



Planning & Environment

**Planning Services
Resource Assessments**

Contact: Sarah Fabian

Phone: 92746252

Email: sarah.fabian@planning.nsw.gov.au

Bob Lander
Director
Tattersall Lander Pty Ltd
PO Box 580
Raymond Terrace NSW 2324

Dear Mr Lander

**State Significant Development - Revised Secretary's Requirements
Bobs Farm Sand Project (SSD6395)**

I have enclosed the revised Secretary's requirements for the preparation of an Environmental Impact Statement (EIS) for the Bob Farm Sand Project.

These requirements are based on the information you have provided to date, and have been prepared in consultation with the relevant government agencies. The agencies' comments are attached for your information (see Attachment 2). You must have regard to these comments in the preparation of the EIS.

Please note that the Department may alter these requirements at any time, and that you must consult further with the Department if you do not lodge a development application and EIS for the project within the next two years.

You should establish whether the proposal requires a separate approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as soon as possible. If such an approval is required, please notify the Department immediately, as the Commonwealth approval process is likely to be integrated with the NSW approval process (under the bilateral agreement), and supplementary requirements will need to be issued.

Please contact the Department at least two weeks before you plan to submit the development application and EIS for the project. This will enable the Department to:

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the required number of copies of the EIS (hard copy and digital).

It is important for you to recognise that the Department will review the EIS for the project carefully before putting it on public exhibition. If it fails to adequately address these requirements, then you will be required to submit an amended EIS.

If you have any enquiries about these requirements, please contact Sarah Fabian on the details listed above.

Yours sincerely

Howard Reed

Director

Resource Assessments

As nominee of the Secretary

12.4.17

Secretary's Environmental Assessment Requirements

State Significant Development

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

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| Application Number | SSD 6395 |
| Proposal | <p>The Bobs Farm Sand Project, which involves:</p> <ul style="list-style-type: none"> • establishing a quarry to extract and process sand at a rate of 750,000 tonnes per annum, from a total resource of 10 million tonnes; • constructing extractive materials processing and transport infrastructure; • transporting extractive material off-site via public road; and • rehabilitating the site. |
| Location | Adjacent to Nelson Bay Road, Bobs Farm, approximately 15 kilometres southwest of Nelson Bay (Lots 10 & 11 DP1071458) |
| Applicant | Ammos Resource Management Pty Ltd |
| Date of Issue | 12 April 2017 |
| General Requirements | <p>The Environmental Impact Statement (EIS) for the development must comply with the requirements in Clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none"> • a full description of the development, including: <ul style="list-style-type: none"> – the need for the development; – the resource to be extracted, including the amount, type and composition; – the site layout and extraction plan, including cross-sectional plans; – the production process and processing activities, including the in-flow and out-flow of materials and points of discharge to the environment; – surface infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process); – a waste (overburden, rejects, tailings etc) management strategy; – a water management strategy; – a rehabilitation strategy to apply during, and after completion of, extraction operations, and proposed final use of site; and – the likely interactions between the development and any existing, approved or proposed development in the vicinity of the site; • a list of any approvals that must be obtained before the development may commence; • an assessment of the likely impacts of the development on the environment, focussing on the key issues identified below, including: <ul style="list-style-type: none"> – a description of the existing environment likely to be affected by the development, using sufficient baseline data; – an assessment of the likely impacts of all stages of the development, including any cumulative impacts, taking into consideration any relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice; – a description of the measures that would be implemented to avoid, minimise, mitigate and/or offset the likely impacts of the development, and an assessment of: <ul style="list-style-type: none"> ○ whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented; ○ the likely effectiveness of these measures; and |

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| | <ul style="list-style-type: none"> ○ whether contingency measures would be necessary to manage any residual risks; and – a description of the measures that would be implemented to monitor and report on the environmental performance of the development if it is approved; • a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; • consideration of the development against all relevant environmental planning instruments (including Part 3 of the <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>); • a conclusion justifying why the development should be approved, taking into consideration: <ul style="list-style-type: none"> – alternatives; – the suitability of the site; – the biophysical, economic and social impacts of the project, having regard to the principles of ecologically sustainable development; and – whether the project is consistent with the objects of the Environmental Planning and Assessment Act 1979; and • a signed declaration from the author of the EIS, certifying that the information contained within the document is neither false nor misleading. <p>While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of this development.</p> <p>In addition to the matters set out in Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>, the development application must be accompanied by a signed report from a suitably qualified expert that includes an accurate estimate of the:</p> <ul style="list-style-type: none"> • capital investment value (as defined in Clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the development, including details of all the assumptions and components from which the capital investment value calculation is derived; and • jobs that would be created during each stage of the development. |
| Consultation | <p>During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, service providers, Aboriginal stakeholders, community groups and affected landowners.</p> <p>In particular, you must consult with:</p> <ul style="list-style-type: none"> • affected landowners; • community groups; • Port Stephens Council; • Office of Environment and Heritage (including the Heritage Branch); • Environment Protection Authority; • Division of Resources and Energy within the Department of Industry; • Department of Primary Industries (including the DPI Water, NSW Forestry, Agriculture and Fisheries sections and Crown Lands division); • Roads and Maritime Services; and • NSW Rural Fire Service. • Hunter Local Land Services; <p>The EIS must:</p> <ul style="list-style-type: none"> • 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; • identify where the design of the development has been amended in response to issues raised; and <p>otherwise demonstrate that issues raised have been appropriately addressed in the assessment.</p> |
| Key Issues | <p>The EIS must address the following key issues:</p> |

- **Water** – including:
 - a detailed site water balance and an assessment of any volumetric water licensing requirements, 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;
 - identification of any licensing requirements or other approvals under the *Water Act 1912* and/or *Water Management Act 2000*;
 - 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);
 - a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant WSP or water source embargo;
 - an assessment of any likely flooding impacts of the development;
 - a detailed consideration of maintenance of an adequate buffer between all excavations at the highest predicted regional groundwater table;
 - an assessment of potential impacts on the quality and quantity of existing surface and ground water resources, including a detailed assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives; and
 - a detailed description of the proposed water management system (including sewage), water monitoring program and other measures to mitigate surface and groundwater impacts;
- **Noise** – including a quantitative assessment of potential:
 - construction, operational and off-site transport noise impacts in accordance with the *Interim Construction Noise Guideline*, *NSW Industrial Noise Policy* and the *NSW Road Noise Policy* respectively;
 - reasonable and feasible mitigation measures to minimise noise emissions; and
 - monitoring and management measures, in particular real-time and attended noise monitoring;
- **Air Quality** – including a quantitative assessment of potential:
 - construction and operational impacts, in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*, and with a particular focus on dust emissions including PM_{2.5} and PM₁₀;
 - dust and other emissions generated from blasting, processing, operational activities and transportation of quarry products;
 - reasonable and feasible mitigation measures to minimise dust and emissions; and
 - monitoring and management measures, in particular, real-time air quality monitoring;
- **Biodiversity** – including:
 - accurate predictions of any vegetation clearing on site;
 - a detailed assessment of the potential biodiversity impacts, paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems and having regard to the relevant policies and guidelines listed in Attachment 1; and
 - an offset strategy (depending on the outcomes of the assessment of biodiversity impacts) to ensure the development maintains or improves the biodiversity values of the region in the medium to long term, including evidence that the appropriate type and quantum of offsets will be available;
- **Heritage** – including:
 - an assessment of the potential impacts on Aboriginal heritage (cultural and archaeological), including evidence of appropriate consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage; and
 - identification of Historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items, having regard to the relevant policies and guidelines listed in Attachment 1;

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| | <ul style="list-style-type: none"> • Traffic & Transport – including: <ul style="list-style-type: none"> - accurate predictions of the road traffic generated by the construction and operation of the development, including a description of the types of vehicles likely to be used for transportation of quarry products; - a detailed assessment of potential traffic impacts on the capacity, condition, safety and efficiency of the local and State road network (as identified above), including a road safety audit; and - a detailed description of the measures or works (including concept plans) that would be used and/or implemented to upgrade, maintain and improve the capacity, efficiency and safety of the road network over the life of the development; • Land Resources – including a detailed assessment of: <ul style="list-style-type: none"> - potential impacts on soils and land capability (including potential erosion and land contamination) and the proposed mitigation, management and remedial measures (as appropriate); - potential impacts on landforms (topography), paying particular attention to the long term geotechnical stability of any new landforms (such as overburden dumps, bunds etc); - potential impacts on areas of regionally significant farmland and associated industries including a biosecurity risk assessment and subsequent response and contingency plans; and - the compatibility of the development with other land uses in the vicinity of the development in accordance with the requirements in Clause 12 of <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>; • Waste – including estimates of the quantity and nature of the waste streams that would be generated or received by the development and any measures that would be implemented to minimise, manage or dispose of these waste streams; • Hazards – including an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks and the transport, handling and use of any hazardous or dangerous goods; • Visual – including an assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, including with respect to any new landforms; • Social & Economic – including: <ul style="list-style-type: none"> - a detailed assessment of the likely social impacts of the development on the local and regional community; and - a detailed assessment of the likely economic impacts of the development, paying particular attention to: <ul style="list-style-type: none"> ○ the significance of the resource; ○ the costs and benefits of the project; identifying whether the development as a whole would result in a net benefit to NSW, including consideration of fluctuation in commodity markets and exchange rates; and - the demand for the provision of local infrastructure and services; and • Rehabilitation – including the proposed rehabilitation strategy for the site having regard to the key principles in the <i>Strategic Framework for Mine Closure</i>, including: <ul style="list-style-type: none"> - rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria; - nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; and - the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region. |
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ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

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| Air | |
| | Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) |
| | Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA) |
| | Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion into the 'Approved Methods for the Modelling and Assessments of Air Pollutants in NSW, Australia' |
| | National Greenhouse Accounts Factors (Commonwealth) |
| Noise | |
| | NSW Industrial Noise Policy and associated Application Notes (EPA) |
| | Interim Construction Noise Guideline (DECC 2009) |
| | NSW Road Noise Policy (EPA) |
| Water | |
| Groundwater | NSW State Groundwater Policy Framework Document (NOW) |
| | NSW State Groundwater Quality Protection Policy (NOW) |
| | NSW State Groundwater Quantity Management Policy (NOW) |
| | NSW Aquifer Interference Policy 2012 (NOW) |
| | Office of Water Guidelines for Controlled Activities (2012) |
| | Groundwater Monitoring and Modelling Plans – Information for prospective mining and petroleum exploration activities (NOW) |
| | Australian Groundwater Modelling Guidelines 2012 (Commonwealth) |
| | National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC) |
| | Guidelines for the Assessment & Management of Groundwater Contamination (EPA) |
| Surface Water | NSW Government Water Quality and River Flow Objectives (EPA) |
| | Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA) |
| | National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ) |
| | National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ) |
| | National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC) |
| | NSW Water Conservation Strategy (2000) |
| | State Water Management Outcomes Plan |
| | NSW State Rivers and Estuary Policy (1993) |
| | Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA) |
| | Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries (EPA) |
| | Managing Urban Stormwater: Treatment Techniques (EPA) |
| | Managing Urban Stormwater: Source Control (EPA) |
| | Technical Guidelines: Bunding & Spill Management (EPA) |
| | Environmental Guidelines: Use of Effluent by Irrigation (EPA) |
| | A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH) |
| | NSW Guidelines for Controlled Activities on Waterfront Land (NOW) |
| Land | |
| | Soil and Landscape Issues in Environmental Impact Assessment (NOW) |
| | Agfact AC25: Agricultural Land Classification (NSW Agriculture) |
| | Agricultural Impact Statement Technical Notes |
| | Land Use Conflict Risk Assessment Guide |

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| | Agricultural Issues for Extractive Industries (NSW Trade and Investment) |
| | State Environmental Planning Policy No. 55 – Remediation of Land |
| | Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC) |
| Traffic | |
| | Guide to Traffic Generating Development (RMS) |
| | Road Design Guide (RMS) & relevant Austroads Standards |
| Biodiversity | |
| | Framework for Biodiversity Assessment (OEH) |
| | NSW Biodiversity Offsets Policy for Major Projects (OEH) |
| | Guidelines for Threatened Species Assessment (DP&E) |
| | NSW State Groundwater Dependent Ecosystem Policy (NOW) |
| | Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW) |
| | State Environmental Planning Policy No. 44 – Koala Habitat Protection |
| Heritage | |
| | The Burra Charter (The Australia ICOMOS charter for places of cultural significance) |
| | Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DP&E) |
| | Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH) |
| | NSW Heritage Manual (OEH) |
| | Statements of Heritage Impact (OEH) |
| | Port Stephens LEP 2013 |
| Public Safety | |
| | State Environmental Planning Policy No. 33 – Hazardous and Offensive Development |
| | Hazardous and Offensive Development Application Guidelines – Applying SEPP 33 |
| | Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis |
| Waste | |
| | Waste Classification Guidelines (EPA) |
| Rehabilitation | |
| | Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth) |
| | Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth) |
| | Strategic Framework for Mine Closure (ANZMEC-MCA) |
| Environmental Planning Instruments - General | |
| | State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 |
| | State Environmental Planning Policy (State and Regional Development) 2011 |
| | State Environmental Planning Policy (Infrastructure) 2007 |
| | Port Stephens Local Environmental Plan 2013 |

ATTACHMENT 2

Agency Correspondence

Sarah Fabian

From: Brett Gardiner <Brett.Gardiner@portstephens.nsw.gov.au>
Sent: Thursday, 6 April 2017 4:11 PM
To: Sarah Fabian
Subject: FW: Request for Secretary's Environmental Assessment Requirements - Bob Farm Sands Project (SSD 6395)
Attachments: PEA.pdf; 21400005 - Local Context Plan.pdf; 21400004 - Regional Context Plan.pdf; Bobs Farm Sand Project - DGRs.pdf; Port Stephens.pdf

Hi Sarah,

I apologise for the late response from Council. For some reason I had it in my head that this was not due until the end of this week.

Council has reviewed the proposal and provides the following additional input to the preparation of revised SEARs:

1. Council considers that the proposal could have a negative impact on local biodiversity and that a Biodiversity Assessment Report should be prepared to inform the assessment process. The biodiversity report should include:
 - A detailed assessment of measures to avoid and minimise impacts to flora and fauna.
 - A detailed assessment of proposed mitigation measures and biodiversity offsets proposed for residual impacts. A legally binding mechanism is required to secure biodiversity offsets in perpetuity. Details are required as to the funding mechanism proposed to fund management of the biodiversity offset in perpetuity.
 - Accurate mapping and estimates of native vegetation clearance. Based on Council's review, it appears Swamp Sclerophyll Forest and River-flat Eucalypt Forest, both endangered ecological communities listed on the NSW TSC Act, occur at the site. (Note: River-flat Eucalypt Forest is uncommon in Port Stephens Local Government Area).
 - Accurate mapping and estimates of hollow-bearing trees at the site, including number and size class of hollows present.
 - An assessment of impacts to corridors and fauna movement through the site pre and post development. An assessment of location and width of retained native vegetation corridors for fauna movement post development. Retained native vegetation should include the areas of Swamp Sclerophyll Forest and River-flat Eucalypt Forest endangered ecological communities.
 - The site is mapped as supplementary koala habitat in the Port Stephens Comprehensive Koala Plan of Management. An assessment of the application under the Port Stephens Comprehensive Koala Plan of Management is required, including the performance criteria for development applications.
 - A detailed assessment of impacts to threatened species, communities and their habitats listed on the TSC Act and/or EPBC Act.
 - A detailed assessment of impacts to groundwater dependant ecosystems at the site.
 - Targeted surveys for threatened orchids during the peak flowering period for *Cryptostylis hunteriana*, *Diuris arenaria*, *Diuris praecox*, *Genoplesium bauera*, *Phaius australis* and *Rhizanthella slateri*. Targeted surveys for other threatened flora where suitable habitat occurs.
 - Surveys for threatened fauna in accordance with Threatened Biodiversity Survey and Assessment: Guidelines for Development and Activities (DEC 2004), including

targeted surveys for koala, squirrel glider, brush-tailed phascogale, wallum froglet, New Holland mouse, threatened owls and microbats.

- Development of a progressive Rehabilitation Strategy including staging of works, stockpiling of cleared native vegetation and staged rehabilitation to maintain viability of the stockpiled material.
- Undertake an assessment to determine an appropriate buffer width to neighbouring properties so that they don't experience wind-blown sand.

2. The proposal is likely to have social impacts and as a result, a Social Impact Assessment should be provided with the application.

I would like to confirm that the above items are in addition to the matters provided in the previous input to the preparation of SEARS.

Please let me know if you have any questions and I will be happy to help.

Regards,



Brett Gardiner | Senior Executive Planner
p (02) 49800213
m 0417474901
w www.portstephens.nsw.gov.au



From: Sarah.Fabian@planning.nsw.gov.au [<mailto:Sarah.Fabian@planning.nsw.gov.au>]

Sent: Thursday, 23 March 2017 10:38 AM

To: SwitchPC

Cc: genevieve.seed@planning.nsw.gov.au

Subject: Request for Secretary's Environmental Assessment Requirements - Bob Farm Sands Project (SSD 6395)

Good Morning

Bob Farm Sands Project (SSD 6395)

Tattersall Lander Pty Ltd on behalf of Ammos Resource Management Pty Ltd is currently preparing an Environmental Impact Statement for the Bobs Farm Sands Project in Port Stephens local government. Director-Generals Requirements were issued in March 2014 for this project. However as two years has passed, the Department is preparing revised SEARs for the project.

The Department requests your input on the revised SEARs for the project.

I have attached documents from the DGRs for your reference, including:

- previous Port Stephen Council comments;
- the Preliminary Environmental Assessment;
- local and regional plans; and
- the Director General Requirements issued March 2014.

It would be greatly appreciated if we could receive your revised advice by **Tuesday 4 April 2017**.

If you have any queries, please contact me on the details below.

Kind Regards

Sarah

Sarah Fabian

Student Planner

Resource Assessments

Level 22, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001

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Environment**



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4 April 2017

Sarah Fabian
Student Planner – Resource Assessments
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Emailed: Sarah.Fabian@planning.nsw.gov.au

Your Reference: SSD 6395
Our Reference: OUT17/13772

Dear Ms Fabian,

**Re: Request for revised Secretary's Environmental Assessment Requirements
Proposal – Bobs Farm Sands Project (SSD 6395)**

Thank you for the opportunity to provide advice for the revised Secretary's Environmental Assessment Requirements for Bobs Farm Sand Project (SSD 6395) by Tattersall Lander Pty Ltd on behalf of Ammos Resource Management Pty Ltd (the proponent). This is a response from New South Wales Department of Planning & Environment – Division of Resources & Mining – Geological Survey of New South Wales (GSNSW).

The building and construction industries in NSW require ongoing replacement of supplies as sources are exhausted. The development of new quarries, subject to environmental assessment, helps to ensure a continued supply of material for a range of building and construction uses in NSW.

It is in the best interests of both the proponent and the community to fully assess the resources which are to be extracted. This means that a thorough geological assessment should be undertaken to determine the nature, quality and extent of the resource. Failure to undertake such an assessment could lead to operational problems and possibly even failure of the proposal.

Background

The project area is located 28km north east of Newcastle and 17 km south west of Port Stephens within the Port Stephens LGA. The proponent proposes to extract 750,000 tonnes per annum of sand for construction purposes with the potential to provide fracking sand for coal seam methane extraction and an export resource for glass manufacturing.

The subject site overlies Pleistocene marine sands and is located in the central east portion of Exploration Licence (EL) 8254 (held by the proponent for exploration of Group 10 Minerals). Past exploration in the area has confirmed that these units host variable amounts of heavy minerals including rutile, zircon, ilmenite and leucoxene which are prescribed minerals under the *Mining Act 1992*. The proposed extractive operation has the potential to produce by-product heavy

mineral sands. Production of these minerals **would** require a Mining Lease under the *Mining Act 1992*.

Construction sand is **not** a prescribed mineral under the *Mining Act 1992*. Therefore, the Department has no statutory role in authorising or regulating the extraction of this commodity, apart from its role under the *Work Health and Safety Act 2011* and associated regulations and the *Work Health and Safety (Mine and Petroleum Sites) Act 2013* and associated regulations, for ensuring the safe operation of mines and quarries. However, the Department is the principal government authority responsible for assessing the State's resources of construction materials and for advising State and local government on their planning and management.

All environmental reports, (EIS or similar) accompanying a Development Applications for extractive industry lodged under the *Environmental Planning & Assessment Act* should include a resource assessment **(as detailed in Attachment A)**. Specifically, the Environmental Assessment should:

- Document the size, and quality of the resource and demonstrate that both have been adequately assessed; and
- Document the methods used to assess the resource and its suitability for the intended applications (eg. grainsize, components for construction sand, fracking sand, heavy minerals); and
- Should include resource estimates for construction materials, industrial uses and for heavy mineral sands
- Provide representative cross-sections through the deposit showing the key geological units and the water table.

If heavy minerals are *not* to be extracted, then the possibility of their sterilisation should be addressed. The proposed handling/stockpiling and any end uses for sand known to contain heavy minerals should be detailed.

If heavy minerals *are* to be extracted the proposed mineral separation methods, including flow charts should be provided. The treatment and handling of monazite should be described in detail to address any radiation concerns.

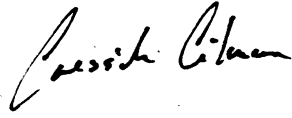
The above information should be summarised in the EIS, with full documentation appended. If deemed **commercial-in-confidence**, the resource assessment summary included in the EIS should commit to providing the Department with full resource assessment documentation separately. Applications to modify, expand, extend or intensify an existing consent that has already been adequately reported using the above protocol in publicly available documents, may restrict detailed documentation to the additional resources to be used, if accompanied by a summary of past resource assessments and of past production.

The Department collects data on the quantity of construction materials produced annually throughout the State. Forms are sent to all operating quarries at the end of each financial year for this purpose. The statistical data collected is of great value to Government and industry in planning and resource management, particularly as a basis for analysing trends in production and for estimating future demand for particular commodities or in particular regions. Production data may be published in aggregated form, however production data for individual operations is kept strictly confidential.

In order to assist in the collection of construction material production data, the proponent should be required to provide annual production data for the subject site to the Department as a condition of any new or amended development consent.

Queries regarding the above information, and future requests for advice in relation to this matter, should be directed to the Division of Resources & Mining – Geological Survey of New South Wales Land Use team at landuse.minerals@industry.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Cressida Gilmore', written in a cursive style.

Cressida Gilmore
Manager - Land Use

Encl. Attachments "A"

ATTACHMENT A**NSW Department of Planning & Environment
RESOURCES & ENERGY DIVISION****ENVIRONMENTAL and WORK HEALTH & SAFETY
ASSESSMENT REQUIREMENTS FOR
CONSTRUCTION MATERIAL QUARRY PROPOSALS**

It is in the best interests of both the proponent and the community to fully assess the resources which are to be extracted. This means that a thorough geological assessment should be undertaken to determine the nature, quality and extent of the resource. Failure to undertake such an assessment could lead to operational problems and possibly even failure of the proposal.

The following issues need to be addressed when preparing an environmental assessment (EA) or environmental impact statement (EIS) for a proposed construction materials (extractive materials) quarry:

Resource Assessment

1. A summary of the regional and local geology including information on the stratigraphic unit or units within which the resource is located.
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, should be included in the EA or EIS. Relevant supporting documentation such as drill logs should be included or appended. Major resource proposals should be subject to extensive drilling programs to identify the nature and extent of the resource.
3. Characteristics of the material or materials to be produced:
 - a) For structural clay/shale extraction proposals, ceramic properties such as plasticity, drying characteristics (e.g. dry green strength, linear drying shrinkage), and firing characteristics (e.g. shrinkage, water absorption, fired colour) should be described.
 - b) For sand extraction proposals, properties such as composition, grain size, 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.
 - c) For hard rock aggregate proposals, information should be provided on properties such as grain size and mineralogy, nature and extent of weathering or alteration, and amount and type of deleterious minerals, if any.
 - d) For other proposals, properties relevant to the range of intended uses for the particular material should be indicated.

Details of tests carried out to determine the characteristics of the material should be included or appended. Such tests should be undertaken by NATA registered testing laboratories.

4. An assessment of the quality of the material and its suitability for the anticipated range of applications should be given.
5. The amount of material anticipated to be produced annually should be indicated. If the proposal includes a staged extraction sequence, details of the staging sequence needs to be provided. The intended life of the operation should be indicated.
6. If the proposal is an extension to an existing operation, details of history and past production should be provided.
7. 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.
8. Justification for the proposal in terms of the local and, if appropriate, the regional context.
9. Information on the location and size of markets to be supplied from the site.
10. Route(s) used to transport quarry products to market.
11. Disposal of waste products and the location and size of stockpiles.
12. Assessment of noise, vibration, dust and visual impacts, and proposed measures to minimise these impacts.
13. Proposed rehabilitation procedures during, and after completion of, extraction operations, and proposed final use of site.
14. Assessment of the ecological sustainability of the proposal.

Health and Safety Issues

In relation to the health and safety of mining and quarrying operations, the following must be addressed:

1. All mining operations are to comply with the following legislation:
 - a. *Work Health and Safety Act 2011*
 - b. *Work Health and Safety Regulation 2011*
 - c. *Work Health and Safety (Mine and Petroleum Sites) Act 2013*
 - d. *Work Health and Safety (Mine and Petroleum Sites) Regulation 2014*
 - e. *Explosives Act 2003*
 - f. *Explosives Regulation 2013.*
2. | The mine holder must appoint a mine operator and notify the Department in writing as required by clause 7 of the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014* before commencing any mining operations.

3. Other duties and notification and reporting requirements exist under the WHS laws
| and duty holders must ensure they understand and comply with these requirements.

Mineral Ownership

The *Mining Act 1992* applies to those commodities prescribed by the regulations of the Act (Schedule 2, *Mining Regulation 2016*). Most construction materials are not prescribed minerals under the *Mining Act 1992*. In general terms, this means these materials are owned by the Crown where they occur on Crown land and by the landowner in the case of freehold land. A Mining Title is not required for their extraction although a Crown Lands licence is required where they occur on Crown land.

Construction materials such as *sand (other than marine aggregate), loam, river gravel, and coarse aggregate materials such as basalt, sandstone, and granite* are not prescribed minerals under the *Mining Act 1992*. Therefore, NSW Division of Resources & Mining has no statutory responsibility for authorising or regulating the extraction of these commodities, apart from its role under the WHS laws with respect to the safe operation of mines and quarries. However, the Department is the principal government authority responsible for assessing the State's resources of construction materials and for advising State and local government on their planning and management.

Some commodities, notably *structural clay (ie clay for brick, tile and pipe manufacture), dimension stone (except for sandstone), quartzite, kaolin, limestone and marine aggregate* are prescribed minerals under the *Mining Act 1992*. Minerals which are prescribed as minerals under the terms of the Mining Act may, in some cases belong either to the Crown or to an individual, depending on a number of factors including the date on which the mineral was proclaimed and the date of alienation of the land.

The proponent needs to determine whether the material is privately owned or Crown mineral (publicly owned). If it is privately owned, then either a mining lease or mining (mineral owner) lease would be required. If it is a Crown mineral, an application for a mining lease will have to be lodged.

If you are unsure whether a mining title is required for your proposal you should contact NSW Department of Planning & Environment, Resources & Mining Division.



Department of Primary Industries

OUT17/13820

Ms Sarah Fabian
Resource Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Sarah.fabian@planning.nsw.gov.au

Dear Ms Fabian

Bobs Farm Sand Project (SSD 6395) Request for Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 21 March 2017 to the Department of Primary Industries (DPI) in respect to the above matter. Comment has been sought from relevant divisions of DPI. Views were also sought from NSW Department of Industry - Lands that are now a division of the broader Department and no longer within NSW DPI. Any further referrals to DPI can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

DPI has reviewed the application and the original Director General's Environmental Assessment Requirements issued for the project and recommends that the revised SEARs should also require the Environmental Impact Statement to include the following:

Land Resources:

- A biosecurity risk assessment outlining the likely plant, animal and community risks as well as detailed biosecurity response and contingency plans including monitoring and mitigation measures for weed and pest management.

Water Resources:

- Detail on predicted generation and disposal methods of tailings and potential acid forming (PAF) material such as pyrite and whether oxidisation may pose a potential acid sulfate soils risk.
- Groundwater baseline information must be obtained for a minimum 2 years, as per AIP. This baseline information should consider water level and water quality analysis in line with any proposed water uses.

Policies, Guidelines & Plans:

- Reference to *Draft Agricultural Impact Assessment Guidelines 2011 (DP&I)* should be removed as this document has been superseded.
- The section Land Resources should include the following:
 - [Agricultural Impact Statement technical notes \(2013\)](#)
 - [Land Use Conflict Risk Assessment Guide \(2011\)](#)
 - [Agricultural Issues for Extractive industry Development \(2012\)](#)

- The section Water Resources should include [NSW Aquifer Interference Policy \(2012\)](#)

Yours sincerely



Mitchell Isaacs

Director, Planning Policy & Assessment Advice

4 April 2017

DPI appreciates your help to improve our advice to you. Please complete this three minute survey about the advice we have provided to you, here:

<https://goo.gl/o8TXWz>



DOC17/204436, EF14/502

NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Ms Sara Fabian

Dear Ms Fabian

**STATE SIGNIFICANT DEVELOPMENT 6395 - PROPOSED BOB'S FARM SANDS PROJECT
NO AMMENDMENTS TO PREVIOUS ADVICE**

Reference is made to your email and attachments dated 21 March 2017 seeking any revision of the Environment Protection Authority's (EPA) Director General's Requirements (DGR's) as provided for the above proposal on 20 February 2014.

The EPA note that no further information is provided regarding the proposal, accordingly the EPA rely on the previous DGR's provided to the Department of Planning and Environment for the proposal dated 20 February 2014.

If you require further information regarding this matter please contact Steve Clair on (02) 4908 6850.

Yours sincerely

STEVE CLAIR
Regional Operations Officer - Hunter
ENVIRONMENT PROTECTION AUTHORITY

Contact officer: STEVE CLAIR
02 4908 6850

[Click here to enter text.](#)



Office of Environment & Heritage

DOC17/178087-1
SSD 6395

Ms Sarah Fabian
Student Planner, Resource Assessments
Department of Planning and Environment
sarah.fabian@planning.nsw.gov.au

Dear Ms Fabian

Input into Secretary's Environmental Assessment Requirements for Bobs Farm Sand Project, Bobs Farm (SSD 6395)

I refer to your email dated 21 March 2017 inviting the Office of Environment and Heritage (OEH) to provide input into the Secretary's Environmental Assessment Requirements (SEARs) for the proposed Bobs Farm Sand Project. The project is located on Nelson Bay Road, at Bobs Farm within the Port Stephens local government area. OEH has previously issued Director General Requirements to the Department of Planning and Environment in correspondence dated 24 February 2014. However, rather than re-issue our previous response, OEH is of the view that the project should be compliant with current NSW Government guidelines and policies and as such we recommend that the new Standard SEARs be applied, which for biodiversity incorporate NSW Biodiversity Offsets Policy for Major Projects and the requirement to comply with the Framework for Biodiversity Assessment.

OEH understands that the proposal is State Significant Development under the *Environmental Planning and Assessment Act 1979*, and it includes:

- establishment of a quarry to extract and process sand at a rate of approximately 750,000 tonnes per annum, from a total sand resource of 10 million tonnes;
- construction of extractive materials processing and transport infrastructure;
- transportation of extractive materials off-site via roads; and
- rehabilitation of the site following post-quarrying.

OEH has reviewed the Preliminary Environmental Assessment Report prepared by Tattersall Lander Pty Ltd on behalf of Ammos Resource Management Pty Ltd (dated 13 February 2014) and has prepared Standard SEARs which are presented in **Attachment A**. OEH acknowledges that this information is generic and some sections may not be relevant to the proposal. There are Project Specific SEARs provided for this project for biodiversity matters as per **Attachment B**. **Attachment C** provides guidance material to assist with addressing the SEARs.

This project is to be assessed under the Framework for Biodiversity Assessment (FBA) and must be conducted by a person accredited in accordance with section 142B(1)(c) of the *Threatened Species Conservation Act 1995* (TSC Act). Please note, the FBA does not provide an exemption for removal of the Biodiversity Assessment Report (BAR) where a proponent deems the site (or parts thereof) to be

disturbed, cleared and/or have no apparent ecological value due to current disturbance. Under the Major Project policy the proponent must conduct an assessment in accordance with the FBA and specifically provide a BAR (via an accredited assessor).


The proponent will need to ensure that the biodiversity assessment is fully consistent with requirements of the FBA. Guidance documents to assist with this process are provided in **Attachment C**. OEH notes that OEH's 'Atlas of NSW Wildlife' database indicates that the following threatened species (as per Schedules under the TSC Act) have been recorded within the development footprint (*: recorded on site / property) or near the study area (within 5 km radius): *Diuris arenaria*, *Diuris praecox*, *Eucalyptus parramattensis* subsp. *decadens*, *Grevillea parviflora* subsp. *parviflora*, *Syzygium paniculatum*, Australasian Bittern, Beach Stone-curlew, Black-necked Stork, Black-tailed Godwit, Brush-tailed Phascogale, Bush Stone-curlew, Dusky Woodswallow, Eastern False Pipistrelle, Eastern Bentwing-bat, Eastern Freetail-bat, Eastern Osprey, Glossy Black Cockatoo, Greater Broad-nosed Bat, Grey-headed Flying-fox, Koala, Little Bentwing-bat, Little Lorikeet, Pied Oystercatcher, Powerful Owl, Sanderling, Sooty Oystercatcher, Southern Myotis, Spotted-tailed Quoll, Squirrel Glider, Swift Parrot, Varied Sittella, Wallum Froglet, White-bellied Sea-eagle and White-fronted Chat. These species must be considered in your assessment (though the assessment should not be restricted to these species).

OEH also notes (based on vegetation mapping) that the following endangered ecological communities may be present on the development site: Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions, and/or Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions.

With respect to threatened biodiversity, OEH considers that under the Framework for Biodiversity Assessment any impacts to *Pterostylis chaetophora* (Tall Rustyhood) and Mahoney's Toadlet (*Uperoleia mahonyi*) are matters that require further consideration.

If you have any further questions in relation to this matter, please contact Steve Lewer, Regional Biodiversity Conservation Officer, on 4927 3158.

Yours sincerely

 3/4/2017

SHARON MOLLOY
ACTING DIRECTOR, HUNTER CENTRAL COAST BRANCH
REGIONAL OPERATIONS DIVISION

Enclosure: Attachments A - C

Attachment A – Standard Environmental Assessment Requirements

| |
|--|
| <p>Biodiversity</p> <p>1. Biodiversity impacts related to the proposed development are to be assessed and documented in accordance with the <u>Framework for Biodiversity Assessment</u>, unless otherwise agreed by OEH, by a person accredited in accordance with s142B(1)(c) of the <i>Threatened Species Conservation Act 1995</i>.</p> |
| <p>Aboriginal cultural heritage</p> <p>2. The EIS must identify and describe Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the EIS. This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the <i>Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW</i> (DECCW, 2011) and consultation with OEH regional officers.</p> <p>3. Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the <i>Aboriginal cultural heritage consultation requirements for proponents 2010</i> (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.</p> <p>4. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the EIS. The EIS must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.</p> |
| <p>Historic heritage</p> <p>5. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to <i>State and local heritage</i> including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall:</p> <ul style="list-style-type: none"> a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996), b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria), c. include a statement of heritage impact for all heritage items (including significance assessment), d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations. |

Water and soils

6. The EIS must map the following features relevant to water and soils including:
 - a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
 - b. Rivers, streams, wetlands, estuaries (as described in Appendix 2 of the Framework for Biodiversity Assessment).
 - c. Groundwater.
 - d. Groundwater dependent ecosystems.
 - e. Proposed intake and discharge locations.
7. The EIS must describe background conditions for any water resource likely to be affected by the development, including:
 - a. Existing surface and groundwater.
 - b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
 - c. Water Quality Objectives (as endorsed by the NSW Government www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
 - d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.
8. The EIS must assess the impacts of the development on water quality, including:
 - a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.
 - b. Identification of proposed monitoring of water quality.
9. The EIS must assess the impact of the development on hydrology, including:
 - a. Water balance including quantity, quality and source.
 - b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
 - c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
 - d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
 - e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
 - f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.
 - g. Identification of proposed monitoring of hydrological attributes.

Flooding and coastal erosion

10. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:

- a. Flood prone land
- b. Flood planning area, the area below the flood planning level.
- c. Hydraulic categorisation (floodways and flood storage areas).

These should be mapped for both current conditions and for those applying with a projected sea level rise equivalent to that adopted by the relevant council for the year 2100 or if the council has not adopted a sea level rise planning level, for a sea level rise of 0.9 metre above the 1990 level.

11. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event for current conditions and for the sea level rise referred to in 10), above.

12. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:

- a. Current flood behaviour for a range of design events as identified above. The 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
- b. For a projected sea level rise as described in 10), above..

13. Modelling in the EIS must consider and document:

- a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.
- b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories.
- c. Relevant provisions of the NSW Floodplain Development Manual 2005.

14. The EIS must assess the impacts on the proposed development on flood behaviour, including:

- a. Whether there will be detrimental increases in the potential flood affection of other properties, assets and infrastructure.
- b. Consistency with Council floodplain risk management plans.
- c. Compatibility with the flood hazard of the land.
- d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
- e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
- f. Whether, having regard to the existing and proposed topography of the land, assess the impact of the proposed development on the capacity for ecosystem migration for mean sea levels equivalent to council's sea level rise planning level for the year 2100 or if the council has not adopted a sea level rise planning level, for a sea level rise of 0.9 metre above the 1990 level.
- g. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
- h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.

- i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.
- j. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.
- k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

Attachment B – Project Specific Requirements

1. Biodiversity

- A. Impacts on the following species will require further consideration and provision of the information specified in s9.2 of the Framework for Biodiversity Assessment:

***Pterostylis chaetophora* (Tall Rustyhood)** – This is a widespread, though rarely recorded, vulnerable orchid species, which has been recently listed. It is known from Taree to the Hunter Valley, including the Port Stephens local government area; where it is currently known from c. 18 scattered locations: in an area between Taree and Kurri Kurri, extending to the south-east towards Tea Gardens and west into the Upper Hunter, with additional records near Denman and Wingen. Specific details on its habitat and distribution are poorly known, though it is known from seasonally moist, dry sclerophyll forest with a grass and shrub understorey. The species has been recorded to the north-west of the proposal within the Grahamstown Dam catchment area; which represents the largest known population ('hundreds of plants') and its current most easterly limit of its geographic range in NSW. However, given that it has been poorly recorded there is the possibility it occurs elsewhere within its broad geographic range, such as Port Stephens. As such any potential loss could significantly reduce the viability and genetic diversity of this species, and therefore OEH specifically requires that this species is considered (in accordance Section 9 of the FBA).

Given its known habitat preferences and known occurrence within the local government area, OEH is of the opinion this species has the potential to occur on the proposed development site. As such OEH expects appropriately targeted sampling to be undertaken during its known flowering period (September to November [Bishop 2000]) and samples sent to the NSW Herbarium for identification and/or confirmation. OEH will provide assistance with details of the nearby location to assist with the targeted sampling.

Mahoney's Toadlet (*Uperoleia mahonyi*) – This species has recently (10 March 2017) listed as an endangered species on an emergency basis as set out in Part 2, Division 4 of the *NSW Threatened Species Conservation Act 1995*. Mahoney's Toadlet is a newly described species of Australian frog (as described in Clulow *et al.* 2016) which has the potential to occur on the subject site. This species was recently discovered at Oyster Cove and inhabits coastal sandplains of the mid-north NSW coast, from the Port Stephens area to the Central Coast. The species is known to from a number of locations in Port Stephens: Fingal Bay, Grahamstown, Oyster Cove (type location), Medowie, Nelson Bay (golf club) Tomago and Williamstown; including nearby sand mine developments. It is closely related to *U. laevigata*, which was widely recorded in the Port Stephens area and to which it is easily mistaken with. Clulow *et al.* (2016) describe this species as a "a habitat specialist, inhabiting coastal ephemeral and semi-permanent swamps and swales, and occasionally man made dams, in heath or wallum habitats almost exclusively on a substrate of white/leached sand". As such suitable habitat exists on the subject site. Given its recently listing and potential confusion with more commonly related taxa, coupled with suitable habitat on the subject site, OEH considers any potential loss of known habitat could significantly reduce the viability and genetic diversity of this species, and therefore OEH specifically requires that this species is considered (in accordance Section 9 of the FBA).

Although, the potential habitat on the subject site (i.e. swamp forest) is likely to be retained, it has been recorded away from water (as detailed in Clulow *et al.* 2016), and there is community concern regarding the impacts on this species associated with sand mining (e.g. Cabbage Tree Road, to the west of this proposal). As such OEH recommends that targeted surveying be undertaken to determine absence or presence. Surveying should be carried out during its breeding season (i.e. spring: October to November [Clulow *et al.* 2016]), and following rain, over two consecutive nights, and for three hours duration (as per OEH 2009 guidelines). Furthermore, OEH recommends surveying should be conducted by a suitable qualified amphibian specialist who is familiar with the species, given that it is easily confused with closely allied taxa.

References:

Bishop, T. (2000) *Field Guide to the Orchids of New South Wales and Victoria*. Second Edition, University of New South Wales Press Ltd., UNSW, Sydney.

Clulow, S., Anstis, M., Scott Keogh, J. and Catullo, R.A. (2016) A new species of Australian frog (Myobatrachidae: *Uperoleia*) from the New South Wales mid-north coast sandplains. *Zootaxa*, **4184** (2): 285-315.

DECC (2009) *Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians*. April 2009. Department of Environment and Climate Change (NSW), Goulburn Street, Sydney.

Attachment C – Guidance material

| Title | Web address |
|--|--|
| <u>Relevant Legislation</u> | |
| <i>Coastal Protection Act 1979</i> | www.legislation.nsw.gov.au/maintop/view/inforce/act+13+1979+cd+0+N |
| <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> | www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/ |
| <i>Environmental Planning and Assessment Act 1979</i> | www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N |
| <i>Fisheries Management Act 1994</i> | www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N |
| <i>Marine Parks Act 1997</i> | www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N |
| <i>National Parks and Wildlife Act 1974</i> | www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N |
| <i>Protection of the Environment Operations Act 1997</i> | www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N |
| <i>Threatened Species Conservation Act 1995</i> | www.legislation.nsw.gov.au/maintop/view/inforce/act+101+1995+cd+0+N |
| <i>Water Management Act 2000</i> | www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N |
| <i>Wilderness Act 1987</i> | www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N |
| <u>Biodiversity</u> | |
| NSW Biodiversity Offsets Policy for Major Projects (OEH, 2013) | www.environment.nsw.gov.au/resources/biodiversity/140672biopolicy.pdf |
| Framework for Biodiversity Assessment (OEH, 2013) | www.environment.nsw.gov.au/resources/biodiversity/140675fba.pdf |
| Fisheries NSW policies and guidelines | www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation |
| List of national parks | www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx |
| Revocation, re-categorisation and road adjustment policy (OEH, 2012) | www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm |
| Guidelines for developments adjoining land and water managed by OEH (DECCW, 2010) | www.environment.nsw.gov.au/resources/protectedareas/10509devadjdeccw.pdf |
| <u>Heritage</u> | |
| The Burra Charter (The Australia ICOMOS charter for places of cultural significance) | http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf |
| Statements of Heritage Impact 2002 (HO & DUAP) | www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf |
| NSW Heritage Manual (DUAP) 1996 | www.environment.nsw.gov.au/Heritage/publications/index.htm#G-I |

| <u>Aboriginal Cultural Heritage</u> | |
|--|--|
| Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010) | www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf |
| Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010) | www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf |
| Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011) | www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf |
| Aboriginal Site Recording Form | www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf |
| Aboriginal Site Impact Recording Form | www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf |
| Aboriginal Heritage Information Management System (AHIMS) Registrar | www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm |
| Care Agreement Application form | www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf |
| The Burra Charter and Indigenous Cultural Heritage Management Practice Notes available at: | http://australia.icomos.org/publications/burra-charter-practice-notes |
| <u>Water and Soils</u> | |
| Acid sulphate soils | |
| Acid Sulfate Soils Planning Maps via 'The NSW Natural Resource Atlas' | www.nratlas.nsw.gov.au/ |
| Acid Sulfate Soils Manual (Stone et al. 1998) | www.planning.nsw.gov.au/rdaguidelines/documents/NSW%20Acid%20Sulfate%20Soils%20Planning%20Guidelines.pdf |
| Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004) | http://www.advancedenvironmentalmanagement.com/Reports/Savannah/Appendix%2015.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above. |
| Flooding and Coastal Erosion | |
| Reforms to coastal erosion management | www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm |
| Floodplain development manual | www.environment.nsw.gov.au/floodplains/manual.htm |
| Guidelines for Preparing Coastal Zone Management Plans | Guidelines for Preparing Coastal Zone Management Plans www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf |
| NSW Climate Impact Profile | NSW Climate Impact Profile |
| Climate Change Impacts and Risk Management | Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation |
| Water | |
| Water Quality Objectives | www.environment.nsw.gov.au/ieo/index.htm |
| ANZECC (2000) Guidelines for Fresh and Marine Water Quality | www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1 |
| Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones | http://deccnet/water/resources/AWQGuidance7.pdf |

Approved Methods for the Sampling and
Analysis of Water Pollutant in NSW
(2004)

[www.environment.nsw.gov.au/resources/legislation/approvedmeth
ods-water.pdf](http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf)



6 April 2017

CR2017/001129
SF2014/001281
DC

Department of Planning & Environment
Industry Assessments
GPO Box 39
SYDNEY NSW 2001

Attention: Sarah Fabian

NELSON BAY ROAD (B63): PROPOSED SAND QUARRY – LOT 254 DP 753204, LOT 51 DP 1015671 & LOT 10 DP 1071458, NELSON BAY ROAD, BOBS FARM – DIRECTOR GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SSD 6395)

Reference is made to Department of Planning and Environment's email dated 21 February 2017, requesting Roads and Maritime Services' (Roads and Maritime) requirements under Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* for the Environmental Impact Statement (EIS). It is understood that the Department is seeking updated requirements as the previous requirements issued in March 2014 have expired.

Transport for NSW and Roads and Maritime's primary interests are in the road network, traffic and broader transport issues. In particular, the efficiency and safety of the classified road network, the security of property assets and the integration of land use and transport.

Roads and Maritime has reviewed the preliminary information, prepared by Tattersalls and Landers dated February 2014, for the subject project and provide the following comments.

Roads and Maritime response & requirements

The EIS should refer to the following guidelines with regard to the traffic and transport impacts of the proposed development:

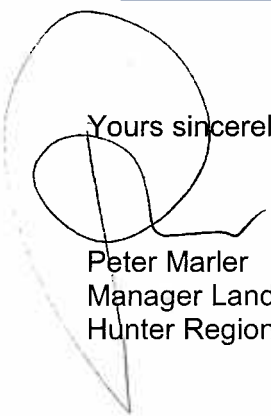
- *Road and Related Facilities* within the Department of Planning *EIS Guidelines*, and,
- *Section 2 Traffic Impact Studies* of Roads and Maritime's *Guide to Traffic Generating Developments 2002*.

Roads and Maritime Services

Furthermore, a traffic and transport study shall be prepared in accordance with the Roads and Maritime's *Guide to Traffic Generating Developments 2002* and is to include (but not be limited to) the following:

- Assessment of all relevant vehicular traffic routes and intersections for access to / from the subject properties.
- Current traffic counts for all of the traffic routes and intersections.
- The anticipated additional vehicular traffic generated from both the construction and operational stages of the project.
- The distribution on the road network of the trips generated by the proposed development. It is requested that the predicted traffic flows are shown diagrammatically to a level of detail sufficient for easy interpretation.
- Consideration of the traffic impacts on existing and proposed intersections, in particular, the intersection of the Nelson Bay Road and Marsh Road, and the capacity of the local and classified road network to safely and efficiently cater for the additional vehicular traffic generated by the proposed development during both the construction and operational stages. The traffic impact shall also include the cumulative traffic impact of other proposed developments in the area.
- Identification of the necessary road network infrastructure upgrades that are required to maintain existing levels of service on both the local and classified road network for the development (if required). In this regard, preliminary concept drawings shall be submitted with the EIS for any identified road infrastructure upgrades. However, it should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of Roads and Maritime and Council.
- Traffic analysis of any major / relevant intersections, using SIDRA or similar traffic model, including:
 - Current traffic counts and 10 year traffic growth projections, allowing a 2% background growth on the classified road network
 - With and without development scenarios considered
 - 95th percentile back of queue lengths
 - Delays and level of service on all legs for the relevant intersections
 - Use of SIDRA or similar traffic model
 - Electronic input/output data files for RMS review
- Any other impacts on the regional and state road network including consideration of pedestrian, cyclist and public transport facilities and provision for service vehicles.

Should you require further information please contact Hunter Land Use on 4908 7688 or by email at development.hunter@rms.nsw.gov.au



Yours sincerely

Peter Marler
Manager Land Use Assessment
Hunter Region

