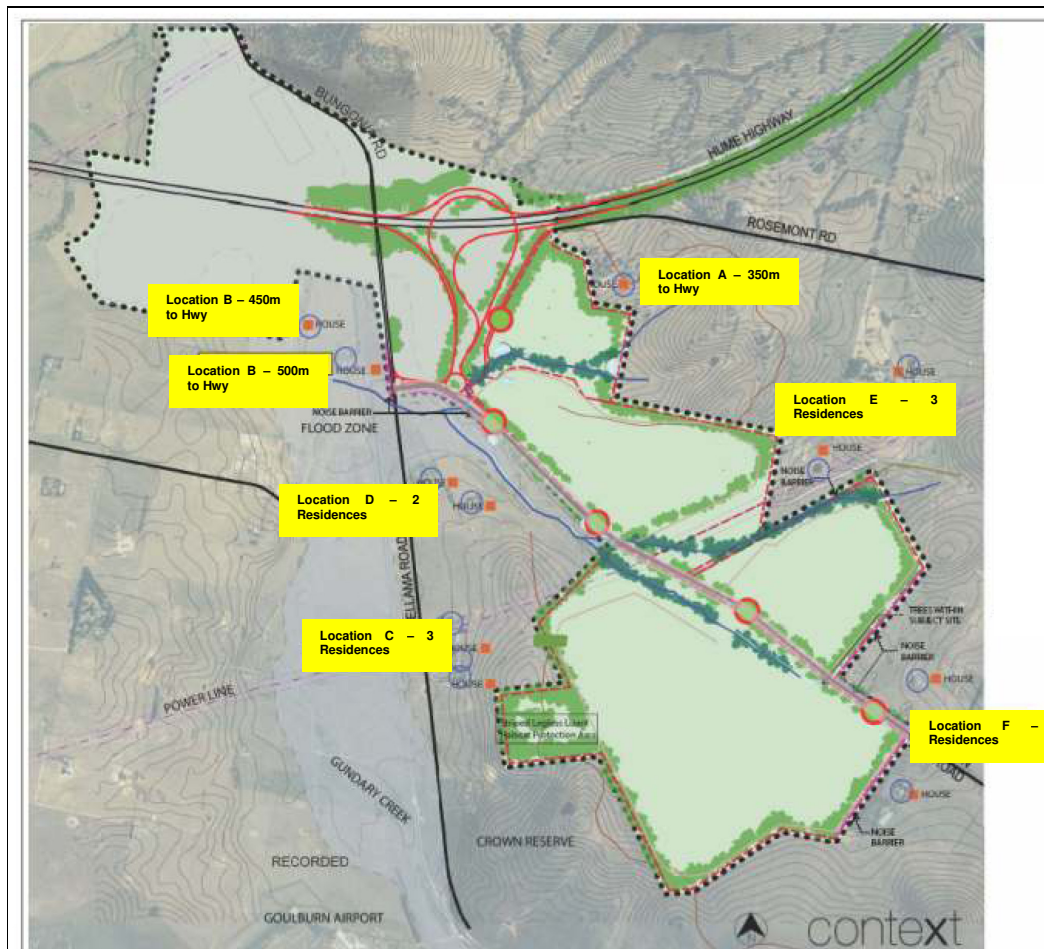


Figure 6: Sensitive Receivers Surrounding the Site

Ambient noise monitoring undertaken as a part of the assessment, indicated that the noise levels at Locations C to F were typical of a rural environment, whilst noise levels at Location A and B were substantially higher, due largely to traffic noise from the Hume Highway. Project specific noise criteria based on this ambient noise monitoring, have therefore been determined in accordance with the DECC's *Industrial Noise Policy*. The project specific noise criteria are outlined in Table 4.

Table 4: Project Specific Noise Criteria (dBA)

Location	Day		Evening		Night	
	$L_{Aeq}(15min)$	L_{Aeq}	$L_{Aeq}(15min)$	L_{Aeq}	$L_{Aeq}(15min)$	$L_{Aeq}(1 min)$
A-B	55	50	57	45	51	61
						40

C-F	42	50	42	45	40	50	40
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A noise assessment for the operation of the facility was undertaken based on what SDH considered a worst case scenario of night time operations, with no shielding or mitigation measures in place. The assessment indicated that during night time operations the facility could potentially exceed the amenity noise criteria (L_{Aeq} of 40dBA) by 9 to 16dB(A) at all locations, except Location C. Noise levels are not expected to exceed criteria at Location C. Furthermore, operation of the facility could potentially exceed the sleep arousal criteria by 2dB(A), or 6dB(A) when trucks were reversing near the site boundary near Location E.

However, SDH has proposed a variety of mitigation measures to ensure that the noise criteria is met. The mitigation measures would include:

- orientation of the yard and dock areas away from residences, so that noisy activities are blocked by the warehouse buildings, reducing noise levels by 10-20dBA;
- addition of fins at the end of buildings and docks, reducing noise levels by up to 10dBA;
- construction of physical enclosures around stationary plants, and installation of silencers or acoustic louvers around service plants including roof fans, blowers and air conditioning units, to reduce noise level by up to 25dBA;
- construction of 5 metre high noise barriers/bunds at the southern end of Precinct 3 and 4 to shield residences from the facility, reducing noise by up to 15dBA; and
- architectural treatment of surrounding residences, reducing internal noise levels by up to 15dBA.

The Department notes that the noise assessment focused on warehouse and distribution type facilities, however, SDH is seeking approval for a wide range of other land uses including industries, road transport terminals and bulk stores. While details of likely onsite operations have not been finalised, the Department considers that sufficient information is available to set noise limits for the concept plan, consistent with the DECC's *Industrial Noise Policy*, as outlined in Table 5. Furthermore, the Department considers that a feasible range of both on-site and off-site mitigation measures are available, to ensure that the project specific criteria is met.

To ensure the amenity of adjacent residences is protected at all times, the Department recommends that subsequent project/development application demonstrate that the proposed component of the project, along with all other activities on site, complies with the project specific criteria outlined in Table 5. The project/development application must also outline measures that would be implemented to ensure compliance with the noise criteria.

SDH is confident that these criteria can be met. SDH also considers there is a sufficient range of suitable facilities that could operate on the site within the defined noise criteria and is aware that the scale and intensity of these facilities could be constrained by the noise criteria.

As previously discussed, the plans for the facility are conceptual and the Department has recommended that the detailed design of the SDBP be further progressed before any development can occur on site. The Department is therefore satisfied that the noise emissions from the operation of the SDBP can be minimised through detailed design required as part of the preparation of the Staging Plan (see Section 4.1) and that noise limits generally can be met. Additionally, compliance with the recommended project noise criteria, would ensure that the amenity of the adjacent residences is maintained.

4.3.3 Traffic Noise

The five properties, located at Locations A, B and D, have the potential to be impacted from road traffic noise resulting from operation of the facility. The road traffic noise assessment indicated that, during the PM peak, traffic noise under the normal case scenario would exceed the road traffic noise criteria based on the DECC's *Environmental Criteria for Road Traffic Noise* (ECRTN) by approximately 7 dBA for residences at Location B and 5 dBA for residences at Location D. A traffic noise assessment for the worst case scenario was not undertaken. Therefore, even with the traffic levels restricted to the normal case scenario, the SDBP could impact the amenity of properties at these locations.

SDH has proposed a variety of noise mitigation measures that would be implemented to comply with road noise criteria, including noise barriers along Bungonia and Mountain Ash Roads and architectural treatments and provision of mechanical ventilation for the impacted properties. These measures

would be finalised as part of the detailed design of the interchange and in consultation with affected residents.

The Department supports SDH's commitment to reduce traffic noise emissions and considers that sufficient engineering solutions are available to minimise traffic noise impacts for the normal case scenario. As noted above, the noise assessment did not identify the noise levels generated by the worst case traffic scenario nor demonstrate that the relevant traffic noise criteria could be met under the scenario. As the worst case scenario would result in more than three times as many heavy vehicles than the normal case scenario, however, the Department considers that the noise impacts are likely to be unacceptable. Therefore, the Department recommends that the number of heavy vehicles movements generated by the SDPB should not exceed 6,230 heavy vehicles movements per day and 1,557 service vehicles movements per day, consistent with the normal case scenario. SDH has agreed to this cap. The Department is satisfied that a restriction on the number of vehicle movements generated by the facility would adequately minimise the impact from traffic noise.

The Department also notes that SDH's road noise assessment only assessed road noise impacts on residences immediately adjacent to the site. The road noise assessment did not consider the road noise impacts of vehicles from the facility utilising Bungonia Road north of the Hume Highway into Goulburn. SDH did not identify the current road traffic noise along Bungonia Road north nor the appropriate road noise criterion. This is of a concern to the Department and therefore the Department recommends that traffic noise limits should be set for the facility.

The Department therefore recommends that traffic noise generated by the proposal must meet ECRTN criteria for all access roads to and from the site, in accordance with Government policy. SDH should identify the road traffic noise criteria prior to submission of any project/development application, and, should then demonstrate in each subsequent project/development application that traffic generated by the proposed component, along with the existing traffic from the facility, complies with the relevant road traffic criteria. In the event that noise road noise mitigation is required, details of the proposed noise mitigation measures, including the arrangements for the provision of these measures, would need to be provided as part of the project/development application. SDH is confident that a sufficient range of facilities could operate on the site that would meet the defined road noise criteria. Furthermore, SDH is aware that the scale and intensity of proposed facilities could be constrained in order to meet the road noise criteria.

Overall, the Department is satisfied that measures are available to SDH to ensure road traffic noise limits are met and impacts minimised.

4.4 Water

4.4.1 Water Supply

Construction

SDH has predicted that approximately 10 - 200 kL of non-potable water would be required during the initial construction phase (provision of infrastructure) of the proposal. SDH has indicated that water would be supplied from a number of sources including bore water, roof water from existing buildings on site, dam water from existing dams on site, tanker supply from recycling storage and from sedimentation dams (once constructed). However, SDH considers that the demand during the initial construction phase can be met through the extraction of groundwater alone, while any requirements for fire fighting water would be supplied from sedimentation dams (once constructed).

Whilst SDH undertook a preliminary pumping and recovery test of nearby groundwater bores, the Department of Water and Energy has advised that it is insufficient to determine the sustainability of groundwater extraction for this initial construction phase. At this stage, the Department is therefore unable to approve the groundwater component of the proposal. The Department considers, however, that there are a sufficient range of alternative non-potable water supply options available for the initial construction phase. Furthermore, the Staging Plan to be submitted by SDH prior to the commencement of any physical activities on the site, is required to include a comparative investigation of the proposed stand alone water system (including its groundwater components) and connection to Council's water system, along with an infrastructure plan outlining details and staging of the water supply network so that each component of the development is adequately catered for. The Department therefore considers that there is adequate scope within the approval to ensure construction water supply demands would be met. Notwithstanding, the Department recommends that SDH should be required to submit a soil and water management plan with each project/development application detailing water demand, water sources, and details of any licenses/approvals required.

Operation

At full operations, it is estimated SDBP would require approximately 1ML of water per day for which 0.61ML/day would be for potable water usage and 0.41ML/day for non-potable water usage. SDH proposes that all potable water needs would be met via its rainwater collection system (with approximately 0.46ML/day available based on the driest annual average rainfall), which would be augmented by groundwater supplies, when required. The non-potable water supply would be obtained through its treatment of sewage and stormwater. However, during the initial stages of the proposal, there would be a reliance on groundwater to meet the project's water demands.

All water collected through the rainwater harvesting scheme and extracted from groundwater would initially be stored in a 40 ML below ground reservoir, prior to being treated on site to meet Australian Drinking Water Guidelines. Any excess water collected from roofs would be discharged to Gundry Creek or recharged to the aquifer via artificial wetlands.

Details of the recycling system for treated wastewater and stormwater is provided in more detail in Sections 4.4.2 and 4.4.3 of the EA respectively. The conceptual water system is outlined in Figure 7 below.

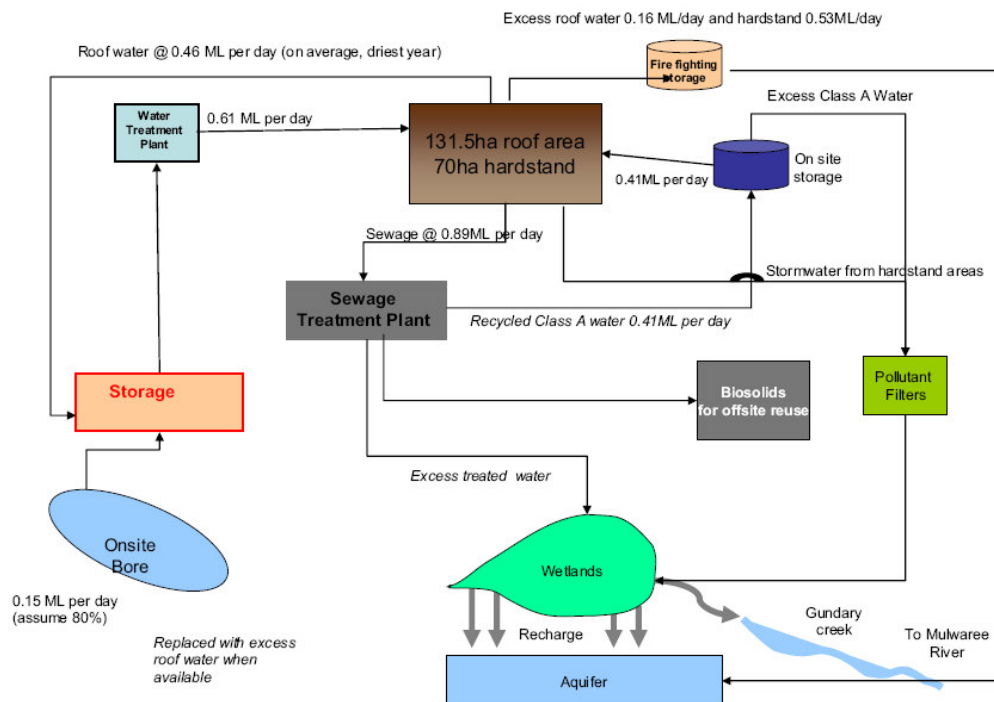


Figure 7: Concept Water Cycle Management System

The availability of potable water is a key issue in the Goulburn Mulwaree LGA and initiatives to conserve water are supported by the Department. Council raised concerns about the security of water supply for the site, as well as concern that the proposed infrastructure, and in particular the water treatment plant, would present a liability to Goulburn. Furthermore, DWE has indicated that insufficient information has been provided to determine the sustainability of the proposed groundwater extraction. Therefore, at this stage the Department is not satisfied that the proposed "stand alone" water supply is the most appropriate water supply system for the site. Furthermore, the Department does not have sufficient information to determine that groundwater is available, and the impacts of its extraction are acceptable.

The Department considers, however, that there are sufficient water options available to adequately service the site. Council has advised the Department that nearby developments including the airport are connected to the town water supply. The project's connection to the town water system could provide a suitable alternative water source to the stand alone system. Therefore, the Department considers that SDH should examine the feasibility of connecting to Goulburn's potable water reticulation system, compared with the proposed stand alone water system (including its groundwater

components) as part of the pre-development Staging Plan. The Staging Plan is to include consideration of the viable options for water supply, along with an infrastructure plan outlining details and staging of the water supply network.

Should it be determined that the “stand alone” system is the most feasible option for this site, the Department recommends that SDH should be required to submit a project/development application for this infrastructure. The recommended conditions of approval outline requirements to be addressed in the application including: details of infrastructure design; its ongoing management and maintenance; the adequacy and sustainability of the water sources; demonstration that the water treatment and quality would comply with the national *Drinking Water Guidelines* 2004; and, measures to mitigate potential impacts from construction and operation of the infrastructure. These requirements would ensure that the most appropriate and feasible water supply infrastructure is implemented for the site, which would meet the requirements of relevant agencies including Council, SCA and NSW Health.

4.4.2 Wastewater

The site is currently not serviced by sewerage and SDH proposes to treat all sewage generated at the SDBP on site (see Section 4.4.3 for the treatment of stormwater). Wastewater would be collected and pumped to a central wastewater treatment works (WWTW), located in the northern section of the site, where effluent would be treated to a tertiary level (i.e., filtration and disinfection). Treated effluent would be piped to service reservoirs prior to being distributed to each lot via a third pipe system. As the proposed wastewater system is conceptually it is unclear whether a licence would be required. This would need to be determined at the development/project application stage.

Proposed uses of the treated wastewater include toilet flushing, landscaping, laundry use, fire fighting and other non-potable uses. Any excess treated effluent would be discharged to artificial wetlands and ultimately to Gunadry Creek and its tributaries, while sludge would be dewatered at the WWTW and disposed of off site.

Council raised concerns about the operation and on-going management of a small onsite treatment plant and considers that an extension to Goulburn's sewerage system should be investigated. This position is supported by the Department, DECC and SCA.

Given the concerns of a number of agencies, the location of the treatment plant within a drinking water catchment, and the fact that the design of the wastewater treatment system is conceptual and detailed design has not been undertaken at this point, the Department recommends that SDH be required to assess of the viability of connecting the site to the town sewerage system. The recommended conditions of approval require SDH to complete this assessment prior to the seeking approval for any components of the concept plan and the results of this investigation are required to be included in the pre-development Staging Plan, as described in Section 4.1. Therefore, the recommended conditions of approval would ensure that all viable options the treatment and disposal of wastewater are consider and investigated, including details of the infrastructure required, prior to any project/development applications being lodged.

Should this assessment demonstrate that it is not reasonable or feasible to connect to the town sewerage system, SDH would be required to treat all wastewater onsite to a suitable standard. SDH would therefore be required lodge a development/project application for the on site system. The recommended conditions of approval outline requirements to be addressed in the application, including:

- a detailed description and design of the infrastructure required (including treatment processes, effluent quality and quantity, storage requirements, and chemical use/storage);
- provisions for on-going management of the system;
- details of any beneficial re-use on site, and where proposed, details of disposal methods;
- details of measures to minimise and manage any potential impacts of the infrastructure (in particular, hazards and risks, and odour); and
- a construction management plan detailing measures to minimise impacts during the construction of the facility.

These requirements would ensure that the design and operation of any sewerage infrastructure would conform with requirements of relevant agencies, and in particular Council, SCA, DWE and NSW Health, and that it would not impose upon Council's resources.

4.4.3 Stormwater Management

The SDBP is located within the Sydney drinking water catchment, and therefore the SCA requires that any discharges from the site must have a neutral or beneficial effect on water quality. The SCA raised concerns that there were substantial inconsistencies between the modeling undertaken to assess stormwater impacts of the proposal and details within the EA. Subsequently, SDH prepared a stormwater quality management strategy for the site including additional modeling of stormwater quality impacts.

Currently, stormwater runoff from the site flows in a north-westerly direction to Gunadry Creek via a series of culverts underneath Windellama Road. Modeling undertaken by SDH indicates that the SDBP would result in a substantial increase in runoff from the site and an increase in the stormwater pollutant loads, particularly in regards to total suspended solids and gross pollutants. However, the phosphorus and nitrogen loads are unlikely to increase.

To minimise impacts on Gunadry Creek and to meet SCA requirements for discharges, SDH propose to install a stormwater treatment system. This system would consist of vegetated buffer strips, swales, bioretention systems, sedimentation basins and wetlands. With these measures in place, SDH predicts that a significant reduction in runoff from the site, as well as a reduction in pollutant loads can be achieved and SCA requirements would be met. Additionally, the collection and reuse of water from roof areas would reduce the amount of stormwater requiring treatment and disposal.

The Department is satisfied that SDH has demonstrated that stormwater from the site can be treated and managed to meet relevant standards, minimising water quality impacts of the proposal. However, the treatment system proposed is conceptual and as such SDH would need to seek further approval for the construction and operation of the stormwater management infrastructure. The Department recommends that SDH should be required to provide the following details when seeking approval for this infrastructure:

- demonstration that the stormwater management infrastructure (including discharge rates, detention volumes and water quality) would conform with, or exceed all relevant requirements and guidelines, particularly of any requirements of Council and SCA;
- a description of the procedures for the installation, inspection and maintenance of the stormwater control infrastructure, including stormwater pollution control devices;
- demonstration that the stormwater management infrastructure would not impact on the existing level of runoff to adjacent properties; and
- a stormwater quality monitoring program and procedures to be undertaken if any non-compliance is detected.

4.4.4 Flooding

The site west of Mountain Ash Road and the intersection of Mountain Ash and Windellama Road (ie., Precinct 4) is currently subject to flooding during 1:100 ARI event. Flooding in this area is generally a result from water backed up from the confluence of the Wollondilly River and as such SDH considers that the proposal would not impact on flood levels.

Limited information has been provided on the flooding impacts of the proposal. However, SDH has committed to undertaking a flood study in accordance with the *NSW Government Floodplain Development Manual* (NSW 2005) prior to any development. The study would include a hydraulic model to determine water levels, velocities and depth of flooding, to ensure that the development would not increase flooding levels on any adjoining lands.

The Department considers that any flooding impacts from the proposal could be managed. However, as part of the site is already flood prone, flood levels would need to be taken into consideration as part of the detailed design of the interchange and associated road works, and development of Precinct 4 to ensure components of the SDBP within the flood area are constructed above the 1:100 ARI flood level. Therefore, the Department considers that the flood study should be undertaken as part of the pre-development Staging Plan (see Section 4.1). The Department is therefore satisfied that the conditions of approval would ensure any flooding impacts are appropriately investigated as part of the detailed design of the SDBP, prior to any development occurring on site, and that impacts would be adequately managed.

4.4.5 Creek Diversions and Riparian Rehabilitation

SDH proposes to realign an ephemeral creek and a number of ephemeral gullies on site to accommodate the proposed layout of the SDBP. SDH proposes to realign the creek from its existing

location to the north of Precinct 4, as depicted in Figure 8. SDH proposes that the realigned creek would accommodate a 2 year annual recurrence interval (ARI) flow in the creek channel and a 100 year ARI flow in the overflow channel.

The detailed design, including construction methodology of the creek realignment has not been undertaken as part of the EA. Additionally, while SDH commits to reinstating the riparian vegetation, the proposed extent of the rehabilitation and the rehabilitation works to be undertaken have not been finalised.

The Department does not oppose the realignment of creeks on site, however, considers that any realigned creek should be constructed to emulate a natural waterbody in both behaviour and appearance and that the realigned creek(s) should be designed to withstand a 1 in 100 year storm event. Additionally, both the Department and DWE support the rehabilitation of riparian vegetation but consider further details are required. Therefore, the Department recommends that prior to seeking approval for any components of the concept plan, SDH should be required to provide details of the creek diversion and measures to rehabilitate the riparian vegetation within a Landscape Management Plan. This Landscape Management Plan is required as part of the Staging Plan (as described in Section 4.1).

Furthermore, SDH would also be required to seek approval for the creek diversions and rehabilitation of the riparian zones. In seeking approval, the Department recommends SDH should be required to provide the following information:

- a detailed description and design of the realigned creek, demonstrating that the realigned creek would emulate a natural creek system;
- a Creek Realignment Plan detailing the physical works that would be undertaken, the commissioning of the creek and the ongoing monitoring and management of the realigned creek;
- a Vegetation Management Plan detailing methodology, staging and monitoring of the riparian vegetation rehabilitation works; and
- a construction management plan, to address environmental management and monitoring practices during construction.

These requirements are consistent with recent project approvals involving creek realignments. The Department is therefore satisfied that the recommended conditions of approval would ensure that the realigned creek(s) is designed to mimic a natural waterway and that a suitable program of works is prepared for the creek realignment(s) and rehabilitation of the riparian vegetation prior to any development occurring on site.

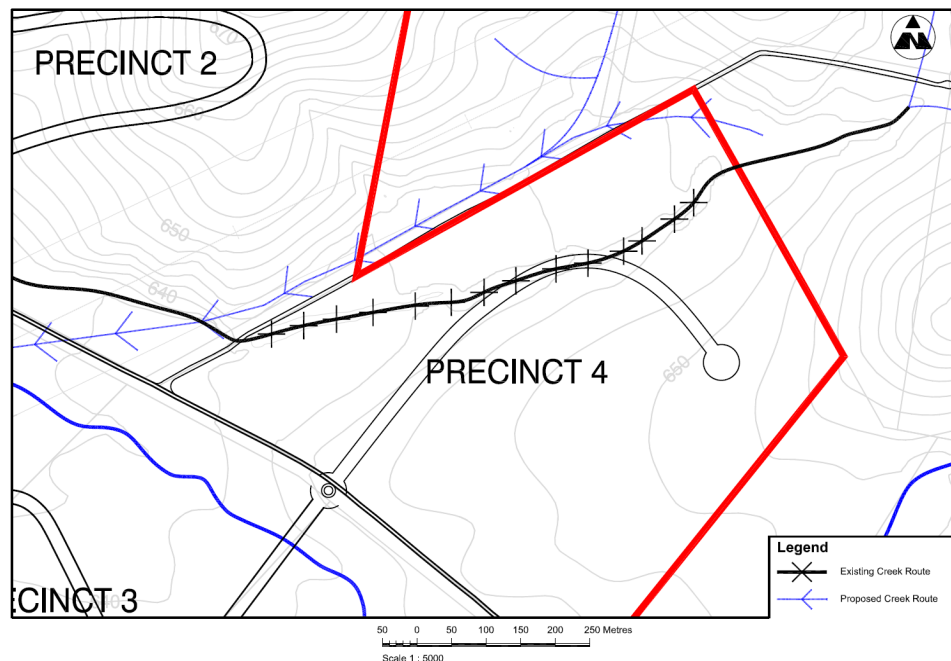


Figure 8: Proposed Creek Relocation

4.5 Visual

A visual assessment of the proposal was undertaken by Connybeare Morrison as part of the concept plan proposal. Connybeare Morrison's visual assessment sought to identify the likely visual impacts of the proposal from surrounding public viewpoints, as well as residential receivers surrounding the site. The Department notes that Connybeare Morrison's assessment appears to be based on a less intensified development than what was ultimately presented in the main document of the EA, in particular:

- the Connybeare Morrison assessment was based upon a maximum building footprint of 50 percent per lot, rather than the proposed building footprint of 60 percent as outlined in the EA; and
- the height of the facility assessed by Connybeare Morrison was not stipulated in the document, whilst the EA proposes a building height of 18 metres.

The assessment, however, does provide a good indication of the likely visual impacts from of the proposal from both public and private viewpoints. The assessment indicates that there would be visual impacts from the proposal, albeit limited, from public viewpoints along the Hume Highway and from Memorial Hill along Rocky Drive. Additionally, the proposal would result in visual impacts for residential receivers surrounding the site, in particular the 13 rural properties immediately adjoining the site.

Connybeare Morrison therefore recommended a number of broad design parameters to be incorporated into a master plan design for the site to minimise its visual impact, including:

- provision of small lots in Precinct 1 and 2 and larger lots in Precinct 3 and 4 to minimise views of SDH from Goulburn and the Hume Highway;
- a maximum 50 percent building area per lot, to enable sufficient landscaping to offset the bulk of the site;
- minimum front, side and rear setbacks for the development; and
- the provision of landscaping corridors through the site, including along the riparian corridors, in a no-build zone in Precinct 3, around the site boundaries and along building frontages.

A plan of the landscape corridors are outlined in Figure 9.

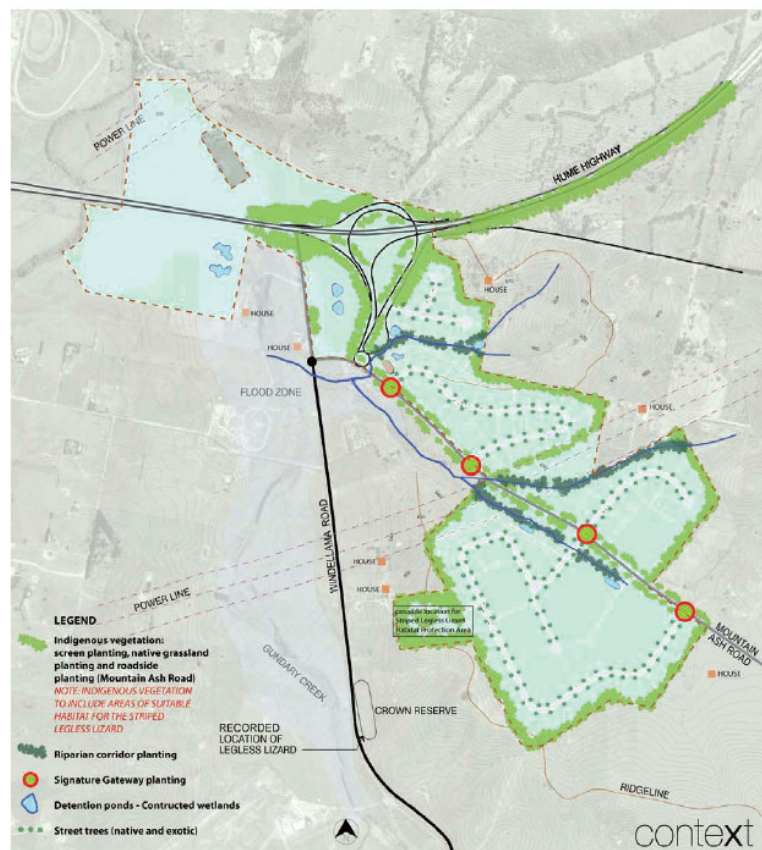


Figure 1.17 - Landscape Design Principles Diagram

Figure 9: Landscape Plan

The Connybeare Morrison assessment noted that the visual impact of proposed buildings on the surrounding rural residences was of specific concern. Provision of visual buffers between these site and these residential receivers was therefore recommended, with tree and shrub planting on top of earth mounds preferred. These earth mounds could also provide the required noise mitigation, in a manner less visually obtrusive than with noise walls. An example of this screening option is outlined in Figure 10.



Figure 1.16 - Visual Screening & Noise Abatement Section

Figure 10: Proposed Visual Screening and Noise Amelioration

The main body of the EA included a development control plan that outlined the proposed development controls and landscaping for the site. The Department notes that a number of the recommendations outlined by Connybeare Morrison were not adopted in the main part of the EA. As the proposal has the potential to result in significant visual impacts to the area, it is vital that appropriate design controls and landscaping are provided to offset and minimise the bulk and scale of the development.

The Department has therefore recommended that a revised development control plan and landscaping plan be included in the Staging Plan for the development, which would set the framework for the development of the site, including design controls and guidelines. Furthermore, SDH would then be required to submit a detailed landscape plan and visual assessment for each subsequent project application, including methods that would be implemented to minimise visual impacts of the proposal, particularly on adjoining properties. It is noted that the White Box-Yellow Box Blakely's Red Gum may not be appropriate as a screening plant. SDH is therefore required to identify appropriate species that could be planted to ameliorate the visual impacts of the proposal.

The concept plan includes the provision of a variety of road facilities, including the interchange, site entrances and noise walls that may result in changes to visual outlook of the area. At this stage the design of these facilities is conceptual. Therefore, to ensure that visual impacts of the road facilities are adequately identified and mitigated, SDH is required to undertake a visual assessment as part of the project application for the interchange. The visual assessment must outline mitigation measures to be implemented including landscape screening, lighting and noise wall design.

The Department recognises that it is the visual outlook of the 13 residential receivers adjoining the site that has the most potential to be impacted by the proposal. It is therefore important that SDH provides adequate mitigation measures for these residences. Therefore, the Department recommends that SDH should be required to prepare an Off-Site Mitigation Strategy for the proposal, in consultation with these landowners and Council. The Off-Site Mitigation Strategy must outline reasonable and feasible mitigation measures that would be implemented to offset impacts on these residences, that could be implemented ahead of development on the site. The Director-General's approval of the Off-Site Mitigation Strategy would therefore be required, prior to the processing of any project/development applications.

4.6 Flora and Fauna

The site is highly modified and degraded as a result of clearing, grazing, pasture improvement, agricultural practices within this rural area. Sites surveys indicates that the site supports native pasture communities of low species diversity, along with improved pasture, and native and exotic species of grass and a few herbaceous species. There are small exotic trees and shrubs through the site, along with some non-endemic Eucalypts and Acacia along the eastern side of the site.

The White Box Yellow Box Blakely's Red Gum Woodland (*Eucalyptus blakelyi*) is listed as an endangered ecological community under the *Threatened Species Conservation Act 1995* (TSC Act)

and as threatened under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Scattered specimens of *Eucalyptus blakelyi* were identified within confined areas on the upper slopes along the north-eastern boundary of the site.

Substantially more extensive endemic vegetation has been retained on the 60 hectare Gundry Travelling Stock Route (TSR) which is located adjacent to the site. One hundred and thirty native species have been identified in this area, compared with five native species on the subject site. The Button Wrinklewort (*Rutidosia leptorrhynchoidea*) which is listed as an endangered species under the TSC Act and as a threatened species under the EPBC Act 1999, has been recorded in the Gundry TSR in previous studies. Surveys undertaken for the EA, however, did not identify the Button Wrinklewort on the site or the Gundry TSR.

The Department considers that the proposal is unlikely to impact these remnant *Eucalyptus blakelyi* as they would be located within the buffer zones separating the site from surrounding receivers. The assessment indicates that it is highly unlikely that Button Wrinklewort would be located on the site. The Proponent has proposed, however, to establish a 50 metres wide conservation zone along the site boundary that adjoins the Gundry TSR, for protection of both the Button Wrinklewort and the striped legless lizard. The conservation area would be fenced and planted with the grassland. A weed management program would be implemented and a qualified ecologist engaged to monitor the condition of the conservation and buffer zones every six months. To ensure that these buffer zones and the conservation zone is adequately managed and protected, the Department has recommended that the Proponent prepare a flora and fauna management plan as part of the construction environmental management plan for each stage of the proposal.

The Striped Legless Lizard (*Delma impar*) which is listed as vulnerable under the TSC Act and as endangered under the EPBC Act, has been recorded in areas surrounding the site in previous studies. Targeted surveys of the Striped Legless Lizard, detected a total of 32 species of vertebrates, including 2 frogs, 10 reptiles, 16 birds and 4 species of mammals on the site, none of which are listed as endangered. The Striped Legless Lizard, however, was observed within less modified Gundry TSR during these surveys.

The flora and fauna survey indicated that the population of the Striped Legless Lizard near the site is somewhat small and isolated, being centred around the native grasslands Gundry TSR. In order to limit impacts on the Striped Legless Lizard the proponent has committed to:

- establish the 50 metre conservation zone adjacent to the Gundry TSR;
- employ a qualified ecologist to provide training in recognising and handling the striped legless lizard; and
- capture and relocate any identified striped legless lizards to the Gundry TSR.

The Proponent has also committed to developing a management plan to address the ongoing protection of the striped legless lizard and rehabilitation of its habitat.

Due to the proposal's potential impact of threatened species under the EPBC Act, it was referred to the Department of Environment and Heritage (DEH). DEH has determined, however, that the concept plan is not controlled action, provided the mitigation measures outlined above are adopted. Similarly, the Department considers that the proposal would not adversely impact the endangered communities and species in the vicinity of the site, provided that buffer and conservation zones are established and protected, and any identified striped legless lizard appropriately relocated.

4.7 Heritage

4.7.1 European Heritage

There are no items of heritage significance located on the site and the Heritage Council confirmed that the proposed site and buildings on it are not listed on the State Heritage Register. However, the Heritage Council did note that nearby items of heritage significance include the Lansdowne Bridge, "Springfield" and the 1924 Motor Cycle Grand Prix Memorial (adjacent to the site). In addition, there are a number of other heritage places/items within the local government area that are listed on the State Heritage Register, the Register of the National Estate and other community registers such as the National Trust, Royal Australian Institute of Architects' Register of 20th Century Buildings, and local trusts.

One of the key issues raised in submissions, including a submission from the National Trust of Australia, was the impact of the proposal on nearby houses that were built in the mid to late 19th

Century. The National Trust is currently investigating the significance of these properties as part of the development of Goulburn. The Heritage Council also raised concerns that heavy vehicle traffic from the SDBP could impact on the structural integrity of the Lansdowne Bridge and recommended that the 1924 Motor Cycle Grand Prix Memorial be retained with a reasonable curtilage.

The Department notes that the majority of buildings listed as heritage items under the current LEP and on various heritage registers are located within the city of Goulburn and would not be impacted by the development. The Department understands that Goulburn Council are currently undertaking a heritage study of a number of houses in the vicinity to the site to ascertain their significance. A number of these houses have been identified as local heritage items under the draft LEP, though none have been identified for state listing. The countryside surrounding the facility has not been identified in the draft LEP as a conservation area.

The Department acknowledges that the proposal would alter the broad setting of a number of these houses. As the concept plan site and its surrounds has not been identified as a conservation zone, and as SDH has not proposed to alter the structure and fabric of houses listed as local heritage items in the draft LEP, the Department considers that the impact of the proposal on the draft local heritage items is acceptable.

A significant number of light vehicles would access the site from Goulburn via the Lansdowne Bridge and Bungonia Road (up to 5,800 vehicles per day under worse case scenario). As discussed in Section 4.2, Lansdowne Bridge is scheduled to be replaced by the RTA, and SDH has not undertaken an assessment of the impact of the proposal on Lansdowne Bridge. However, it is unclear when the replacement bridge would be constructed. As such, the recommended conditions of approval require SDH to undertake an assessment of the impacts of the project on Lansdowne Bridge in its current form, and to detail any works required to mitigate impacts. This assessment is required to be completed prior to the lodgement of any project applications for the SDBP.

The 1924 Motor Cycle Grand Prix Memorial is located in the vicinity of the proposed interchange for the site. SDH has committed to retaining and conserving the memorial in consultation with the Classic Riders Club of Goulburn. Notwithstanding, the Department agrees with the Heritage Council's recommendation that the memorial be retained with a reasonable curtilage and that views to and from the memorial also be retained. These requirements have been incorporated into the recommended conditions of approval.

In summary, the Department is satisfied that through the commitments made by SDH and the recommended conditions of approval that the proposed SDBP would have minimal impacts on heritage items and places.

4.7.2 *Aboriginal Heritage*

As part of its heritage assessment, SDH conducted a search of the Australian Heritage Information Management System, a review of Goulburn Mulwaree Council records and consulted with the Pejar Aboriginal Land Council. The review indicated that indigenous sites of significance are unlikely to be located on the site, as early indigenous activity has only been identified in areas north east of the site, with no known recordings of Aboriginal activity on the site itself, possibly due to the absence of permanent watercourses on the site. No field surveys were undertaken as part of the assessment, however, to confirm this.

SDH has therefore committed to prepare a Cultural Heritage Management Plan detailing measures to identify and remove artifacts, and to mitigate any potential impacts from the construction of the SDBP. The management plan would include provisions for:

- salvaging and/or conservation of any Aboriginal objects in the disturbance area;
- responding to the discovery of any new Aboriginal objects or skeletal remains during construction; and
- involving the Aboriginal community groups in the conservation and management of any Aboriginal cultural heritage identified on the site.

The Pejar Land Council has not raised concern about the development.

The Department considers that the preparation of cultural heritage plan for each subsequent application outlining methods to protect, salvage and conserve any Aboriginal objects, in consultation with the relevant Aboriginal groups, should provide sufficient protection of any indigenous items on

site. These requirements have therefore been incorporated into the recommended conditions of approval.

4.8 Waste

SDH proposes to operate a recycling centre on site for the collection of recyclable materials, such as glass, paper, cardboard and plastics. Individual occupiers at the SDBP would be responsible for the disposal of all other wastes from the site. SDH has committed to the preparation of a Waste Management Plan and all storage and disposal of waste during the construction and operation of the SDBP would be in accordance with that plan.

If not managed appropriately, any storage of waste on site has the potential to generate impacts such as air emissions (dust), odour, noise, litter, visual impacts and contaminated runoff. Therefore, the Department considers that SDH should be required to seek approval for any waste management infrastructure on site. In seeking this approval, the Department recommends that the following information be provided:

- a detailed description and design of waste management infrastructure including the types and quantities of waste that would be generated on site;
- a description of how waste would be stored and handled on site, transported from the site and disposed of in accordance with the DECC's guidelines;
- an assessment of the potential impacts of the waste management infrastructure (air quality, soil and water and any other significant issues identified during the detailed design phase);
- measures to minimise the production and impact of all wastes generated on site and procedures to monitor the amount of waste generated at the site; and
- a construction management plan detailing measures to minimise impacts during the construction of the infrastructure.

The Department considers that this should ensure that the generation of waste is adequately minimised and managed.

4.9 Other Issues

The Department's consideration of other issues is provided below.

Issue	Comment
Contamination	<p>SCA noted that land in the vicinity of the existing Windellama Road overpass is contaminated, with the leachate from this area being acidic. SCA is concerned that as the new on and off ramp for the proposed interchange is in the vicinity of the contaminated land, the construction of the interchange has the potential to disturb this land, resulting in water quality issues.</p> <p>The recommended conditions of approval require SDH to prepare a contamination management plan outlining measures to identify and manage contaminated material disturbed by construction works associated with the interchange.</p>
Loss of Agricultural Land	<p>The proposal would result in the loss of approximately 430 hectares of agricultural land. Agriculture is a significant employer in the LGA and a key economic contributor to the region and as such the draft <i>Sydney-Sydney Corridor Regional Strategy</i> recognises the need to protect rural lands due to the significant economic benefits of agricultural industries to the region.</p> <p>Agriculture is the dominant land use within the LGA, accounting for over 86% of the land area (total land area of 3,220 square kilometres). The area of agricultural land that would be lost is considered insignificant (~0.15%) and is unlikely to have an impact on agriculture in the region.</p>
Air Quality	<p>A preliminary assessment of air quality issues for the proposal was undertaken, focusing on air emission from traffic and the WWTW, as well as greenhouse gas emissions. This assessment indicated that traffic generated by the SDBP was unlikely to impact on air quality at surrounding residences, however, further detailed assessment would be required to be undertaken on emissions from the WWTW and other developments at the site.</p> <p>The recommended conditions of approval required SDH to submit an air quality assessment, covering construction and operation, when seeking approval for the various components of the concept plan.</p>
Energy and Water Efficiency	<p>The Department considers that energy and water efficiency measures should be considered as part of any future development/project applications for the proposal. As such, the Department recommends that the Control Plan for the facility be revised to include controls/guidelines relating to energy and water efficiency/conservation. Additionally, the Department recommends that future development/project applications should also include details of the water and energy efficiency measures proposed to reduce water and energy requirements.</p>

5 CONCLUSION

The Department has assessed the environmental assessment documentation (concept plan application, EA, submissions of the proposal and SDH's response to submissions) in accordance with the requirements in Clause 8B of the EP&A Regulation and objects of the EP&A Act.

The Department's assessment of the project has included a detailed consideration of the merits of the proposal including its economic, social and environmental impacts. The assessment recognises that the detailed planning and design of the SDBP is at a preliminary stage, with plans presently being conceptual. The Department considers that sufficient information has been provided, however, to determine the broad concept plan for the site, namely approval for the proposed landuses and its broad development framework. Importantly, the assessment has enabled the Department to set environmental limits for the development of the site, which can now be fed into the detailed design. The Department therefore considers that the Minister can determine the concept plan proposal.

At this stage, the approval does not allow for any physical works to be undertaken on the site. The Department consider that there are a number of key aspects of the project that should be investigated and refined further, prior to the processing of related project and development applications and commencement of physical works onsite. In particular, the Department recommends that aspects relating to the onsite provision of water and sewerage systems and the proposed development controls should not be approved and that the following studies be included in a predevelopment staging plan:

1. feasibility of rail linkages to the site,
2. infrastructure options and upgrade requirements;
3. refinement of develop controls for the site (i.e., design controls and development guidelines) in consultation with Council; and
4. the resulting implementation framework to ensure the site is developed in an orderly manner.

This predevelopment staging plan would enhance the overarching framework for the development on the site. Importantly, further consideration of a rail link provides a valuable opportunity to improve the intermodal capabilities of the project and thereby further reduce its impacts. The Director General's approval of the staging plan would be required, prior to submission of any project or development related applications. Additionally, the Department has recommended that a Masterplan should be prepared for each stage of the project.

The Department is satisfied that the majority of the impacts of the proposal can be minimised and managed to ensure an acceptable level of environmental performance. Importantly, as part of conditions of approval, the Department has recommended that the daily number of heavy and service vehicle movements be capped at 6,230 and 2,557 respectively, consistent with the SDH's normal case estimates. The conditions of approval also include limitations on noise levels and water runoff to ensure that impacts associated with the project are acceptable. SDH are aware the scale and intensity could be constrained by these conditions of approval, but are confident that a sufficient range of facilities could be developed on the site within this framework. SDH would be required to demonstrate compliance with these conditions of approval, and government policies, in the subsequent project and development related applications.

The Department acknowledges that the proposal has the potential to impact on the amenity of the 13 rural residences adjoining the site. These impacts may include noise, visual amenity, traffic, access and water supply. The Department considers that a range of measures (engineering, landscaping, architectural treatments at the residence etc) are available to minimise these impacts. Subsequently, the Department's recommendations include a requirement that SDH prepare an Off-Site Mitigation Strategy in consultation with the affected landowners, outlining the measures to be implemented to minimise and off-set any residual impacts from the proposal.

While the Department recognises that through appropriate design and implementation of other mitigative measures key environmental and amenity criteria could be met, the Department considers in this instance, and given the significance of the project to the region and the State, voluntary acquisition clauses and appropriate arbitration mechanisms should be considered in the Off-site Mitigation Strategy for inclusion in future applications. This would ensure a safety net is in place where the adoption of all reasonable and feasible mitigation measures do not adequately protect local

amenity. This Off-Site Mitigation Strategy is to be submitted and approved by the Director General with the staging plan.

The Department supports the proposal as it meets a demonstrable need for the region, providing significant economic and social benefits for the Goulburn LGA, not least from the \$1 billion capital investment and the creation of up to 3000 jobs. The proposal will result in the development of over 260 hectares of employment lands and facilitate jobs, thereby meeting key objectives in the NSW's Government's *Sydney-Canberra Corridor Regional Strategy* and Council's *Goulburn Mulwaree 2020 Strategy* to create additional employment/industrial lands for future population growth in the region.

Furthermore, the proposal is also of significant benefit to the state, in that it will cater for an increase demand for freight services along the eastern seaboard and provide alternative and more cost effective land for warehousing and industrial uses than is available within the key metropolitan areas of Sydney, Canberra and Melbourne. Importantly the site's strategic location adjoining the Hume Highway provides a direct connection to the key road freight route linking these metropolitan areas and the nearby ports of Port Botany and Port Kembla, as well as the regional markets of Wagga Wagga and Albury Woodonga.

SDH's agreement to fund the construction of the \$30 million interchange connecting the site with the Hume Highway, also provides valuable new infrastructure at no cost to the State.

The Department also considers that integration of rail for the facility is vitally important to promote an increased rail share for freight transportation, and thereby reduce broader impacts associated with heavy vehicle transportation. The Department's requirement that a feasibility study for rail connection be undertaken and approved by the Director-General prior to the processing of any development or project related applications, provides an opportunity that rail can be incorporated in the upfront design of the facility. Furthermore, the recommended capping of heavy and service vehicles utilising the site, should promote and encourage the development of the rail connection.

Overall, therefore, the Department considers that there is a demonstrable need for the proposal in the Goulburn area and considers that the proposal offers significant economic and social benefits both for the Goulburn Mulwaree LGA and the State as it would:

- result in capital investment of approximately \$1 billion;
- create jobs for 3000 workers;
- develop additional employment/industrial lands with the Goulburn Mulwaree LGA;
- cater for the increased demand for freight services along the eastern seaboard;
- funds valuable new infrastructure at no cost to the state; and
- provides opportunities to promote rail.

Consequently, the Department believes that the proposal is in the public interest and should be approved, subject to conditions.

6 RECOMMENDATION

It is RECOMMENDED that the Minister:

- consider the findings and recommendations of this report;
- approve the concept plan application, subject to conditions, under section 75O and 75P of the *Environmental Planning and Assessment Act 1979*; and
- sign the attached concept plan approval (Tagged A).

Chris Wilson
Executive Director
Major Project Assessment

Sam Haddad
Director-General

APPENDIX A – SUMMARY OF CONDITIONS OF APPROVAL

Aspect	Condition	Requirement
Schedule 2		
General Terms of Approval	1	Defines which aspects of the concept plan have been approved
Modifications to the Concept Plan	2	Details modifications to the concept plan, that is which aspects are not approved
	3	Requirement to prepare a Staging Plan prior to seeking approval for the various components of the concept plan. The Staging Plan must detail the orderly development of the site commencing at the interchange. Staging Plan must include the feasibility of connecting the site to the rail yards, infrastructure plan, landscape management plan, and a Masterplan for each stage.
	4	Requirement to prepare an Off-Site Mitigation Strategy to identify measures to minimise impacts of the project on adjacent private properties.
Limits on the Approval	8 - 10	Environmental limits including noise limits and water limits
Schedule 3		
Application Requirements	11	Project application requirements for the interchange and associated road works.
	12	Project/development requirements for any buildings and associated infrastructure.
	13	Project/development requirements for the water supply and rainwater harvesting infrastructure.
	14	Project/development requirements for the sewerage system.
	15	Project/development requirements for the stormwater management infrastructure.
	16	Project/development requirements for the creek diversions and riparian zone rehabilitation.
	17	Project/development requirements for the waste management infrastructure.

APPENDIX B – CONDITIONS OF APPROVAL

APPENDIX C – ENVIRONMENTAL PLANNING INSTRUMENTS CONSIDERATION

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

- *State Environmental Planning Policy No. 11 - Traffic Generating Developments;*
- *State Environmental Planning Policy No. 44 – Koala Habitat Protection;*
- *State Environmental Planning Policy No. 55 – Remediation of Land; and*

Consideration of the proposed development in the context of the objectives and provisions of these environmental planning instruments is provided below.

State Environmental Planning Policy No. 11

State Environmental Planning Policy No. 11 – Traffic Generating Developments applies to the site. SEPP 11 aims to ensure that the RTA is made aware of and allowed to comment on proposals for developments listed in Schedule 1 of SEPP 11. SEPP 11 requires the Department to forward a copy of the application to the RTA within 7 days of receipt. A copy of the application was provided to the RTA on 12 February 2007. The RTA provided a response on the proposal within the exhibition period detailing its recommended conditions of approval. Therefore, pursuant to clause 7(5) of SEPP 11, the Minister is able to determine the application.

State Environmental Planning Policy No. 44

State Environmental Planning Policy No. 44 – Koala Habitat Protection (SEPP 44) applies to Goulburn Mulwaree LGA. The site is predominantly cleared and the Department is satisfied that the proposal is unlikely to impact on koala habitat.

State Environmental Planning Policy No. 55

State Environmental Planning Policy No. 55 – Remediation of Land applies to the site. SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application. Clause 7 of SEPP 55 states that:

- 7(1) *A consent authority must not consent to the carrying out of any development on land unless:*
- (a) it has considered whether the land is contaminated, and*
 - (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
 - (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

A preliminary site investigation for contamination indicated that the site was suitable for the proposed warehouse and distribution centre. However, SCA has indicated that contamination is evident in the vicinity of the existing Windellama Road overpass. The recommended conditions of approval require SDH to prepare a contamination management plan outlining measures to identify and manage contaminated material disturbed by construction works associated with the interchange.

The Department is satisfied with the consideration of SEPP 55 contained in the Environmental Assessment and considers that the recommended conditions of approval would ensure all contaminated material is identified and managed appropriately.

APPENDIX D – REPONSE TO SUBMISSIONS

APPENDIX E – SUBMISSIONS

APPENDIX F – ENVIRONMENTAL ASSESSMENT
