





## Chapter Three Statutory requirements

### 3.1 Introduction

The *Environmental Planning and Assessment Act 1979* (the Act) and *Environmental Planning and Assessment Regulation 2000* (the Regulation) control the use and development of land in New South Wales. The Act establishes the hierarchy of planning instruments that apply to the proposal. These instruments and all relevant legislation applying to the proposal are summarised in the following sections.

The Act was amended in August 2005 by the inclusion of Part 3A. The Minister for Planning is responsible for determining development which has been declared to be major infrastructure under this part of the Act. The Minister may declare a development to be a major project if defined in *Schedule 1: Major Projects-Classes of Projects in State Environmental Planning Policy (Major Projects)*. Group 2.7 in Schedule 1 includes extractive industries and the Hitchcock Road project therefore meets the criteria for consideration as a major project due to its scale and significance.

The Environmental Assessment (EA) has been prepared to accompany a development application by PF Formation for a change to their operations at the Hitchcock Road site in Maroota, Baulkham Hills. Although the proposal comprises a number of changes to the current approval, it is treated as a new development which would supersede it. The current approval would remain in force until it ceases to have effect when the present application is approved under Part 3A of the Act.

### 3.2 Environmental Planning and Assessment Act 1979

#### 3.2.1 Development consent

Part 3A provides an assessment and approvals regime tailored to major infrastructure and other projects where the Minister is the approval authority. The provisions of Part 3A apply to major projects where the Minister for Planning has made a declaration relating to the specific development to which the project belongs. The process is divided into three stages:

- project application and environmental assessment;
- exhibition, consultation and review; and
- Director General's assessment and Ministerial determination.

#### ***Project application and environmental assessment***

The proponent of major infrastructure under Part 3A must submit a project application to the Department of Planning. Information in the application is used to determine whether Part 3A of the Act applies and whether a concept plan will be required or authorised by the Minister. Under the provisions of Clause 75E(2) of the Act, the application must include a description of the proposal and any other matters required by the Director General. This would normally include a preliminary assessment to accompany the project application.

Depending on the proposal, the proponent may also need to establish whether the Minister will require or will authorize the submission of a Concept Approval for the project. The project application should include:

- description of the project and any ancillary components;
- location(s) and a map identifying the site(s)/alignment/corridor;
- capital investment value and other relevant information in relation to the parameters set out in the Major Projects State Environmental Planning Policy or any order relevant for determining whether Part 3A applies;
- planning provisions applying to the site;
- views of other agencies, local council or the community, if known;
- list of any other approvals required, in particular if a licence from the Department of Environment and Conservation under the Protection of the Environment Operations Act is required;
- justification of consideration of the project under Part 3A provisions, if necessary; and
- preliminary assessment aimed at identifying the likely environmental issues.

The preliminary assessment is based on the *Preliminary Assessment Guidelines* (Department of Planning 2005) which set out a systematic process of identifying and ranking environmental issues to provide the basis for the environmental assessment requirements for the proposal. The preliminary assessment is predominantly a desk top study which also identifies any likely environmental constraints on the site to assist in the formulation of the proposal.

The Department of Planning consults all relevant government agencies and local councils during the preparation of the environmental assessment requirements under Clause 75F(2). Where the issues are complex, a Planning Focus Meeting is convened by the Department for the participants to consider the issues and the level of assessment to be required.

The Director General issues the environmental assessment requirements which must be consistent with the guidelines. These are publicly available on the Department's web site. The requirements nominate the general contents of the environmental assessment, key issues to be addressed, the level of assessment required and the form and contents of the documentation.

The environmental assessment is essentially a technical document which identifies the environmental risk or benefits of the proposal so that the approval authorities or an informed member of the public can understand the implications of the key issues and can evaluate the proponent's commitments to environmental management and mitigation measures for the project together with any expected residual effects. The assessment should focus on those issues important for the management of the project in a sustainable manner.

The environmental assessment contains a draft Statement of Commitments indicating the measures that will be undertaken to minimise impacts on the environment should the proposal be approved. This will be included in the conditions of approval.

### ***Exhibition, consultation and review***

Prior to exhibition, the adequacy of the assessment is considered by the Director General in consultation with government agencies and the relevant council. Additional information may be required at this stage. When adequate, the environmental assessment is exhibited for a minimum of 30 days during which written submissions are invited.

Copies are sent to the proponent, the Department of Environment and Conservation if a licence is required, and any other public authority. The proponent may be required to respond to submissions, prepare a Preferred Project Report outlining any changes to the proposal to minimise its environmental impact and a revised Statement of Commitments.

### ***Assessment and determination***

The third stage comprises the Director General's assessment and the Ministerial determination. The draft assessment report includes recommendations for determination – either, approval subject to implementation of the Statement of Commitments with other conditions as appropriate, or refusal. The report takes account of the environmental assessment, any peer review, any panel or inquiry report and recommendations, submissions from public authorities and other stakeholders and any preferred project report.

The assessment focuses on the acceptability of the residual impacts, adequacy of measures in the Statement of Commitments to manage and minimise impacts and the justification of the proposal taking the Director General's requirements into consideration. The assessment report is submitted to the Minister for Planning for determination. A copy of the Minister's determination is sent to the proponent, relevant agencies and councils and is published on the Department of Planning's website.

Appeal rights under Part 3A are generally the same as those operating prior to its introduction. The proponent (except public authorities) has merit appeal rights except for proposals which are critical infrastructure or where a commission of inquiry or panel of experts has been involved in the process. Applications must be lodged within three months of a decision.

Third party objectors have merit appeal rights similar to those that applied to designated development under Part 4 except where there is a commission of inquiry or panel of experts. Applications must be lodged within 28 days of a decision.

The determination process for a major development is summarized on **Figure 1.4**.

### **3.2.2 Integration of other State legislation**

Threatened species assessment and Aboriginal cultural heritage assessment (responsibilities of the Department of Environment and Conservation) have been integrated into the Part 3A assessment and approval process.

In both cases, an initial desktop assessment would be adequate to determine whether threatened species occur on site or are likely to be affected by the proposal or in order to determine Aboriginal cultural values associated with the affected site. If present, further assessment will be required and details included in the Director General's requirements for the EA.

Clause 75I(2) of the Environmental Planning and Assessment Act Part 3A requires the Director-General's report to include:

- (e) *except in the case of a critical infrastructure project-a copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that has been taken into consideration in the environmental assessment of the project under this Division,*
- (f) *a copy of or reference to the provisions of any State Environmental Planning Policy that substantially governs the carrying out of the project.*

The relevant provisions of all environmental planning instruments applying to the proposal are identified and discussed in the following sections.

### **3.3 Baulkham Hills Local Environmental Plan 2005**

Land use in the Baulkham Hills local government area is governed by *Baulkham Hills Local Environmental Plan 2005*. The site is zoned Rural 1(b). Quarrying is permitted in this zone with development consent.

The following section provides responses to the relevant objectives of the zone.

#### **Rural 1(b) Zone**

- (a) *To ensure that existing or potentially productive agricultural land is not withdrawn unnecessarily from agricultural production.*

Parts of the proposed extraction area have been used for low key agricultural purposes. However, *Sydney Regional Environmental Plan 9 – Extraction Industry (Number 2)* identifies the sand/clay/shale and friable sandstone in these and surrounding properties as of regional significance. The Regional Environmental Plan takes precedence over local environmental planning instruments and therefore the use of land for sand extraction is considered to have greater value to the region than its use for agriculture. Once extraction has taken place, substantial parts of the rehabilitated site would be returned to agricultural use.

- (b) *To maintain the rural character of the area without adversely affecting the carrying out of agricultural activities.*

Although the proposal would restrict horticulture and grazing in the short term, it is proposed to use substantial parts of the site for these purposes once extraction has ceased. Buffer zones along the peripheral roads would assist in the retention of the rural qualities of the area when viewed from these public areas.

- (c) *To ensure that development is carried out in a manner that minimizes risk from natural hazards and does not unreasonably increase demand for public services and public facilities.*

The operation of the quarry is unlikely to result in any increase in the risk from natural hazards. While the area, in common with its surroundings, is susceptible to bush fires, it is unlikely that site operations would contribute to an increase in any risk. Substantial areas of the site are cleared and would therefore not be affected.

No additional facilities or services would be required as a result of the proposal. Total output from PF Formation's existing operations in Baulkham Hills Shire and the proposal would not exceed the approved rate of 200 laden truck movements per day off-site. The proposal would not therefore generate any need for improvements to the public road network in the area.

- (d) *To provide land on which development may be carried out that assists the operation and functioning of development in adjoining residential areas and appropriate locations for tourist facilities.*

The proposal would allow the continued supply of Tertiary Sand to the Sydney market for use in a wide range of development and infrastructure projects. The resource is recognized in Sydney Regional Environmental Plan 9 as regionally significant.

The proposed development is not a tourist facility. However, due to the prominent location of the site and its history, consideration would be given to the provision of a particular facility. Its nature and character will be determined in consultation with the local community. This is not part of the present application but would be considered once the development is further advanced.

- (e) *To protect and enhance those areas of particular scenic and environmental value.*

The proposed extraction area contains some native vegetation. The site supports a community of the threatened plant *Tetratheca glandulosa* and an area of the endangered ecological community, shale/sandstone transition forest. It would however be necessary to remove a number of small populations of the plant and the remnants of the transition forest which are located adjacent to the highest point on the site. Proposals for rehabilitation of the site include the collection and storage of an extensive seed base derived from the existing forest. This has been propagated to provide the basis for replanting as part of the rehabilitation program. The impact assessment concluded that the proposal would be unlikely to have an impact on the plant species or the recovery of the forest community.

The rural character of the area would be maintained by the provision of vegetated buffers along the boundary of the site and the inclusion of three metre high bunds at locations where views into the site would be possible. The bunds would also be vegetated.

The area of disturbance would be minimised by only clearing areas immediately prior to extraction and undertaking progressive rehabilitation using native seed derived from the adjacent bushland. Progress in rehabilitating the site is dependent on the rate at which the silt ponds fill and dry out.

These and other mitigation measures are discussed in more detail in **Chapters 4 and 5**.

- (f) *To ensure that development is designed and carried out having regard to the rural and heritage character of the surrounding land.*

The development would result in visual changes in the short term. However any impacts would be minimised by the implementation of mitigation measures such as visual bunding and extensive tree planting. The site would be rehabilitated in stages and returned to agricultural/horticultural uses consistent with the surrounding rural area.

- (g) *To ensure that development is designed and carried out having regard to adjoining land uses and the natural environment.*

All development on the site would comply with the requirements of Baulkham Hills Development Control Plan 16 including the provision of setbacks from all boundaries and the inclusion of visual management measures. Sand extraction inevitably leads to the removal of existing vegetation on the affected site. Progressive rehabilitation would recreate the vegetation communities using seed collected prior to the start of development. A range of mitigation measures would be implemented to protect other parts of the natural environment. These are described in **Chapters 2, 4 and 5**.

In light of this assessment, the proposal is generally consistent with the objectives of the Rural 1 (b) zone and is therefore permissible.

Clause 15 of LEP 2005 states that:

- (1) *A person must not carry out development on any land to which this plan applies unless arrangements satisfactory:*
- (a) *to Sydney Water Corporation for water, sewerage and drainage; and*
  - (b) *to Transgrid and/or Integral Energy for electricity; and*
  - (c) *to Telstra Corporation Limited and/or telecommunications carriers for telephone services; and*
  - (d) *to the Roads and Traffic Authority for classified roads in the Kellyville Rouse Hill Release Area;*

*have been made in relation to that land.*

The proposal would not require the provision of additional water, sewerage, electricity or telecommunication services and surface water would continue to be managed using the established and expanded drainage system.

Clause 21 relates to land subject to bushfire hazards and addresses the provisions of the *Rural Fires Act 1997*. The clause requires that Council must take into account whether:

- (a) *the development is likely to have an adverse effect on the implementation of any strategies for bushfire control and fuel management adopted by the Baulkham Hills Bushfire management Committee in accordance with the Rural Fires Act 1997;*
- (b) *access arrangements to and from the development will increase the hazard to residents, visitors and emergency services;*
- (c) *the increased demand for emergency services during bushfire events created by the development would lead to a decrease in the ability of the emergency services personnel to effectively control major bushfires; and*

- (d) the measures adopted to avoid or mitigate the threat of bushfire, including siting of the development, design of structures and materials used, clearing of vegetation, fuel free and fuel reduced areas and landscaping and fire control aids such as roads and water supplies are adequate for the locality or would result in unacceptable environmental impacts.*

Division 2 of LEP 2005 addresses the conservation of heritage items, relics and conservation areas of the local government area.

Extractive industries or industries directly associated with, or dependent on extractive industries are classified as advertised development in LEP 2005 and are permissible with development consent in the 1(b) zone. Clause 41 relates to advertised development and states that:

- (1) Pursuant to Section 29A of the Act, the provisions of Sections 79 and 79A of the Act apply to and in respect of development specified in the table to Clause 9 under the heading Advertised Development (wherever occurring) in the same way as those provisions apply to and in respect of designated development.*

As the proposal is for extractive industry, the Department of Planning is required to exhibit the development application for 30 days and written notification given to applicable residents under Sections 79 and 79(A) of the Environmental Planning and Assessment Act.

The socio-economic effects of the proposal are outlined in Section 4.16 and consultation with the community during the development of the proposal is summarised in Section 1.3. The proposal would not adversely affect the cultural or ecological diversity of the Shire or significantly affect any archaeological sites or native fauna species. It would result in the removal of a small area of listed native forest community. However, this would be replaced by a substantial area of similar habitat derived from seed collected over the last three years from the existing forest community. The quality of the surface water and groundwater resources of the site would be maintained by the expansion of the existing drainage and erosion and sediment control measures to those areas not so far subject to sand extraction. No works would be undertaken within 40 metres of any tributary of Little Cattai Creek.

The environmental assessment of the proposal was undertaken with reference to the Industrial Noise Policy (Environmental Protection Authority 2001) and the Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales (Environment Protection Authority 2001).

Clause 32 deals specifically with extractive industries.

### **32 Extractive industries**

- (1) Consent must not be granted to the carrying out of development for the purpose of extractive industries unless the consent authority has given consideration to the following:*
- (a) social, economic and environmental impacts of the proposed development and management of those impacts; and*
  - (b) the extent to which internationally and nationally recognized environmental standards may be implemented in carrying out the proposed development; and*

- (c) *the extent of community consultation about and involvement in all phases of the proposed development; and*
- (d) *the existence, nature and level of detail of sound technical parameters for carrying out the proposed development in an environmentally sensitive manner; and*
- (e) *the conservation of the biological and cultural diversity and quality of land within the Baulkham Hills local government area; and*
- (f) *the impact of the proposed development on the archaeological resources of the site; and*
- (g) *the impact on the cultural landscape, including any significant views and vistas to or from items of environmental heritage located in the vicinity of the proposed development; and*
- (h) *proposed program of remediation for the site, including the post extractive industry usage; and*
- (i) *the impact of the proposed development on surface water and groundwater resources; and*
- (j) *the impact of the proposed development on native vegetation (trees, shrubs and groundcover species) including threatened species; and*
- (k) *the impact of the proposed development on native fauna habitat; and*
- (l) *the provision of an adequate setback, no less than 40 metres from the top bank of a watercourse to the extraction operations.*

All these considerations, where relevant, are addressed in the EA. The section of the document where these and other pertinent issues are discussed is listed in **Appendix B**.

Clause 45 of LEP 2005 addresses the protection of riparian zones and states that:

*The Council shall not consent to the carrying out of development within 200 metres of a creek unless it is considered that such development will not have a detrimental impact on natural ecosystems, flora and fauna, water quality, natural drainage channels, visual amenity, flooding, soil erosion or topographical features.*

The large farm dam on Lot 2 DP555184 (not included in the application) is located at the top of the catchment of Little Cattai Creek. The creek itself commences at the discharge from the dam. The creek crosses Lot 214 DP752039 approximately 150 metres from the eastern edge of the proposed extraction area. The proposal would have no detrimental effect on the ecology or water quality of the creek or its visual amenity and topography of its riparian corridor.

Clause 51 of LEP 2005 relates to the environmental management and monitoring of development within the Rural 1(b) zone and states that:

*Council shall not consent to development within the Rural 1(a), 1(b), 1(c), 1(d) or 7(a) or 8(a) zones unless the Council is satisfied that the following issues are addressed:*

- (a) water quality;
- (b) soil erosion;
- (c) air quality;
- (d) noise;
- (e) salinity;
- (f) bushfire hazard;
- (g) flora and fauna; and
- (h) the continued monitoring of these issues.

The potential impacts of the proposal on the drainage and groundwater of the site are addressed in **Sections 4.5** and **4.7** of the EA and soil erosion, air quality, noise impacts, bushfire hazards and ecology are discussed in **Sections 4.6, 4.9, 4.8, 4.14** and **4.10** respectively. The mitigation measures and environmental monitoring proposed for the site are outlined in **Chapter 5**.

Clause 59 of LEP 2005 relates to the clearing of bushland and states that:

*Despite any other provisions in this plan, the clearing of bushland in the Rural 1(a), 1(b), 1(c), 1(d) or 7(a) and 8(a) zones requires the consent of Council unless a land owner has been directed by Bushfire and Emergency Services to carry out bushfire hazard reduction works.*

The development would take place predominantly on cleared land or on areas used for orchards. An area of listed native forest would be removed. This is not expected to significantly affect the survival of this community and substantial parts of the site would be revegetated with seed from the existing remnant.

### **3.4 Baulkham Hills Shire Council development control plans**

#### **3.4.1 Development Control Plan 1 – Rural Land**

*Development Control Plan 1 – Rural Land* applies to land zoned Rural 1(a), 1(b) and 1(c) under Baulkham Hills Local Environmental Plan 1991. Its aim is to ensure that development in rural areas is sympathetic and is undertaken taking account of appropriate environmental considerations.

The objectives of the Development Control Plan are to:

- provide guidelines for the development of rural areas;
- ensure that development in rural areas has regard to the agricultural and environmental quality of the land; and
- accommodate development which is compatible with the rural environment, does not unreasonably increase the demand for services and minimizes risks from natural hazards.

Development Control Plan 1 provides development objectives and standards for development sites, dwellings, dual occupancies, setbacks to roads, development near the Hawkesbury River, rural industries, tourist facilities, reception establishments, restaurants and developer contributions.

Development standards relevant to the proposal are:

- the site must have a minimum area of 10 hectares and a road frontage of 60 metres; and
- a minimum building setback of 30 metres from Old Northern Road must be provided.

The proposal complies with these development standards.

### **3.4.2 Development Control Plan 16 – Extractive Industries**

*Development Control Plan 16 – Extractive Industries* has been designed to assist applicants in the preparation, assessment and determination of extractive industry proposals.

The objectives of the Development Control Plan are to:

- consider the social, economic and environmental issues in the assessment and management of extractive industries;
- implement the objectives of international and nationally recognized environmental standards;
- encourage community participation in all phases of extractive industry development;
- provide sound technical parameters to facilitate the orderly development of extractive resources within environmentally sensitive regions;
- conserve the biological and cultural diversity and quality of Baulkham Hills Shire; and
- implement the requirements of the *Environmental Planning and Assessment Act 1979* and other relevant environmental statutes.

The Development Control Plan also provides objectives, performance criteria and prescriptive measures for various environmental issues. Performance criteria and/or prescriptive measures relevant to the proposal are listed in **Table 3.1** together with comments regarding the proposal in response to these measures.

## **3.5 Regional environmental plans**

### **3.5.1 Sydney Regional Environmental Plan 9 – Extractive Industry**

*Sydney Regional Environmental Plan 9 – Extractive Industry (Number 2) 1994* was introduced to help develop extractive resources located close to the Sydney metropolitan area so that the cost of supplying materials to the community could be kept to a reasonable level. The plan takes precedence over local planning instruments.

**Table 3.1 Relevant performance criteria and other requirements of Development Control Plan 16 - Extractive Industries**

Element	Performance criterion or prescriptive measure	Comments
Community Participation	<p>Community consultation should be undertaken in the preparation, assessment and management of extractive industries.</p> <p>Proponents are encouraged to promote a better understanding of the links with local cultural history and diversity; natural features and biodiversity; local economies and local views, values and aspirations.</p>	<p>A community meeting was held in December 2002 to provide information about the proposal and seek to identify those issues of concern. Ongoing consultation forms part of the existing operation including the provision of information in local newspapers and on the PF Formation web site. The existing telephone complaint line will continue to operate.</p> <p>In addition, two meetings are held each year with the Liaison and Review Committee relating to the operation of the site. The committee is made up of community members, Council, Department of Environment and Climate Change and Department of Natural Resources representatives and any others considered to be appropriate by Council. These meetings address issues raised in relation to current operations and those needing to be addressed as part of the current proposal.</p> <p>Articles on the web site include the reporting of monitoring results and a discussion of sand mining issues.</p>
Setbacks	<p>Extraction should be set back no less than:</p> <ul style="list-style-type: none"> <li>• 10 metres from adjoining property boundaries;</li> <li>• 30 metres from a public road;</li> <li>• 40 metres from the top bank of a watercourse or otherwise to the requirements of the Department of Water and Energy;</li> <li>• 100 metres from a public or community facility; and</li> <li>• 100 metres from a residence not associated with extraction</li> </ul>	<p>The proposed development complies with these setback provisions.</p> <p>If adjacent lots, not part of the same development, both accommodate approved sand extraction operations, set backs would not be required along the common boundary following landowner agreement. This has been approved at other locations in the Maroota area in order to achieve a more natural final ground profile.</p>

**Table 3.1 Relevant performance criteria and other requirements of Development Control Plan 16 – Extractive Industries (continued)**

<b>Element</b>	<b>Performance criterion or prescriptive measure</b>	<b>Comments</b>
Transport	<p>Internal access roads should be:</p> <ul style="list-style-type: none"> <li>• no less than 20 metres wide;</li> <li>• have a setback of at least 10 metres from adjoining property boundaries;</li> <li>• have a setback of at least 50 metres from environmentally sensitive areas, including habitats of threatened species; and</li> <li>• have a setback of 100 metres from residences not associated with extraction.</li> </ul>	<p>The proposal would rely on the existing haul roads which comply with these requirements.</p>
Water Resources	<p>A water management strategy should be prepared and submitted.</p> <p>Extraction should not occur within 2 metres of the wet weather high groundwater level or otherwise to the requirements of the Department of Land and Water Conservation.</p>	<p>The surface water management strategy is contained in <b>Section 2.5</b>.</p> <p>Extraction will not occur within 2 metres of the wet weather high groundwater level. Groundwater levels and quality will be regularly monitored and the results reported.</p>
Visual Amenity and Scenic Quality	<p>A landscape site analysis must be submitted that identifies and assesses the scenic qualities, landscape constraints and options for landscape protection of the extraction site.</p> <p>Visual pollution should be minimised through appropriate setbacks, perimeter screen planting and other measures.</p> <p>Extraction sites should be rehabilitated to a final landform compatible with the shape, grade, level, form, land use, landscape quality and biodiversity of the surrounding terrain.</p>	<p>A visual assessment of the site satisfying these requirements is provided in <b>Section 4.12</b> and <b>Technical Paper 8</b>.</p> <p>Various measures will minimise the visual impact of the proposal including the maintenance of vegetated buffers along the boundaries of the site.</p> <p>A rehabilitation and revegetation strategy is in the process of implementation for the existing development and the principles of this strategy will be applied to the proposed development amended as appropriate.</p>

**Table 3.1 Relevant performance criteria and other requirements of Development Control Plan 16 – Extractive Industries (continued)**

<b>Element</b>	<b>Performance criterion or prescriptive measure</b>	<b>Comments</b>
Flora and Fauna	<p>A flora and fauna assessment should be undertaken including seven part tests and a Species Impact Statement where required.</p> <p>Extraction operations should provide a buffer zone of at least 50 metres from the critical habitat of threatened species, populations and ecological communities.</p>	<p>A flora and fauna assessment has been undertaken and is documented in <b>Section 4.9</b> and <b>Technical Paper 6</b>.</p> <p>No areas of critical habitat have been identified on the site subject to the application.</p>
Heritage and Archaeological Resources	<p>An archaeological study should be submitted which includes an assessment of the scientific, educational, landscape and cultural values of all Aboriginal and non-Aboriginal sites.</p> <p>Extraction should not occur within 40 metres of rock engravings, axe grinding grooves, open scatters of artifacts, stone arrangements, waterhole/well and/or scarred trees, archaeological sites protected under the <i>National Parks and Wildlife Act 1974</i> and listed in the Aboriginal Sites Register and any other requirements of the National Parks and Wildlife Service.</p>	<p>An archaeological study is documented in <b>Section 4.10</b> and <b>Technical Paper 7</b>.</p> <p>No Aboriginal archaeological sites or areas of potential archaeological deposit were identified.</p>
Soil Conservation	<p>A sediment and erosion control plan should be submitted.</p>	<p>Sediment and erosion control measures are discussed in <b>Section 2.7</b>.</p>
Acoustic Management	<p>An acoustic impact assessment report must be submitted which identifies and assesses the range of noise levels within the locality and the impacts likely to be generated by the proposal.</p>	<p>An acoustic assessment is provided in <b>Section 4.7</b> and <b>Technical Paper 4</b>.</p>

**Table 3.1 Relevant performance criteria and other requirements of Development Control Plan 16 – Extractive Industry (continued)**

<b>Element</b>	<b>Performance criterion or prescriptive measure</b>	<b>Comments</b>
Air Quality Management	An air quality assessment report should be submitted.	An air quality assessment report is documented in <b>Section 4.8</b> and <b>Technical Paper 5</b> .
Extraction Program	An extraction program should be submitted.	The proposed extraction plan is located in <b>Section 2.4</b> .
Rehabilitation	A rehabilitation strategy should be submitted.	The principles of the present rehabilitation and revegetation strategy will be applied to the proposed development amended as appropriate.
Social and Economic Assessment	An economic appraisal report and social impact assessment should be submitted.	A socio-economic profile of the area is provided in <b>Section 4.15</b> together with a discussion of the costs and benefits of the proposal.
Ecologically Sustainable Development	An ecologically sustainable development summary report should be submitted.	The manner in which the proposal would comply with the principles of ecologically sustainable development is described in <b>Section 4.16</b> .
Post-Extraction Land Use	The extraction site should be rehabilitated to a useable and stable final landform that can support a variety of agricultural or other permissible land uses. A farm management plan should be submitted for agricultural post-extraction land uses.	The rehabilitation and revegetation strategy for the site of the proposal and details of final land uses are provided in <b>Section 2.8</b> .

**Table 3.1 Relevant performance criteria and other requirements of Development Control Plan 16 – Extractive Industries (continued)**

Element	Performance criterion or prescriptive measure	Comments
Maroota	<p>Extractive industry set backs specific to the Maroota area are:</p> <ul style="list-style-type: none"> <li>• 40 metres from Maroota State Forest;</li> <li>• 50 metres from known critical habitats of the Yellow Bellied Glider, <i>Kunzea rupestris</i> and <i>Tetratheca glandulosa</i>, other threatened species, populations and ecological communities; and</li> <li>• 250 metres from Maroota Public School.</li> </ul>	<p>The provisions of Development Control Plan 16 have been addressed throughout the EA and are summarized in this table. The proposal complies with these setback requirements. There is no critical habitat on the site subject to the application.</p>
Section 94 Contributions	<p>Section 94 contributions may be required.</p>	<p>Section 94 contributions will be made as required.</p>
Environmental Management Systems	<p>An annual environmental management plan should be submitted to indicate the overall performance and management of the operation, to include an acoustic management plan, a rehabilitation management plan, a water management plan and a social impact management plan.</p>	<p>An environmental management system is in place for the existing development on the site. This requires annual reporting of the overall performance and management of the operation. This would be continued following review and updating to take account of any changes.</p>

The relevant aims of Sydney Regional Environmental Plan 9, as they apply to the proposal are:

- to facilitate the development of extractive resources in proximity to the population of the Sydney metropolitan area by identifying land which contains extractive material of regional significance;
- to permit, with the consent of the council, development for the purpose of extractive industries on land described in Schedules 1 or 2;
- to ensure consideration is given to the impact of encroaching development on the ability of extractive industries to realize their full potential; and
- to promote the carrying out of development for the purpose of extractive industry in an environmentally acceptable manner.

Clause 8 of *Sydney Regional Environmental Plan 9* requires Council to forward a copy of the development application to the Director-General of the Department of Mineral Resources with respect to land identified in Schedule 2 of the plan. The land, which is the subject of the present application, is listed in Schedule 2 and this clause therefore applies to the proposal.

Under Part 3A of the *Environmental Planning and Assessment Act 1979*, the Department of Planning is responsible for ensuring that all other relevant authorities are consulted and this and other requirements of Sydney Regional Environmental Plan 9 are satisfied.

Clause 9 of *Sydney Regional Environmental Plan 9* requires Council to consider planning recommendations for future resource extraction presented in the Extractive Industry Planning Report when considering development applications for extraction. The Planning Report states that in order to achieve the objective of environmental acceptability, Council should require that:

- noise and vibration levels are in accordance with Department of Environment and Conservation guidelines;
- a rehabilitation plan is prepared;
- rehabilitation measures are carried out in accordance with the guidelines in the *Urban Erosion and Sediment Control Handbook* (Department of Conservation and Land Management 1992); and
- the impacts on groundwater and/or watercourses are assessed.

These requirements are also stipulated in Clause 7 of *Sydney Regional Environmental Plan 9*.

A noise assessment, preliminary rehabilitation and revegetation strategy, surface and groundwater impact assessment have been completed as part of the EA in accordance with these guidelines and requirements.

Clause 11 of *Sydney Regional Environmental Plan 9* sets out details of special requirements for extractive industry at Maroota. Clause 11(2) is reproduced in the following section in italics followed by comments regarding the current proposal.

*The council must not grant consent to the carrying out of development for the purpose of extractive industry on land to which this clause applies unless the council is satisfied that the proposed development:*

- (a) *is unlikely to have a significant adverse impact on the Maroota groundwater resource or on other groundwater users in the region;*

The proposal is unlikely to have a significant impact on the Maroota groundwater resource or on local groundwater users as discussed in **Section 4.4** and described in the groundwater assessment report included in **Technical Paper 2**. Extraction would not occur below two metres above the wet weather groundwater level and groundwater levels and quality would be regularly monitored.

- (b) *will conserve the environmentally sensitive and significant areas and features of the Maroota locality including the environment of threatened species, populations and ecological communities;*

The proposal would protect adjoining bushland by maintaining buffer zones, employing appropriate erosion and sediment controls and removing weeds. It would however result in the removal of a remnant of shale sandstone transitional forest, a protected ecological community, from the highest point on the site. This is in poor condition and has been badly affected by the recent (December 2002) bush fires. Seed has been collected from this community and this will provide the basis for large scale revegetation of the site as part of the rehabilitation strategy. This is discussed in detail in **Section 4.9** and **Technical Paper 6**.

- (c) *will involve controlled and limited access points to main roads;*

Sand extracted from the site would be transported by articulated vehicles along the existing haul roads on the site to the slurry plant located at its northern end. Here the sand is mixed with water and would be transported via the existing pipeline to the central wash plant on Lot 198 for processing and stockpiling. All product would be sent to market via the existing intersection on Wisemans Ferry Road. No new access points are proposed.

- (d) *will result in a final landform capable of supporting agricultural production or other post-extraction land uses compatible with the established character and landscape and natural quality of the Maroota locality.*

The final land uses would be similar to that existing prior to sand extraction. These would include orchards, horticulture, pasture and native vegetation.

### **3.5.2 Sydney Regional Environmental Plan 20 – Hawkesbury-Nepean River**

*Sydney Regional Environmental Plan 20 – Hawkesbury-Nepean River (Number 2) (1997)* applies to the proposal and aims:

*to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context.*

Sydney Regional Environmental Plan 20 contains general planning considerations, specific planning policies and recommended strategies that apply to development proposals. Those specific planning strategies that are applicable to the proposal are set out in italics in the following section. Comments are provided in relation to the proposal as appropriate.

*Total catchment management:*

- (b) consider the impact of the development concerned on the catchment; and*
- (c) consider the cumulative environmental impact of development proposals on the catchment.*

There are numerous sand extraction operations in the Maroota area and several studies have included investigations of their impacts. Cumulative impacts of traffic movement, noise, air quality and effects on flora and fauna are assessed in **Chapter 4**.

*Environmentally sensitive areas:*

- (b) minimise adverse impacts on water quality, aquatic habitats, riverine vegetation and bank stability;*
- (d) protect wetlands (including upland wetlands) from future development and from the impacts of land use within their catchments; and*
- (g) consideration should be given to the impact of the development concerned on the water table and the formation of acid sulphate soils.*

The Hawkesbury River is 4.5 kilometres to the north west of the site.

Erosion, sediment and stormwater controls described in **Sections 2.5 to 2.7** would include the maintenance of buffers, staged extraction and site rehabilitation, the diversion of clean runoff away from disturbed areas and the diversion of dirty runoff into sediment basins and catch ponds.

*Water Quality*

- (a) quantify and assess the likely impact of any predicted increase in pollutant loads on receiving waters; and*
- (f) consider the need for an Erosion and Sediment Control Plan (to be in place at the commencement of development) where the development concerned involves the disturbance of soil.*

An assessment of the impact of the proposed development on the quality of receiving waters is contained in **Section 4.4** and **Technical Paper 2** in Volume Two.

*Water Quantity*

- (b) ensure that the amount of stormwater runoff from a site and the rate at which it leaves the site does not significantly increase as a result of development. Encourage on-site stormwater retention, infiltration and (if appropriate) reuse; and*
- (d) consider the impact of development on the level and quality of the water table.*

All surface runoff from the site would be directed to a series of sedimentation basins and ultimately to a clean water storage dam from where it would be recycled for use in the sand/slurry transport system.

Extraction would not occur below two metres above the wet weather groundwater level. Groundwater levels and quality would be regularly monitored and the results reported.

### *Cultural Heritage*

- (b) *protect Aboriginal sites and places of significance; and*
- (c) *consider an Aboriginal site survey where predictive models or current knowledge indicate the potential for Aboriginal sites and the development concerned would involve significant site disturbance.*

An archaeological study of the site has been carried out and is documented in Technical Paper 7.

### *Flora and fauna*

- (a) *conserve and, where appropriate, enhance flora and fauna communities, particularly threatened species, populations and ecological communities, aquatic habitats, wetland flora, rare flora and fauna, riverine flora, fauna and heritage values, habitats for indigenous and migratory species of fauna and existing or potential fauna corridors;*
- (c) *minimise adverse environmental impacts, protect existing habitat and, where appropriate, restore habitat values by use of management practices;*
- (e) *consider the range of flora and fauna inhabiting the site of the development concerned and the surrounding land, including threatened species and migratory species, and the impact of the proposal on the survival of threatened species, populations and ecological communities, both in the short and long term;*
- (f) *consider the need to provide and manage buffers, adequate fire radiation zones and building setbacks from significant flora and fauna habitat areas; and*
- (g) *consider the need to control access to flora and fauna habitat areas.*

The site supports the threatened plant *Tetratheca glandulosa* and the endangered ecological community, Shale Sandstone Transitional Forest. A number of small populations of the plant and remnants of the transitional forest would need to be removed. Seeds have been collected from the forest community and these will provide the basis for the revegetation program. The impact assessment concluded that the proposal would be unlikely to have an impact on the plant species or the recovery of the forest community.

## **3.6 State environmental planning policies**

### **3.6.1 State Environmental Planning Policy 11 – Traffic Generating Developments**

*State Environmental planning Policy 11 – Traffic Generating Developments* which applies to extractive industries requires that the Roads and Traffic Authority is made aware of the proposal and is given the opportunity to make representations concerning it.

### **3.6.2 State Environmental Planning Policy 33 – Hazardous and Offensive Development**

*State Environmental Planning Policy 33 – Hazardous and Offensive Development* ensures that proposals are assessed in relation to potential off-site risk and offence. Two of the aims of the policy are:

- (d) *to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account; and*
- (e) *to ensure that in considering any applications to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact.*

In order to determine whether a development is a hazardous, offensive or potentially hazardous or offensive industry, Clause 8 of the policy refers to *Hazardous and Offensive Development Application Guidelines* (Department of Urban Affairs and Planning 1996). On the basis of these guidelines the proposal is likely to be considered to be a potentially offensive industry because it requires an Environmental Protection Licence from the Environment Protection Authority.

A potentially offensive industry is defined in the policy as:

*a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including, for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment.*

The guidelines stipulate that:

*a key consideration in the assessment of a potentially offensive industry is that the consent authority is satisfied that there are adequate safeguards to ensure (that) emissions from a facility can be controlled to a level at which they are not significant. An important factor in making this judgement is the view of the Environment Protection Authority (for those proposals requiring a pollution control licence under Environment protection Authority legislation). If the Environment Protection Authority considers that its licence requirements can be met, then the proposal is not likely to be an offensive industry.*

A preliminary hazard assessment is required for a potentially hazardous industry. This is reported in **Section 4.13**. This assessment and the findings of the technical studies included in the EA regarding noise, flora and fauna, air quality, archaeology, surface water and groundwater demonstrate that the proposal would not have a significant impact on the environment as a result of the mitigation measures that would be employed.

### **3.6.3 State Environmental Planning Policy 44 – Koala Habitat Protection**

*State Environmental Planning Policy 44 – Koala Habitat Protection* relates to the conservation of food trees specific to Koala habitat. There is no potential Koala habitat on the Hitchcock Road site and the policy does not therefore apply

### **3.6.4 State Environmental Planning Policy 55 – Remediation of Land**

*State Environmental Planning Policy 55 – Remediation of Land* relates to the remediation of contaminated land. This plan does not apply to the Hitchcock Road site as no areas within the project site are known to be contaminated

### 3.7 Other approval requirements

Section 75U of the *Environmental Planning and Assessment Act 1979* specifies certain approvals that are not required for an approved project under Part 3A. Section 75A defines an approved project as a project to the extent that it is approved by the Minister under this Part, but does not include a project for which only approval for a concept plan has been given. Consequently, if the Minister grants approval to carry out the project (or part of it) under s75J(1) of Part 3A, the following would not be required:

- permit under Section 201, 205 or 219 of the *Fisheries Management Act 1994*;
- approval under Part 4 or an excavation permit under Section 139 of the *Heritage Act 1977*;
- permit under Section 87 or a consent under Section 90 of the *National Parks and Wildlife Act 1974*;
- permit under Part 3A of the *Rivers and Foreshores Improvement Act 1948*; and
- water use approval under Section 89, water management work approval under Section 90 or an activity approval under section 91 of the *Water Management Act 2000*.

In addition, under s75V(1), the following authorisations cannot be refused if necessary for an approved project and are to be substantially consistent with an approval to carry out the project given under Part 3A:

- environment protection licence under Chapter 3 of the *Protection of the Environment Operations Act 1997*; and
- consent under s138 of the *Roads Act 1993*.

No authorisation under Section 12 of the *Native Vegetation Act 2003* would be required as this Act does not cover urban areas listed in Part 3 of Schedule 1 of the Act, which includes south western Sydney. Similarly, a bush fire safety authority would not be required under Section 100B of the *Rural Fires Act 1997* as the proposal does not meet the definition of development requiring authorisation under the Act.

### 3.8 Commonwealth legislation

The *Environment Protection and Biodiversity Conservation Act 1999* specifies that (subject to some exceptions) an approval from the Commonwealth Minister for the Environment and Heritage is required to undertake controlled actions that include an action on any land that is likely to have a significant impact on a matter of national environmental significance. Items of national environmental significance include particular threatened species.

One ecological community (Shale Sandstone Transition Forest), two plant species (*Tetratheca glandulosa* and *Grevillea parviflora*) and one fauna species (Large-eared pied bat), listed as vulnerable under the Environment Protection and Biodiversity Conservation Act, were identified on the site. The impacts of the proposal on these species are discussed in **Section 4.9** and **Technical Paper 6**.

As the community and the species are located on, or use the site, a referral under the EPBC Act 1999 was submitted to Environment Australia in March 2003. In a letter dated 18 July 2003, the Minister determined that approval under the Act was required (EPBC Reference 2003/991) and that an accredited assessment process should be conducted. This would be an Environmental Impact Assessment under Part 4 of the EP&A Act 1979.

The applicability of the provisions of Part 3A of the EP&A Act was confirmed by the Department of the Environment and Heritage in a letter dated 10 April 2006. This means that even though the proposal requires Commonwealth approval, the assessment will be generally undertaken in accordance with the relevant provisions of Part 3A of the Act.