Attachment A

1. Description of the project

The proponent is requested to provide a full updated consolidated project description that addresses the following comments:

- Inconsistencies remain in relation to describing the area of the site and project parameters. For example:
    - Section 4.2 of the RTS states that of a total site area of 50.04ha, 39.07ha will be mined and 11.46ha will consist of buffer strips (DPIE notes this adds up to a total site area of 50.53ha).
    - Section 4.5 of the RTS states that sand mining operations will be undertaken over an area of 'about 36.07ha'.
    - Section 2 page 6 of the updated Biodiversity Assessment Report states that the proposed sand mine will have a disturbance zone of 36.46ha.
    - Section 2 page 9 of the updated Biodiversity Assessment Report goes on to state that of the 27.18ha of native vegetation directly impacted, 12.10ha will be rehabilitated while the remaining 24.42ha of the extraction area will become an artificial lake (DPIE notes that this equates to a total extraction area of at least 36.52ha, an area larger than the disturbance zone noted earlier).

  Please provide a clear statement regarding the following project parameters and provide a figure clearly indicating the location of each of these boundaries:
    - Total site area
    - Total disturbance area
    - Total extraction area
    - Total buffer area.

  Please also confirm whether any technical specialist assessments require updating to account for inaccuracies in area calculations or assumptions.

- Inconsistencies in the hours of operation of the project exist between the RTS and specialist studies. The RTS states that the hours of operation are Monday to Saturday 7am to 7pm, whereas:

    - Section 2.3 of the Air Quality Assessment states that hours of operation are initially '*from 06:00 -16:00, with provision for an additional 10 hour shift if production and or sales demands require it.*' Then goes on to state that '*Operational hours for both extraction, loading of vehicles and transportation of material are proposed to be Monday to Saturday – 06:00 to 18:00 only*.'
    - Section 3.3 of the noise impact assessment states that hours of operation are Monday to Saturday 7am to 7pm, however then goes on to model operational impacts of the project during the night time period, stating in Section 7.1 that '*Operation has been assessed for 1 hour in the night period (6am-7am) for potential flexibility of operation hours if required*.'

- Inconsistencies exist in the hours of construction. The RTS and Updated Noise Impact Assessment state that the hours of construction are Monday to Saturday 7am to 7pm, whereas

Section 2.3 of the Air Quality Assessment states that construction activities will be undertaken '*from 07:00 to 17:00*'.

- Describe the activities that will be undertaken during the construction phase of the project, and describe any overlap between construction activities and operational activities.

- Inconsistencies exist in the height above the groundwater table that dry mining techniques will be utilised. Section 4.5 and Figure 4.6 indicate that the proponent will use dry extraction methods down to 2 metres above the water table, while Table 4.2 indicates that the proponent will utilise dry mining techniques down to 1 metre above the groundwater table. Please clarify this discrepancy.

- Please provide a schedule of plant and equipment to be used in each mining phase, including the type and number of each item of plant/equipment to be used.

- Please provide a description of the structures proposed to be constructed on site, including dimensions of proposed shed and screen enclosure.

- Please provide details of proposed maximum stockpile volumes and heights.

- Please provide an updated description of the proposed water management system, including any aspects relevant to acid sulphate soils management. This should be supported by a schematic of the proposed surface water management system.

- Key mitigation measures should be described in the project description and, where relevant, shown on project layout figures. Examples include the noise bunds and walls recommended by the Updated Noise Impact Assessment and the paved haul road and enclosed screen proposed by the Air Quality Assessment.

- A number of the figures provided in the RTS show extraction occurring to the south of the power easement, for example figure 4.5, 4.8 and 4.9. This is inconsistent with the proposal presented in the RTS. The Department requests these figures be updated to reflect the current proposal.

- To assist in providing a clear, consolidated description of the project, please provide a table summarising all key project components. Please also include in this table a comparison of these key project components against those proposed by the original EIS – this will enable to a clear comparison of project changes between the EIS and RTS phase. Key project parameters may include:

    - Project life
    - Total resource
    - Extraction rate
    - Extraction area
    - Total disturbance area
    - Hours of operation
    - Hours of construction
    - Employees

- Mining method
- Processing method
- Transport methods and truck movements
- Equipment and infrastructure
- Site access
- Rehabilitation and final landform
- Capital investment value

2. Project layout figures

The proponent is requested to provide updated project layout figures that address the following comments:

- A number of the technical specialist studies submitted with the RTS and EIS identify project components that are not currently shown on project layout figures. For example:
  - the RTS references a 20 metre wide APZ around the proposed shed, this APZ is not shown on project layout figures and, if applied, may encroach on the adjacent buffer zone.
  - Section 6.5.2 of the Hydrogeological Assessment identifies the need for sediment ponds or similar to treat surface water runoff from the sand processing area, these ponds are not shown on the project layout figures.
  - The Surface Water Management Plan identifies a truck washdown area that is not currently shown on project layout figures.
  - The Air Quality Assessment identifies a wheel wash at the exit of the mine that is not shown on project layout figures.
  - The Hydrogeological Assessment identifies the need for a septic tank and absorption trench with appropriate buffers. By contrast, the Surface Water Management Plan states that an Aerated Wastewater Treatment Facility and associated irrigation area will be required. Please provide clarification as to which type of wastewater treatment facility is proposed and identify the location (including relevant absorption or irrigation area) on the project layout figures.
  - The Acid Sulphate Soils Management Plan recommends that an acid sulphate soils treatment area incorporating a lined settling pond, a leachate collection pond and an impermeable treatment pad are required to be established within the project area. These are not shown on project layout figures.
  - The updated Noise Impact Assessment recommends the construction of substantial noise bunds ranging from 6-8 metres in height around the proposed extraction area. Earthen bunds of this size will have a substantial footprint that will impact either on the extent of the proposed extraction area or the extent of the buffer zone surrounding the extraction area. The footprint of these bunds should be calculated and shown on project layout figures.

  The Department requests that an updated project layout figure be submitted identifying all project components.

- Further to the request above, please provide a zoomed/detailed layout for the proposed infrastructure area showing all relevant project features discussed in the EIS, RTS and specialist studies. This should include but not be limited to proposed structures, plant and equipment, traffic flow paths, carparking areas, stockpile layout, loading area layout, water management

features, acid sulphate soil treatment facilities, asset protection zones (APZs), site access layout, earthworks cut and fill batters and noise walls.

- The RTS references a Right of Way across the mine site from Lot 521. Please identify this Right of Way on a figure showing the project layout.

3. Project clarifications and additional information

The proponent is requested to provide a specific response to each of the following comments and, where relevant, to consider these comments in preparing the updated consolidated project description and project layout figures requested in items 1 and 2 above.

- Section 4.5 of the RTS states that on top of the original 15m offset from the existing boundary, '*there will be an enhanced buffer around the whole mine that will be progressively rehabilitated*'. Please provide further clarification of what this 'enhanced buffer' is, where it is located and whether it will be impacted by the proposal. Please indicate the location of this 'enhanced buffer' on project layout figures.

- Provide stage plans for mining for key phases of the project life. These plans should show the progression of mining over time as well as progressive rehabilitation proposed over the project life. These stage plans should be supported by a description of the schedule/timing for each stage, the volume/tonnage of sand resource extracted per stage and a description of the progressive rehabilitation to be undertaken at each stage.

- Provide details of the quantity of mulch and topsoil that will be required to be stored on site following clearing activities, the location for storing this mulch and topsoil and a comment on the capacity of the nominated stockpiling area to accommodate the storage of this mulch and topsoil as well as other stockpiled product or materials.

- Section 6.5.2 of the Hydrogeological Assessment identifies the potential for fuel and chemical storage on site. Please detail the types, quantities, location and method of storage for all fuels and chemicals proposed to be stored on site and provide an assessment against SEPP 33 consistent with the *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33* (NSW Department of Planning 2011).

- Please explain how noise from construction activities, including the construction of noise bunds around the perimeter of the extraction area, have been assessed in the Updated Noise Impact Assessment. What noise sources were assessed for these construction works and what locations were the noise sources modelled? Please also confirm the likely duration and timing of bund construction.

- The Biodiversity Management and Rehabilitation Plan states that hollow bearing trees/logs are to be salvaged from the clearance area and placed within the buffer and stockpiled for future use. Noting that there are an estimated 875 hollow bearing trees identified within the disturbance area, please describe how this volume of material will be stockpiled within the buffer zone without damaging the biodiversity values of the buffer.

- Section 7.8.3 of the updated Noise Impact Assessment indicates that negotiated agreements are the preferred option to manage noise exceedances at surrounding sensitive receivers. Please provide a summary of any consultation undertaken to date with affected receivers and the progress towards achieving these agreements.

4. Aspects of RTS Request that remain outstanding

The proponent is requested to provide a response to the following residual matters that were raised in Attachment A to the Departments request for a response to submissions dated 7 February 2019. The residual matters outlined below do not appear to have been addressed in the RTS submitted by the proponent.

- Item 3. Transport:
    - The Department's request dated 7 February 2019 required that the TIA assess:
        - *the traffic impacts …for single carriageway sections of the proposed haulage routes, the roundabout at Paul's Corner (Richardson and Nelson Bay Roads) and the roundabout at Cabbage Tree and Nelson Bay Roads*.
        - *In terms of cumulative traffic impacts, DPE considers that sand haulage traffic due to other sand extraction operations must also be considered including:*
            - *Cabbage Tree Road Sand Quarry at Williamtown;*
            - *Mackas Sands' operations at Salt Ash and Williamtown;*
            - *ATB Morton's Salt Ash Quarry; and*
            - *Boral Resources' Stockton Bight Quarry at Fullerton Cove.*

      The TIA has instead applied a background growth value of 2% per annum as '*traffic flows associated with other developments are relatively low and within the background growth value of 2%*.' This statement is unsupported and does not address the requirement of the Department outlined in the request dated 7 February 2019, nor does it address the concerns raised in submissions in relation to cumulative heavy vehicle impacts.

      The Department requires that the proponent undertake an assessment of the cumulative traffic impacts of the project on the sections of the road network noted above based on the *current* capacity of these intersection. The assessment of cumulative traffic impacts must also specifically consider sand haulage traffic due to other sand extraction operations in the region.

- Item 8. Air Quality:
    - Point 1 does not appear to have been addressed in the RTS or updated Air Quality Assessment. Please assess the air quality impacts to the approved Eco-Cabins Retreat at 686 March Road Bobs Farm. Refer to the submission of Mr Andrew Tindale in this regard.
    - Point 2 does not appear to have been addressed in the RTS or updated Air Quality Assessment. Please assess potential impacts of air particulate emissions from the sand mine (including silica) to residents' tank drinking water supplies.
    - Point 4. The proponent appears to have sought to address Point 4 through reference to a quote in Table 2.30 of the draft report submitted as Annex 15 to the

RTS (*Supply and Demand Profile of Geological Construction Materials for the Greater Sydney Region.* RW Corkery & Co. Pty. Limited, 2019). This quote is replicated below.

Natural Sand:	• The State Government needs to acknowledge and inform the community (through the Health Department) that silicosis is not an environmental issue for natural sand quarries. So much time and cost is wasted each time a sand extraction proposal is placed before a community. It is a non-issue and should not continue to be raised in SEARs, etc. and requested to be addressed in Response to Submissions.

This statement does not address the Department's request in Point 4 to consider the submission of Robert Goldsworthy dated, 7 December 2018, and incorporate Site-specific studies of the size distribution of the Site's silica sand resource in the assessments presented in the RTS.

- Point 6 does not appear to have been fully addressed in the RTS or updated Air Quality Assessment. For example, the updated Air Quality Assessment has assessed a maximum production of 700,000 tonnes per annum rather than the proposed maximum of 750,000 tonnes per annum.

- Item 9. Social Impact Assessment
  - A detailed description of the proposed Social Impact Monitoring Program has not been provided in the RTS. Please provide this information.

- Item 10. Mineral Sands Component
  - A detailed description of how mineral sands would be recovered, processed and waste stream managed has not been provided in the RTS. Please provide this information.