Sutton Forest Sand Quarry Report No. 864/07

# Appendix 2

## Coverage of Director-General's Requirements and Additional Matters for Consideration in the EIS

(Total No. of pages including blank pages = 26)

#### SUTTON FOREST QUARRIES PTY LTD

#### **ENVIRONMENTAL IMPACT STATEMENT**

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Appendix 2

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### Table A2.1 Coverage of Director-General's Requirements in the EIS

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	Palevant FIS
Paraphrased Requirement	Relevant EIS Section(s)
GENERAL REQUIREMENTS	
The Environmental Impact Statement (EIS) for the development must meet the content requirements in Clauses 6 and 7 of Schedule 2 of the <i>Environmental and Assessment Regulation 2000.</i>	
In addition, the EIS must include a:	
detailed description of the development, including:	
- need for the proposed development;	7.3.5
- alternatives considered;	2.15
<ul> <li>likely components and staging of the development - including construct operational stage/s and rehabilitation; and</li> </ul>	tion, Section 2
- plans of any proposed building works.	Section 2
<ul> <li>consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments</li> </ul>	
<ul> <li>risk assessment of the potential environmental impacts of the developmen identifying the key issues for further assessment.</li> </ul>	nt, 3.4 Appendix 4
<ul> <li>detailed assessment of the key issues specified below, and any other sign issues identified in this risk assessment, which includes:</li> </ul>	various parts
- a description of the existing environment, using sufficient baseline data	of Section 5
<ul> <li>an assessment of the potential impacts of all stages of the developmer including any cumulative impacts, taking into consideration relevant gu policies, plans and statutes;</li> </ul>	
<ul> <li>a description of the measures that would be implemented to avoid, mir if necessary, offset the potential impacts of the development, including for adaptive management and/or contingency plans to manage any sig risks to the environment; and</li> </ul>	proposals
<ul> <li>a statement of commitments, outlining all the proposed environmental management and monitoring measures included in the EIS.</li> </ul>	Section 6
The EIS must be accompanied by a report from a qualified quantity survey providing:	/or
<ul> <li>a detailed calculation of the capital investment value (CIV) (as defined of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all the assumptions and components from CIV calculation is derived;</li> </ul>	e Summary
<ul> <li>a close estimate of the jobs that will be created by the development du construction and operational phases of the development; and</li> </ul>	ring the 2.12.1
- certification that the information provided is accurate at the date of prepared	paration. Page iii



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### Table A2.1 (Cont'd) Coverage of Director-General's Requirements in the EIS

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Paraphrased Requirement	Relevant EIS Section(s)
KEY ISSUES	
SOIL AND WATER	
The EIS must address the following specific issues:	
Land Resources - including a detailed assessment of the potential impacts on:	
soils and land capability (including land contamination);	5.10
landforms and topography;	4.1, 5.11
land use, including conservation and recreational use; and	4.5, 5.12
agricultural resources and/or enterprises in the local area, including:	2.13
- any change in land-use arising from requirements for biodiversity offsets; and	
<ul> <li>a detailed description of the measures that would be implemented to avoid and/or minimise the potential impacts of the project on agricultural resources and/or enterprises</li> </ul>	5.12.4
Water Resources including –	
<ul> <li>detailed assessment of potential impacts on the quality and quantity of existing surface and ground water resources, including the impacts on:</li> </ul>	
<ul> <li>existing user entitlements, affected licensed water users and basic landholder rights;</li> </ul>	5.2.8, 5.3.4
- groundwater-dependent and riparian ecology; and	5.2.3, 5.5.6.4
- regional water supply infrastructure.	5.2.6
<ul> <li>a detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume and frequency of any water discharges), water supply infrastructure and water storage structures;</li> </ul>	5.3.3
a detailed consideration of maintenance of an adequate buffer between all excavations and the highest predicted groundwater table;	2.15.4
<ul> <li>identification of any licensing requirements or other approvals under the Water Act 1912 and/or Water Management Act 2000;</li> </ul>	2.1.3
<ul> <li>demonstration that water for the construction and operation of the development can be obtained from an appropriately authorised and reliable supply in accordance with the operating rules of any relevant Water Sharing Plan (WSP) or water source embargo; and</li> </ul>	5.2.7, 5.3.3
<ul> <li>a detailed description of the proposed water management system, water monitoring program and other measures to mitigate surface and groundwater impacts;</li> </ul>	5.2.9, 5.3.3, 5.3.5
BIODIVERSITY	
The EIS must include:	
measures taken to avoid, reduce or mitigate impacts on biodiversity;	5.5.5, 5.6.5
accurate estimates of proposed vegetation clearing;	5.5.6
a detailed assessment of potential impacts of the development on any:	
<ul> <li>terrestrial or aquatic threatened species or populations and their habitats, endangered ecological communities and groundwater dependent ecosystems, paying particular attention to the indirect impacts on the threatened ecological communities and threatened flora associated with Long Swamp; and</li> </ul>	5.6.3, 5.5.2, 5.5.4
<ul> <li>regionally significant remnant vegetation, or vegetation corridors, with particular consideration to the Illawarra Regional Environmental Plan No 1;</li> </ul>	5.5.6.3

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### Table A2.1 (Cont'd) Coverage of Director-General's Requirements in the EIS

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Paraphrased Requirement	Relevant EIS Section(s)			
KEY ISSUES (Cont'd)				
BIODIVERSITY (Cont'd)				
a comprehensive offset strategy to ensure the development maintains or improves biodiversity values in the medium to long term;	2.14			
HERITAGE				
The EIS must include:				
an Aboriginal cultural heritage assessment (including both cultural and archaeological significance) which must:				
<ul> <li>demonstrate effective consultation with Aboriginal communities in determining and assessing impacts, and developing and selecting mitigation options and measures; and</li> </ul>	5.7.2			
<ul> <li>outline any proposed impact mitigation and management measures (including a evaluation of the effectiveness and reliability of the measures).</li> </ul>	an 5.7.5			
A Historic heritage assessment (including archaeology) which must:				
<ul> <li>include a statement of heritage impact (including significance assessment) for any State significant or locally significant historic heritage items; and</li> </ul>	5.8.5			
<ul> <li>outline any proposed mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures).</li> </ul>	5.8.5			
TRAFFIC AND TRANSPORT				
The EIS must include:	2.8, 5.1.7			
accurate predictions of project-related traffic and a detailed assessment of the potential impacts of project-related traffic on the capacity, safety and efficiency of road networks, including modelling to predict queue lengths and intersection performance; and				
<ul> <li>a detailed description of the measures that would be implemented to upgrade and/or maintain the capacity, efficiency and safety of effected roads and intersections ove the life of the project, including concept plans for any proposed works;</li> </ul>				
AIR QUALITY				
The EIS must include a quantitative assessment of the potential:	5.9.7			
construction and operational impacts;				
reasonable and feasible mitigation measures to minimise dust emissions; and	5.9.6			
monitoring and management measures.	5.9.6			
NOISE				
The EIS must include and quantitative assessment of the potential:				
construction, operational and transport noise impacts;	5.4.7			
off-site road noise impact;	5.4.7.3			
reasonable and feasible mitigation measures, including evidence that there are no such measures available other than those proposed; and	5.4.5			
monitoring and management measures.	5.4.5, 5.4.8			



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#### Appendix 2

### Table A2.1 (Cont'd) Coverage of Director-General's Requirements in the EIS

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Paraphrased Requirement	Relevant EIS Section(s)			
KEY ISSUES (Cont'd)				
VISUAL				
The EIS must include:	5.11.3			
a detailed assessment of the:				
- changing landforms on the site during the various stages of the project;				
<ul> <li>potential visual impacts of the development on private landowners in the surrounding area as well as key vantage points in the public domain, and</li> </ul>	5.11.5			
a detailed description of the measures that would be implemented to minimise the visual impacts of the development.	5.11.4			
WASTE				
The EIS must include:				
accurate estimates of the quantity and nature of the potential waste streams of the development, including waste fines from processing; and	2.11			
a description of measures that would be implemented to minimise production of other waste, and ensure that that waste is appropriately managed.	2.11			
GREENHOUSE GASES				
The EIS must include:	5.9.7.6			
• a quantitative assessment of potential Scope 1, 2 and 3 greenhouse gas emissions;				
a qualitative assessment of the potential impacts of these emissions on the environment; and				
an assessment of reasonable and feasible measures to minimise greenhouse gas emissions and ensure energy efficiency.				
HAZARDS				
The EIS must address potential hazards paying particular attention to public safety and bushfires	5.13			
SOCIAL & ECONOMIC				
The EIS must include	5.14			
potential impacts on local and regional communities, including impacts on social amenity;				
a detailed description of the measures that would be implemented to minimise the adverse social and economic impacts of the project, including any infrastructure improvements, or contributions and/or voluntary planning agreement or similar mechanism; and	5.14.5			
a detailed assessment of the costs and benefits of the development as a whole, and whether it would result in a net benefit for the NSW community.	5.14.6			
REHABILITATION				
The EIS must include the proposed rehabilitation strategy for the site having regard to the key principles in the Strategic Framework for Mine Closure, including:				
rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria;	2.13			
nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; and	2.13.5			
the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region.	2.14			

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### Table A2.1 (Cont'd) Coverage of Director-General's Requirements in the EIS

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Pa	raphrased Requirement	Relevant EIS Section(s)
	KEY ISSUES (Cont'd)	
	PLANS AND DOCUMENTS	
•	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. These documents should be included as part of the EIS rather than as separate documents.	Noted
	CONSULTATION	
Co	ring the preparation of the EIS, you must consult with relevant local, State and mmonwealth Government authorities, service providers, community groups and ected landowners.	Section 3
In	particular you must consult with the:	
•	Commonwealth Department of the Environment;	
•	Office of Environment and Heritage (including the Heritage Branch);	
•	Environment Protection Authority;	
•	Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services;	
•	Department of Primary Industries (including the NSW Office of Water, NSW Forestry, Agriculture and Fisheries sections, Catchments and Lands (Crown Lands Division));	
•	NSW Health;	
•	Transport for NSW (including the Centre for Transport Planning, Roads and Maritime Services);	
•	South East Local Land Services; and	
•	Wingecarribee Shire Council.	
Th	e EIS must:	3.2
•	describe the consultation process used and demonstrate that effective consultation has occurred;	
•	describe the issues raised by public authorities, service providers, community groups and landowners;	3.2
•	identify where the design of the development has been amended in response to issues raised; and	3.2
•	otherwise demonstrate that issues raised have been appropriately addressed in the assessment.	3.2 and throughout Section 5



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Table A2.2 Coverage of Additional Matters Identified for Consideration in the EIS

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	GENERAL	
EPA (21/01/14)	Provide details on the location of the proposed development including the affected environment.	1.3.2
	Describe the Proposal in its local and regional environmental context including surrounding land uses, planning zonings and potential sensitive receptors	Section 4
	Describe mitigation and management options that will be used to prevent, control, abate or mitigate identified environmental impacts (including any cumulative impacts) and risks to human health.	Throughout Section 5 and Section 6
	Include an assessment of the effectiveness and reliability of management techniques, and any residual impacts after these measures are implemented.	Throughout Section 5
	Discuss and document opportunities to resolve future land use conflicts which may arise.	4.5.2
	LAND AND RESOURCES	
DTIRIS - R&E (07/02/14)	Document the size and quality of the resource and demonstrate that both have been adequately assessed including the methods used and the adequacy of the methods for the intended applications.	2.2
	If describing only the additional resource to be used, a summary of the past resource assessments and past production should accompany the description.	NA
	Indicate intention to provide annual production data to DTIRIS – Mineral Resources Branch.	1.5.2
	The EIS should include:	
	A summary of the regional and local geology including information on the stratigraphic unit or units within which the resource is located.	2.2
	The amount of material to be extracted and the method or methods used to determine the size of the resource (e.g. drilling, trenching, geophysical methods). Plans and cross-sections summarising this data, at a standard scale, showing location of drillholes and/or trenches, and the area proposed for extraction. Relevant supporting documentation such as drill logs should be included or appended.	2.2
	Characteristics of the material or materials to be produced:	4.2.2
	<ul> <li>For sand extraction proposals, properties such as composition, grainsize, grading, clay content and contaminants should be indicated. The inclusion of indicative grading curves for all anticipated products as well as the overall deposit is recommended.</li> </ul>	
	<ul> <li>Details of tests carried out to determine the characteristics of the material should be included or appended.</li> </ul>	4.2.2
	An assessment of the quality of the material and its suitability for the anticipated range of applications should be given.	4.2.2
	Include details of:	
	- the amount of material anticipated to be produced annually;	2.5.6, 2.6.3
	- the staging sequence, if applicable; and	2.5.4
	- the intended life of the operation.	2.10.2

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	LAND AND RESOURCES (Cont'd)	
DTIRIS – R&E (07/02/14)	An assessment of alternative sources to the proposal and the availability of these sources. The impact of not proceeding with the proposal should be addressed.	7.3.5
(Cont'd)	Justification for the proposal in terms of the local and, if appropriate, the regional context.	7.3
	Information on the location and size of markets to be supplied from the site.	1.4
	Disposal of waste products and the location and size of stockpiles.	2.11, 2.3
	Ensure assessment of agricultural issues is consistent with the Departments' Guideline: Agricultural Issues for Extractive Industries	5.12
DPI – Agriculture NSW (06/02/14)	Identify potential impacts on rural enterprises and landholders, assess relative risks and consider the possible cumulative effects.	5.12
DPI - Forestry Corporation NSW (06/02/14)	Advice should be sought from the Forestry Corporation NSW regarding state forest in vicinity of project.	3.2
DPI – Crown	Ensure all works are contained within Lot 4 DP 253435.	Noted
Lands (06/02/14)	Consult with Crown Lands in the event of impacts to the Crown road on the southern and western boundary of the site.	
	TRAFFIC AND TRANSPORT	
RMS	Describe existing access arrangements and traffic conditions	5.1.2
(29/01/14)	Identify likely traffic generation rates and distributions associated with the development to determine likely peak hour movements.	5.1.5
	Estimate expected traffic composition including the percentage of light and heavy vehicles. Identify whether oversized or over mass vehicles will be used.	5.1.5
	Identify suitable infrastructure required to ameliorate any traffic and safety impacts associated with the development. Provide concept plans for any works proposed including access arrangements at and around the interchange, including swept path diagrams.	5.1.5
	Demonstrate that the Proposal will not compromise the safe operation of the Hume Motorway.	5.1.7
	Consider the environmental impacts of any works within the road reserve including traffic and road safety impacts as well as noise, heritage, socio-economic issues and biodiversity.	5.1.7 Section 5
DTIRIS – R&E (07/02/14)	Document route(s) used to transport quarry products to market.	2.8.3



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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	WATER – GENERAL	
EPA	Demonstrate that environmental outcomes for the project ensure:	
(21/01/14)	There is no pollution of waters (including surface and groundwater) except in accordance with licence requirements	5.3.3
	Wastewater is captured on the site and directed to reticulated sewer where available or collected, treated and beneficially reused, where this is safe and practicable to do so	2.9.6
	There is consistency with any relevant Statement of Joint Intent established by Healthy Rivers Commission; and	NA
	It contributes to the protection of achievement over time of River Flow Objectives and Water Quality Objectives.	5.3.3
	Describe the nature and the degree of any likely impacts that the proposed project may have on the receiving environment and clearly outline the proposed mitigation, monitoring and management measures	5.2.5, 5.2.7, 5.3.3, 5.3.4
	Determine the requirements that apply to the local catchment and clearly identify any sensitive areas.	5.6
	Address the potential for any diesel or chemical spills and any necessary bunding and/or spill management measures	Appendix 3
	Document the soil and water management controls that will be implemented during the project to minimise any potential impacts on water quality	5.3.3
	Address impacts and mitigation measures associated with water supply at the site.	5.3.3, 5.2.7
DPI – NOW	The EIS should demonstrate:	
(06/02/14)	<ul> <li>An adequate and secure water supply for the proposal. Confirmation that water supplies for the quarry operation, associated activities incorporated into product and any other losses, are sourced from an appropriately authorised and reliable supply.</li> </ul>	5.3.3, 5.2.7
	Identify through a water balance the:	5.3.3
	<ul> <li>site water demands in terms of volume and timing;</li> </ul>	
	- water sources (surface and groundwater);	5.2.7
	- water disposal methods;	
	<ul> <li>water storage structures including Maximum Harvestable Right Dam Capacity;</li> </ul>	5.3.3, 5.3.4
	- annual volume of groundwater to be intercepted	5.2.8
	<ul> <li>annual volume of groundwater to be extracted/used for quarry purposes and any other losses</li> </ul>	5.2.8
	<ul> <li>annual volume of surface water intercepted by the quarry operations and volumes extracted for any purpose;</li> </ul>	5.3.4
	<ul> <li>volume and purpose of all dams/water storages on the contiguous land holding of the proponent; and</li> </ul>	5.3.3
	<ul> <li>any water reticulation infrastructure that supplies water to and within the site.</li> </ul>	NA



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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)	
	WATER – GENERAL (Cont'd)		
DPI - NOW (06/02/14) (Cont'd)	Existing and proposed water licensing requirements in accordance with the Water Management Act 2000 and Water Act 2012 (as applicable). This is to demonstrate that existing licences (include licence numbers) and licensed uses are appropriate, and to identify where additional licences are proposed.	2.1.3, 5.2.7	
	Ensure licensing is commensurate with the anticipated volume of groundwater take and surface water take prior to this take occurring.	5.3.3, 5.2.7	
	An impact assessment on adjacent licensed water users (surface and groundwater), basic landholder rights, and groundwater-dependent ecosystems, notably Long Swamp and Stingray Swamp as well as Long Swamp Creek and adequate provision of buffer requirements.	5.2.8	
	Assess watercourses to be crossed and describe appropriate techniques and mitigating measures to minimise impacts on those watercourses.	NA	
	Design and construct any crossings/works in/within 40m of watercourses are to be in accordance with NSW Office of Water Guidelines for Controlled Activities on Waterfront Land (July 2012).	NA	
	An assessment of the potential to intercept and/or impact groundwater and predicted dewatering volumes, water quality and disposal/retention methods. This will need to address the requirements of relevant policy including the Aquifer Interference Policy. It is recommended final landforms of open voids containing groundwater are minimised. Where there is ongoing groundwater take induced by evaporative loss this must be identified and addressed by retaining the appropriate water licence entitlement at the site.	5.2.8	
	Adequate mitigating and monitoring requirements to address surface water and groundwater impacts.	5.2.9, 5.3.5	
	Water Sharing Plans		
	Demonstrate that the proposed project is consistent with the relevant access and trading rules within the following:		
	Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources 2011	5.3.3	
	Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2011.	5.2.2, 5.2.7	
	Detail the extent to which the proposed project is consistent with relevant legislation, policies and guidelines, and justify any inconsistencies	5.2, 5.3	
SURFACE WATER			
NOW (06/02/14)	Consider the impact of the Proposal on the watercourse and associated riparian vegetation within the site and provide the following;	5.3.2	
	Identify the sources of surface water.  Putally of the end of children (variant the Charles Contains)	F 0 0	
	Details of stream order (using the Strahler System).  Patalla of any proposed system system system including system.	5.3.2	
	<ul> <li>Details of any proposed surface water extraction, including quantity, purpose, location of existing pumps, dams, diversions, cuttings and levees.</li> </ul>	5.3.4	

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Government Agency		Paraphrased Requirement	Relevant EIS Section(s)
		SURFACE WATER (Cont'd)	
NOW (06/02/14)	•	Details of available surface water licenses that could be purchased to account for any proposed extractions.	NA
(Cont'd)	•	Detailed description of any proposed development or diversion works including all construction, clearing, draining, excavation and filling.	5.3.3
	•	An assessment of the impacts of proposed methods of excavation, construction and material placement on the watercourse and associated vegetation.	NA
	•	A detailed description of all potential water related environmental impacts of any proposed development in terms of riparian vegetation, sediment movement, water quality and hydrologic regime.	5.3.4, 5.6.6
	•	A description of the design features and measures to be incorporated into any proposed development to guard against anything more than minimal long term actual and potential environmental disturbances, particularly in respect of maintaining the natural hydrologic regime and sediment movement patterns and the identification of riparian buffers.	5.3.3
	•	Details of impact on water quality and remedial measures proposed to address more than minimal adverse effects	5.3.3, 5.6.5
		r existing or proposed Water Management Structures/Dams provide ormation on the following:	
	•	Date of construction (for existing structure/s)	NA
	•	Details of legal status/ approval for existing structure/s	NA
	•	Details of any proposal to change the purpose of the existing structure/s	NA
	•	Details if any remedial work is required to maintain the integrity of the existing structure/s	NA
	•	Clarification if the structure/s is on a watercourse	NA
	•	Details of the purpose, location and design specification for the structure/s	NA
	•	Size and storage capacity of structures/s	5.3.3
	•	Calculation of the Maximum Harvestable Right Dam Capacity (MHRDC) for the site	5.3.3
	•	Details if the structures/s is affected by flood flows.	NA
	•	Details of any proposal for shared use, rights and entitlement of the structure/s	NA
	•	Details if the proposed development has the potential to bisect the structure/s	NA
		entify existing basic landholder rights users and potential impacts to ese rights associated with the proposal.	NA
	Ma	sess the provision of a sustainable water supply and include Water anagement Plans detailing how sustainable water supply can be urced and implemented	5.3.3

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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)		
GROUNDWATER				
NOW (06/02/14)	The EIS should include an assessment of potential groundwater issues and potential degradation to the groundwater source and provide the following:			
	Detail the predicted highest groundwater table at the development site.	5.2.8		
	Detail any works likely to intercept, connect with result in pollutants infiltrating into groundwater sources	NA		
	Detail any proposed groundwater extraction, including purpose, location and construction details of all proposed bores and expected annual extraction volumes.	5.2.7		
	Describe the flow directions and rates and the physical and chemical characteristics of the groundwater source	5.2.2		
	Detail the predicted impacts of any final landform on the groundwater regime.	5.2.8		
	Detail the existing groundwater users within the area (including the environment) any potential impacts on these users and safeguards measures to mitigate impacts	5.2.3, 5.2.4		
	Assess the quality of groundwater for the local groundwater catchment	5.2.2		
	Detail the expected impacts of the proposed development on the quality of groundwater both in the short and long term.	5.2.8		
	Detail measures to prevent groundwater pollution so that remediation is not required	Appendix 3		
	<ul> <li>Quantify impacts on groundwater dependent ecosystems (GDEs) if applicable</li> </ul>	5.2.8		
	Detail protective measures to minimise any impacts on GDEs	5.6.5		
	Detail proposed methods for the disposal of waste water and approval from the relevant authority.	2.9.6		
	<ul> <li>Assess the potential for saline intrusion of the groundwater and measures to prevent such intrusion into the groundwater aquifer.</li> </ul>	5.2.8		
	<ul> <li>Detail results of any models or predictive tools used to predict groundwater drawdown, inflows to the site and impacts on affected water sources.</li> </ul>	5.2.8		
	Include an impact assessment that identifies limits to the level of impact and contingency measures that would remediate, reduce or manage potential impacts to the existing groundwater resource and any dependent groundwater environment or water users.	5.2.9		
	Provide details of any proposed monitoring programs, reporting procedures including mechanism for transfer of information to NOW.	5.2.9		
	Ensure all proposed groundwater works, including bores for purpose of investigation, extraction, dewatering, testing, or monitoring are identified in the proposal and an appropriate approval obtained from the Office of Water prior to their installation.	5.2.7, 5.2.9		

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Government Agency		Paraphrased Requirement	Relevant EIS Section(s)
		GROUNDWATER (Cont'd)	
NOW (06/02/14) (Cont'd)	pro wit	entify any known or potential GDEs that may be impacted by the oposal and detail management and mitigation measures in accordance the NSW Aquifer Interference Policy and the NSW Groundwater opendent Ecosystem Policy	5.2.3, 5.2.7
		ECOLOGY	
OEH (07/02/14)	pos	nsider mitigation measures to avoid impacts and where this is not ssible minimise impacts before considering offsets to remaining pacts.	2.14, 5.5.5
	As	odiversity impacts can be assessed using either the BioBanking sessment Methodology (scenario 1) or a detailed biodiversity sessment (scenario 2).	
	Bic det ins app	e BioBanking Assessment Methodology can be used either to obtain a bBanking statement, or to assess impacts of a proposal and to termine required offsets without obtaining a statement. In the latter tances, if the required credits are not available for offsetting, propriate alternative options may be developed in consultation with EH officers and in accordance with the OEH policy.	
	Sc	enario 2	
		nere a proposal is assessed outside the BioBanking Assessment ethodology the EIS should include.	
	•	a detailed biodiversity assessment, including assessment of impacts on threatened biodiversity, native vegetation and habitat.	5.5.6, 5.6.7
	In <sub>I</sub>	particular, indirect impacts on Long Swamp and the threatened entities associated with this formation should be addressed.	5.6.6, 5.6.7
	•	a field survey of the site should be conducted and documented in accordance with relevant guidelines, including:	
		<ul> <li>the Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna -Amphibians (DECCW, 2009);</li> </ul>	
		<ul> <li>Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004); and</li> </ul>	Section 3
		<ul> <li>Threatened species survey and assessment guideline information on www.environment.nsw.gov.au/threatenedspecies/surveyassessmentgdlns.htm.</li> </ul>	
	•	If a proposed survey methodology is likely to vary significantly from the above methods, the proponent should discuss the proposed methodology with the OEH prior to undertaking the EIS, to determine whether the OEH considers that it is appropriate.	Noted
	•	For any recent (less than five years old) surveys used, demonstrate no significant difference in:	Noted
		- seasonality, weather conditions or extensive disturbance events.	
		<ul> <li>utilised methodologies, survey sampling intensities, timeframes or baits; and</li> </ul>	
	•	Ensure that any additional species listed under the TSC Act since the previous survey took place, have been surveyed for.	

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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

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Government Agency	Paraphrase	d Requirement	Relevant EIS Section(s)
	ECOLO	GY (Cont'd)	
OEH (07/02/14) (Cont'd)	be done in accordance with the Assessment: Guidelines for Dev Draft (DEC, 2004) and the Guide Assessment (Department of Plathreatened Species website and must be the primary information species present. The BioBankir Vegetation Types databases and assessment:	anning, July 2005). The OEH and the Atlas of NSW Wildlife database in sources for the list of threateneding Threatened Species Database, the and other data sources (e.g. PlantNET, f Australian Museums previous or	5.5.2, 5.5.3, 5.6.3, Section 4.4 and Section 6
		apping should include the full extent of Creek in the immediate vicinity of the p that occur on neighbouring	5.5.2, 5.6.4
	communities that will be impact proposal. Of key interest are the the deep sands of the extraction	Id be undertaken in the key vegetation ed both directly and indirectly by the e vegetation communities that exist on a area as well the water-dependent reek. Execution of survey plots and DEH standards.	Section 3
	Plot data should be used to relatypes or other like communities	ate impacted communities to biometric for proposed offsetting.	Section 2 and 4
	The EIS should contain the follo	owing information as a minimum:	5. 5
	<ul> <li>The requirements set out in Assessment (Department of</li> </ul>	the Guidelines for Threatened Species Planning, July 2005);	
	associated spatial data files; satellite images and /or aeric datum, projection and zone, communities (including classify), key habitat feature	ced mapping of study area (and ), e.g. overlays on topographic maps, all photos, including details of map all survey locations, vegetation sification and methodology used to s and reported locations of threatened ological communities present in the	5.5 Files available upon request
	<ul> <li>Description of survey metho location and weather conditi</li> </ul>	dologies used, including timing, ons;	5.5.2, 5.5.3, 5.6.4
	• • • • • • • • • • • • • • • • • • • •	ons and experience of all staff apping and assessment of impacts as	1.6
		I state listed threatened biota known or rea and their conservation status;	5.5.2, 5.5.3, 5.6.3

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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

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Causemment		Page 9 of 18
Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	ECOLOGY (Cont'd)	
OEH (07/02/14) (Cont'd)	<ul> <li>Description of the likely impacts of the proposal on biodiversity and wildlife corridors, including direct and indirect and construction and operation impacts. Wherever possible, quantify these impacts such as the amount of each vegetation community or species habitat to be cleared or impacted, or any fragmentation of a wildlife corridor;</li> </ul>	5.5.6, 5.6.7
	<ul> <li>The proposal will impact on an important regional wildlife corridor, the Southern Highlands Biolink, identified in the Great Eastern Ranges Initiative. Functionality of this corridor should be considered when considering avoiding, mitigating or offsetting impacts of the proposal.</li> </ul>	5.5.6.3
	<ul> <li>Identification of the avoidance, mitigation and management measures that will be put in place as part of the proposal to avoid or minimise impacts, including details about alternative options considered and how long term management arrangements will be guaranteed;</li> </ul>	5.5.5, 5.6.5
	<ul> <li>Description of the residual impacts of the proposal. If the proposal cannot adequately avoid or mitigate impacts on biodiversity, then a biodiversity offset package is expected; and</li> </ul>	5.5.5
	<ul> <li>Provision of specific Statement of Commitments relating to biodiversity.</li> </ul>	Section 6
	<ul> <li>An assessment of the significance of direct and indirect impacts of the proposal must be undertaken for threatened biodiversity known or considered likely to occur in the study area based on the presence of suitable habitat. In this instance the indirect impacts on the threatened ecological communities and threatened flora associated with Long Swamp are of primary concern.</li> </ul>	5.5.6, Section 7
	<ul> <li>This assessment must take into account:</li> <li>the factors identified in s.5A of the EP&amp;A Act; and</li> </ul>	Noted
	<ul> <li>the ractors identified in 3.5A of the ET &amp;A Act, and</li> <li>the guidance provided by The Threatened Species Assessment Guideline – The Assessment of Significance (DECCW, 2007).</li> </ul>	
	<ul> <li>Where an offsets package is proposed by a proponent for impacts to biodiversity (and a BioBanking Statement has not been sought) this package should:</li> </ul>	2.14
	<ul> <li>Meet either the OEH's Principles for the use of biodiversity offsets in NSW.</li> </ul>	2.14
	<ul> <li>Identify the conservation mechanisms to be used to ensure the long term protection and management of the offset sites; and</li> </ul>	2.14
	<ul> <li>Include an appropriate Management Plan (such as vegetation or habitat) that has been developed as a key amelioration measure to ensure any proposed compensatory offsets, retained habitat enhancement features within the development footprint and/or impact mitigation measures (including proposed rehabilitation and/or monitoring programs) are appropriately managed and funded.</li> </ul>	2.14



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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

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	Page 10 of 1	
Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	ECOLOGY (Cont'd)	
OEH (07/02/14) (Cont'd)	With regard to the Commonwealth Environment Protection and Biodiversity Conservation Act 1999, the assessment should identify any relevant Matters of National Environmental Significance and whether the proposal has been referred to the Commonwealth or already determined to be a controlled action.	5.5.6.2
DTIRIS – R&E (07/02/14)	Assess the ecological sustainability of the proposal.	7.2.2
	AQUATIC ECOLOGY	
DTIRIS - DPI	The General Requirements of the EIS include the following:	
(07/02/14)	<ul> <li>The area which may be affected either directly or indirectly by the development or activity should be identified and shown on an appropriately scaled map (1:25000) and aerial photographs.</li> </ul>	
	<ul> <li>All waterbodies and waterways within the proposed area of development are to be identified.</li> </ul>	
	<ul> <li>A description and maps of aquatic vegetation, snags, gravel beds and any other protected, threatened or dominant habitats should be presented. Description should include area, density and species composition.</li> </ul>	5.6.2
	<ul> <li>A survey of fish species should be carried out and results included. Existing data should be used only if collected less than 5 years previously.</li> </ul>	
	<ul> <li>Identification of recognised recreational and commercial fishing grounds, aquaculture farms and/or other waterways users.</li> </ul>	NA
	Details of the location of all component parts of the proposal, including any auxiliary infrastructure, timetable for construction of the proposal with details of various phases of construction.	2.4
	<ul> <li>Aspects of the management of the proposal, both during construction and after completion, which relate to impact minimisation and site rehabilitation, e.g. Environment Management Plans, Rehabilitation Plans, Compensatory offsets.</li> </ul>	5.3.3, 2.13
	For each freshwater body identified on the plan, the plan should include, either by annotation or by an accompanying table, hydrological and stream morphology information such as: flow characteristics, including any seasonal variations, bed substrate, and bed width.	5.6.4
	<ul> <li>For each marine or estuarine area identified on the plan, the plan should include, either by annotation or by an accompanying table, hydrological and stream morphology information such as: tidal characteristics, bed substrate, and depth contours.</li> </ul>	NA

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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

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Paraphrased Requirement   Relevant EIS Section(s)			Page 11 of 18
DTIRIS - DPI (07/02/14) (Cont'd)		Paraphrased Requirement	Relevant EIS Section(s)
(Cont'd)  Purpose of works  Type(s) and distribution of marine vegetation in the vicinity of the proposed works  Method of dredging to be used  Timing and Duration of works  Dimension of area of works including levels and volume of material to be extracted or placed as fill  Nature of sediment to be dredged, including Acid Sulphate Soil, contaminated soils, etc.  Method of marking area subject to works  Environmental safeguards to be used during and after works  Measures for minimising harm to fish habitat under the proposal  Spoil type and source location for reclamation activities  Method of disposal of dredge material  Location and duration of spoil stockpilling, if planned  For activities that damage marine vegetation describe the following:  NA  Type of marine vegetation to be harmed  Map and density distribution of marine vegetation  Reasons for harming marine vegetation  Methods of harming marine vegetation  Construction details  Duration of works/activities  Measures for minimising harm to marine vegetation under the proposal and details of compensatory habitat development to replace lost vegetation.  Method and location of transplanting activities or disposal of marine vegetation  For activities that block fish passage describe the following:  Type of activity, e.g. works in a stream that change flow or morphological  characteristics of the stream, including culvert and causeway construction, sediment  and erosion control measures, stormwater diversion structures.  Length of time fish passage is to be restricted, whether permanent or temporary  Timing of proposed restriction. Should be timed to avoid interfering with migratory movements of fish.  Remediation or compensatory works to offset any impacts  Complete a threatened aquatic species assessment (Section 5c, EP&A)		AQUATIC ECOLOGY (Cont'd)	
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Duration of works/activities  Measures for minimising harm to marine vegetation under the proposal and details of compensatory habitat development to replace lost vegetation.  Method and location of transplanting activities or disposal of marine vegetation  For activities that block fish passage describe the following:  Type of activity, e.g. works in a stream that change flow or morphological  characteristics of the stream, including culvert and causeway construction, sediment  and erosion control measures, stormwater diversion structures.  Length of time fish passage is to be restricted, whether permanent or temporary  Timing of proposed restriction. Should be timed to avoid interfering with migratory movements of fish.  Remediation or compensatory works to offset any impacts  Complete a threatened aquatic species assessment (Section 5c, EP&A 5.6.3		Methods of harming marine vegetation	
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proposal and details of compensatory habitat development to replace lost vegetation.  Method and location of transplanting activities or disposal of marine vegetation  For activities that block fish passage describe the following:  NA  Type of activity, e.g. works in a stream that change flow or morphological  characteristics of the stream, including culvert and causeway construction, sediment  and erosion control measures, stormwater diversion structures.  Length of time fish passage is to be restricted, whether permanent or temporary  Timing of proposed restriction. Should be timed to avoid interfering with migratory movements of fish.  Remediation or compensatory works to offset any impacts  Complete a threatened aquatic species assessment (Section 5c, EP&A 5.6.3		Duration of works/activities	
vegetation  For activities that block fish passage describe the following:  NA  Type of activity, e.g. works in a stream that change flow or morphological  characteristics of the stream, including culvert and causeway construction, sediment  and erosion control measures, stormwater diversion structures.  Length of time fish passage is to be restricted, whether permanent or temporary  Timing of proposed restriction. Should be timed to avoid interfering with migratory movements of fish.  Remediation or compensatory works to offset any impacts  Complete a threatened aquatic species assessment (Section 5c, EP&A 5.6.3		proposal and details of compensatory habitat development to replace	
<ul> <li>Type of activity, e.g. works in a stream that change flow or morphological</li> <li>characteristics of the stream, including culvert and causeway construction, sediment</li> <li>and erosion control measures, stormwater diversion structures.</li> <li>Length of time fish passage is to be restricted, whether permanent or temporary</li> <li>Timing of proposed restriction. Should be timed to avoid interfering with migratory movements of fish.</li> <li>Remediation or compensatory works to offset any impacts</li> <li>Complete a threatened aquatic species assessment (Section 5c, EP&amp;A 5.6.3</li> </ul>			
<ul> <li>morphological</li> <li>characteristics of the stream, including culvert and causeway construction, sediment</li> <li>and erosion control measures, stormwater diversion structures.</li> <li>Length of time fish passage is to be restricted, whether permanent or temporary</li> <li>Timing of proposed restriction. Should be timed to avoid interfering with migratory movements of fish.</li> <li>Remediation or compensatory works to offset any impacts</li> <li>Complete a threatened aquatic species assessment (Section 5c, EP&amp;A 5.6.3</li> </ul>		For activities that block fish passage describe the following:	NA
construction, sediment  and erosion control measures, stormwater diversion structures.  Length of time fish passage is to be restricted, whether permanent or temporary  Timing of proposed restriction. Should be timed to avoid interfering with migratory movements of fish.  Remediation or compensatory works to offset any impacts  Complete a threatened aquatic species assessment (Section 5c, EP&A 5.6.3			
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temporary  Timing of proposed restriction. Should be timed to avoid interfering with migratory movements of fish.  Remediation or compensatory works to offset any impacts  Complete a threatened aquatic species assessment (Section 5c, EP&A 5.6.3		and erosion control measures, stormwater diversion structures.	
<ul> <li>with migratory movements of fish.</li> <li>Remediation or compensatory works to offset any impacts</li> <li>Complete a threatened aquatic species assessment (Section 5c, EP&amp;A 5.6.3</li> </ul>		· · · · · · · · · · · · · · · · · · ·	
Complete a threatened aquatic species assessment (Section 5c, EP&A 5.6.3			
		Remediation or compensatory works to offset any impacts	
			5.6.3

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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

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	Page 12 of 18		
Government Agency	Paraphrased Requirement	Relevant EIS Section(s)	
AQUATIC ECOLOGY (Cont'd)			
DTIRIS - DPI (07/02/14) (Cont'd)	List threatened species, endangered populations and endangered ecological communities and consider habitat types present within the study area, recent records of threatened species in the locality and the known distributions of these species.	5.6.3	
	Describe any commercial, recreational and indigenous fishing activities that may be affected by the activity, including regular commercial fishing grounds, popular recreational fishing sites, and recognised indigenous harvesting sites.	NA	
	Assess whether the activity will impact on the continuing operation and viability of nearby aquaculture or mariculture ventures.	NA	
	Consider the potential influence of previous land and water uses and the effect of these on the proposed site.	NA	
	Provide a description of aquatic habitat including such components as:	5.6.4	
	stream morphology;		
	in-stream and riparian vegetation;		
	water quality;		
	water flow characteristics;		
	bed morphology;		
	vegetation (both aquatic and adjacent terrestrial); and		
	water quality and tide/flow characteristics.		
	The condition of the habitat within the area should be described and discussed, including the presence and prevalence of introduced species.		
	The EIS must:	5.6.2	
	<ul> <li>describe and discuss significant habitat areas within the study area;</li> </ul>		
	<ul> <li>outline the habitat requirements of threatened species likely to occur in the study area;</li> </ul>	5.6.3	
	<ul> <li>indicate the location, nature and extent of habitat removal or modification which may result from the proposed action;</li> </ul>	5.6.7	
	discuss the potential impact of the modification or removal of habitat;	5.6.6	
	<ul> <li>identify and discuss any potential for the proposal to introduce barriers to the movement of fish species; and</li> </ul>	NA	
	<ul> <li>describe and discuss any other potential impacts of the proposal on fish species or their habitat.</li> </ul>	5.6.6	
	Describe other locally occurring populations of species likely to have their lifecycle patterns disrupted by the proposal. Discuss the extent, security and viability of remaining habitat in the locality.	5.6.3	
	Consider how the proposal has been or may be modified and managed to conserve fisheries habitat on the subject site and in the study area.	2.15.4	
	Consider developing long term management strategy to protect areas within the study area which are of particular importance for fish species. This may include proposals to restore or improve habitat.	5.6.5	

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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

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	Page 13 of		
Government Agency	Paraphrased Requirement	Relevant EIS Section(s)	
	AQUATIC ECOLOGY (Cont'd)		
DP – Fisheries	Describe the aquatic environments (watercourses, wetlands) located on the site or adjacent to the site and their regional significance.	5.6.2	
(06/02/14)	Predict any impacts of the development upon aquatic environments both on the site and downstream (both temporary and permanent).	5.6.6	
	Document safeguards to mitigate any impacts upon aquatic environments and riparian habitats (e.g. full details of proposed riparian buffer zones and any riparian rehabilitation and revegetation plans	5.6.5, 5.6.7	
	Predict any impacts upon water quality and aquatic threatened species, populations and ecological communities listed under Fisheries Management Act 1994	5.6.7	
	Document safeguards to mitigate any impacts upon water quality and aquatic threatened species, including impacts on Long Swamp Creek, this should include details of proposed erosion and sediment control during construction, proposed management of stormwater and road drainage, and proposed water quality monitoring downstream of the development site.	5.6.5, 5.3.3	
	Detail any proposed waterway crossings or possible obstruction of fish passage.	NA	
	Ensure the design and construction of any watercourse crossings on the site is undertaken in accordance with the Fisheries NSW Policy and Guidelines for Fish Friendly Waterway Crossings (2004) and Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (2004)	NA	
	Refer to Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management (2013) where necessary	Noted	
	NOISE AND VIBRATION		
EPA (21/01/14)	Assess the predicted noise impacts associated with the project in accordance with the EPA's Interim Construction Noise Guidelines and Industrial Noise Policy		
	<ul> <li>The assessment should include:</li> <li>Identification and assessment of all potential noise sources associated with the development</li> </ul>	5.4.6	
	Identify the locations of all sensitive receptors	5.4.3	
	The proposed hours of construction and operation of the quarry and associated activities	2.10	
	An assessment of compliance with the project specific noise levels	5.4.7	
	An assessment of the potential impacts of any transport noise	5.4.7.3	
	Any proposed noise mitigation, monitoring and management measures	5.4.5, 5.4.8	
	Include an assessment of any predicted vibration impacts associated with the project	5.4.7.4, 5.4.7.5	
	Consider the cumulative noise impacts with reference to the Penrose Quarry and the Green Valley Sand Quarry	5.4.7.6	
DTIRIS – R&E (07/02/14)	Assess noise and vibration impacts, and proposed measures to minimise these impacts.	5.4.5, 5.4.7	

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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	AIR QUALITY	
EPA (21/01/14)	Demonstrate that environmental outcomes for the project ensure:     Unacceptable impacts do not occur on human health or the environment	
	<ul> <li>No offensive odours are caused or permitted from the premises</li> <li>Emissions of dust from the premises are prevented or minimised</li> <li>All relevant guidelines in regards to ambient air quality are satisfied; and</li> </ul>	5.9
	Vehicular kilometres travelled are minimised  Identify and describe all processes and sources (including odour and dust) that could result in air emissions and detail the characteristics and quantity of all emissions.	5.9.3
	Describe any proposed mitigation and monitoring and management measures to ensure air quality outcomes are achieved.	5.9.6, 5.9.9
	Demonstrate that emissions will be minimised to the maximum extent achievable for all emission sources	5.9.7
	Specify any proposed management protocols, pollution control equipment and emission control techniques/practices that will be employed as part of the project	5.9.6
	Assess the risk associated with potential discharges of fugitive and point source emissions for all stages of the project, include air quality impact assessment in accordance with the EPA's Approved Methods for the Modelling and assessment of Air Pollutants in NSW.	5.9.7
	Justify the level of assessment undertaken on the basis of risk factors including proposal location, characteristics of the receiving environment and type and quantity of pollutants emitted.	5.9.5
DTIRIS – R&E (07/02/14)	Assess dust impacts, and proposed measures to minimise these impacts.	5.9
	VISUAL AMENITY	
DTIRIS - R&E (07/02/14)	Assess visual impacts, and proposed measures to minimise these impacts.	5.11
	ABORIGINAL HERITAGE	
OEH (07/0214)	<ul> <li>The EIS should contain:</li> <li>A description of the Aboriginal objects and declared Aboriginal places located within the area of the proposed development.</li> </ul>	5.7.3, 5.7.4
	A description of the cultural heritage values, including the significance of the Aboriginal objects and declared Aboriginal places, that exist across the whole area that will be affected by the proposed development, and the significance of these values for the Aboriginal people who have a cultural association with the land.	5.7.6
	A description of how the requirements for consultation with Aboriginal people as specified in clause 80C of the <i>National Parks and Wildlife Regulation 2009</i> have been met.	5.7.2

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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	ABORIGINAL HERITAGE (Cont'd)	
OEH (07/0214) (Cont'd)	The views of those Aboriginal people regarding the likely impact of the proposed development on their cultural heritage. If any submissions have been received as a part of the consultation requirements, then the report must include a copy of each submission and your response.	5.7.6
	<ul> <li>A description of the actual or likely harm posed to the Aboriginal objects or declared Aboriginal places from the proposed activity, with reference to the cultural heritage values identified.</li> </ul>	5.7.7
	A description of any practical measures that may be taken to protect and conserve those Aboriginal objects or declared Aboriginal places.	5.7.5
	A description of any practical measures that may be taken to avoid or mitigate any actual or likely harm, alternatives to harm or, if this is not possible, to manage (minimise) harm.	5.7.5, 5.7.7
	Commitment to the use of an Aboriginal Heritage Impact Permit and/or Aboriginal Site Impact Recording Form and subsequent submission of these to the Aboriginal Heritage Management Information Management System (AHIMS) Registrar, for each Aboriginal object or site that is harmed or potentially harmed through the proposed development.	5.7.5
	In addressing these requirements, the proponent must refer to the following documents:	Noted
	Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011).	
	Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010).	
	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010).	
	Applying for an Aboriginal Heritage Impact Permit: Guide for applicants (OEH, May 2011).	
	For AHIMS sites identified in the archaeological survey of the proposed development area provide:	SCSC Part 7 Section 8
	<ul> <li>baseline information on the archaeological survey methodology;</li> </ul>	
	- archaeological survey visibility conditions;	
	- site attributes;	
	- results of consultation with Registered Aboriginal Parties, and	
	- assessment of site representativeness and site significance.	
	Include a draft or final ACHAR addressing these matters.	SCSC Part 7
Heritage Council of NSW (17/01/14)	The EIS should address the following:	
	The heritage significance of the site and any impacts the development may have upon this significance should be assessed. This assessment should include natural areas and places of Aboriginal, historic or archaeological significance. It should also include a consideration of wider heritage impacts in the area surrounding the site.	5.7, 5.8



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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	ABORIGINAL HERITAGE (Cont'd)	
Heritage Council of	The State Heritage Inventory and items protected under the NSW Heritage Act 1977 and other statutory instruments.	5.8.3
NSW (17/01/14) (Cont'd)	Lists maintained by the National Trust, any heritage items listed under the Australian Government's Environment Protection and Biodiversity Conservation Act 1999 and the local council in order to identify any identified items of heritage significance in the area affected by the proposal.	5.8.3
	The proposal should have regard to any impacts on places, items or relics of significance to Aboriginal people.	5.7
	Ensure adequate community consultation takes place regarding any required assessment of significance, likely impacts and management/mitigation measures.	5.7.2
	HISTORIC HERITAGE	
Heritage Council of NSW	<ul> <li>Identify by field survey (undertaken by a qualified practitioner/consultant with historic sites experience), any Non- Aboriginal heritage items within the area affected by the proposal.</li> </ul>	5.8.4
(17/01/14)	Include a statement of significance and an assessment of the impact of the proposal on the heritage significance of these items in accordance with the guidelines in the NSW Heritage Manual	5.8.5
	<ul> <li>Identify any policies/measures to conserve the heritage significance of any identified items.</li> </ul>	NA
	HEALTH AND SAFETY	
DTIRIS – R&E (07/02/14)	<ul> <li>All operations are to comply with the following Acts &amp; Regulations</li> <li>Work Health &amp; Safety Act 2011</li> <li>Work Health &amp; Safety Regulations 2011</li> <li>Mine Health &amp; Safety Act 2004</li> <li>Mine Health &amp; Safety Regulations 2007</li> </ul>	Noted
	The mine holder must nominate the mine operator in writing on the prescribed form to the Chief Inspector as required by the Mine Health & Safety Act 2004 Section 22 prior to the commencement of extraction.	Noted
	The operator of the mine must appoint a production manager as required by the Mine Health & Safety Regulation 2007 Clause 16 and the operator must notify the Chief Inspector of the appointment in writing as required by The Mine Health & Safety Regulation 2007 Clause 18 prior to the commencement of extraction.	Noted
	Any blasting operations carried out by the mine operator must comply with the Explosives Act 2003 and the Explosives Regulations 2005.	Noted

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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

	-	Page 17 of 18
Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	WASTE MANAGEMENT	
EPA	Demonstrate that environmental outcomes ensure waste is managed:	2.11
(21/01/14)	In accordance with the principles of waste hierarchy and cleaner production	
	The handling, processing and storage of all material used at the premises does not have negative environmental or amenity impacts	
	The beneficial reuse of all wastes generated at the premises are maximised where it is safe and practical to do so; and	
	No waste disposal occurs on site except in accordance with an EPL.	
	Identify, characterise and classify all waste that will be generated and disposed of as a result of the proposed project.	2.11
	Detail proposed quantities of wastes and disposal locations including waste that is intended for reuse and/or recycling.	2.11
	Provide details of how waste will be handled and managed both onsite and offsite to minimise pollution. Dispose of lawfully does not pose a risk to human health or the environment. Should the waste possess hazardous characteristics, the EIS must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.	2.11
	Classify in accordance with EPA's Waste Classification Guidelines.	NA
DTIRIS – R&E (07/02/14)	Document disposal of waste products and the location and size of stockpiles.	2.11
	CONTAMINATION	
EPA (21/01/14)	Assess and manage land contamination so that the land is suitable for its proposed use and does not present an unacceptable risk of harm to human health or any other aspect of the environment	Section 2, 4.5
	Assess potential land contamination in accordance with	3.3
	Contaminated Land Management Act 1997;	
	Contaminated Land Management Regulation 1998; and	
	State Environmental Planning Policy (SEPP) 55 – Remediation of Land.	
	Summarise all potential contamination sources (including soil, surface water and groundwater) on or related to the site and determine the likelihood of any impacts	Throughout Section 5
REHABILITATION		
DTIRIS – R&E (07/02/14)	Document proposed rehabilitation procedures during, and after completion of, extraction operations, and proposed final use of site	2.13
	LICENSING	
EPA (21/01/14)	Include a review of Schedule 1 of the POEO Act that identifies all scheduled activities, types of ancillary activities and types of discharges (to air, land and water).	3.3.3

#### **SUTTON FOREST QUARRIES PTY LTD**

Appendix 2

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### Table A2.2 (Cont'd) Coverage of Additional Matters Identified for Consideration in the EIS

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)	
	NATURALLY OCCURING RADIOACTIVE MATERIALS		
EPA (21/01/14)	Consider the potential for Naturally Occurring Radioactive Materials (NORM) in materials, minerals and all the resources associated with the proposal	NA	
	Consider whether the presence of NORM is an issue for the proposed quarrying project. Should it be determined that NORM is present at the site, suitable management measures will need to be developed in consultation with the EPA prior to the commencement of the quarrying activities	NA	



#### SUTTON FOREST QUARRIES PTY LTD

#### **ENVIRONMENTAL IMPACT STATEMENT**

Appendix 2

Sutton Forest Sand Quarry

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