



17 December 2019

Director - Social and Infrastructure Assessments  
Department of Planning, Industry and Environment  
GPO Box 39  
Sydney NSW 2001

**Attn: Rebecca Sommer**

Dear Ms Sommer

**Subject: Belmont Desalination Plant SSI - 8896  
(Council Ref: MISC/279/2017/B)**

Thank you for the opportunity to comment on the proposed Belmont Drought Response Desalination Plant at 12A Ocean Park Road, Belmont,

Please find following a range of matters that Lake Macquarie City Council officers have considered, including a number of important matters that Council would like to note or seek to be addressed prior to, or as part of any determination.

### **Erosion and Sediment Control**

The Environmental Impact Statement for the Hunter Water Corporation Belmont Drought Response Desalination Plant dated November 2019 has addressed earlier concerns raised by Council's Erosion and Sediment Control officer.

The proposed erosion and sediment control actions are in accordance with Council's Development Control Plan (DCP) 2014.

Our Ref: MISC/279/2017/B Your Ref: SSI-8896

126-138 Main Road T 02 4921 0333  
Speers Point NSW 2284 E council@lakemac.nsw.gov.au  
Box 1906 HRMC NSW 2310 W lakemac.com.au



## **Engineering**

### **Cut & Fill**

The proposed development includes significant cut and fill, in the order of 20 metres of cut and approximately 2 metres of fill. This is inconsistent with the DCP controls, however:

- a. The filling is required to facilitate sufficient levels above storm surge and sea level rise.
- b. The proposed cut will only be undertaken to facilitate the salt water take-up into the plant and will be hidden after construction finishes.

### **Stormwater Management**

A suitable Stormwater Management Plan in accordance with the Lake Macquarie DCP 2014 should be provided prior to construction commencing.

### **Design of Parking and Service Areas**

#### *Servicing*

The proposed development has not achieved adequate facilities for service vehicles with regard to AS 2890.2 Parking Facilities – Off Street commercial vehicle facilities.

- a) It should be demonstrated where and how service vehicles are parked/unloaded on the site. It is considered the access road should not be used for this purpose.

### **Construction Management Plan**

A Construction Management Plan should be required and fencing provided along the western side of the site providing a barrier to the neighbouring wetlands and Belmont Lagoon.

The Construction Management Plan should specifically address avoiding impacts on the native vegetation to the west of Ocean Park Road. This would include avoiding impacts that might arise from use of the road to access the site or upgrading the road.

## **Ecology – Flora and Fauna**

Council's Environmental Planner – Environmental Strategy has made the following comments:

All efforts should be made in the concept design and construction to avoid impacts on the adjacent State Environmental Planning Policy Coastal Management Wetlands, including direct removal of native vegetation and changes in hydrology.

Hydrological studies should be undertaken to quantify direct and indirect impacts on wetland ecosystems. These would need to address changes in frequency, height and duration of flooding and inundation, as well as any possible changes to ground water levels. The EIS indicates a ground water drawdown of 0.5m for 30 metres west of Ocean Park Road (P115). However, ground water drawdown is shown to be up to 1 metre and extending further west in Figure 7.6 (P101). The EIS states that the drawdown is considered unlikely to significantly impact on the persistence of the existing vegetation communities however, this statement is not substantiated with evidence. The impacts are not quantified. Drawdown for up to 2 years followed by a 1-2-year recovery could lead to significant impacts on important wetland vegetation communities particularly during drought. The relationship between ground and surface waters under drawdown conditions needs to be quantified and data on the impact of such drawdowns on the composition of wet heath and swamp mahogany communities over the long term is required.

Should any adverse impact within the Coastal Management SEPP mapped wetland area occur then the consent authority needs to have regard to Clause 10 of the policy and be satisfied that sufficient measures have been or will be undertaken to protect and where possible enhance the wetland.

Any roadworks required to access the site, or deterioration of the existing road surface associated with site access also has the potential to impact on the native vegetation communities, (including wetland vegetation), to the west of Ocean Park Road. Raising the road could also change surface hydrology.

Adverse impacts on the wetland ecosystem regardless of significance would also be inconsistent with the objectives of the adjacent (E2) Environmental Conservation Zone (LMLEP 2014).

Any unavoidable impacts on native vegetation should be adequately offset. This includes direct and indirect impacts whether or not the proposal triggers the Biodiversity Offset Scheme (BOS). Unavoidable impacts should be offset within and around the wetland being affected and if this is not possible within a similar ecosystem in the local area.

The impacts of increased saline discharge on water quality and nearshore ecosystems should also be addressed.

Additional control measures to minimise impacts should include:

- Containment of all runoff from the site on the site - in order to maintain water quality for the Coastal Wetland. The site should not be permitted to drain to the west of Ocean Park Road.
- A plan to deal with the spread of Chytrid fungus.
- A native vegetation rehabilitation plan for Hunter Water land to the west of Ocean Park Road to remove weeds and enhance values of the state significant wetland area that could be affected by drawdown and be invaded by weeds as a result of hydrological changes.
- Retention of a bund planted with native vegetation on the western side of the proposed development adjacent to Ocean Park Road. Wind fencing should be used to prevent sand blowing across the road into the adjacent wetland area.
- After construction permanent post and cable fencing on the western side of Ocean Park Road to restrict access and any damage to native vegetation.
- Modifications to drawdown management, so that when ground water levels reach a point where impacts to native vegetation within the wetland area are likely, pumping ceases. This will need to be informed by the information requested above, including timing of recharge, and baseline data on natural water level fluctuations, particularly seasonal variability.
- Any fencing of the foredune area should not include barbed wire to minimise impacts on shorebirds that may use the rehabilitated area.

## **Council Assets – Roads**

Council's Projects and Technical Officer Asset Management – Asset Planning has reviewed the application and provided the following comments:

Ocean Park Road, Belmont South, has failed due to heavy vehicles gaining access to the Belmont WWTW and beach access. Council will require the road from Green Street to the main access gate to Hunter Water land, to be reconstructed post construction.

Council has undertaken a pavement investigation of the road and it was identified, that asbestos was observed. This material imposes a level of complexity into the construction, which means the road will require a granular overlay 300-400mm thick and sealed to meet expected vehicle usage.

As part of these works, stormwater will need to be catered for, that will require additional drainage to take a water build up from the northern side of the road and discharged into the sand dunes. Due to potential aboriginal artefacts being present, an impact study will be required for where the water discharge is likely to occur.

Ocean Park Road should be conditioned to be maintained by Hunter Water during construction, to the satisfaction of Council and any failed areas shall be repaired within a reasonable timeframe of 4 weeks, should Council be notified by other motorists, using this road to gain access to Blacksmiths Beach. The future road reconstruction will require a design to be submitted for approval as per Council's DCP requirements.

## **Coastal Management / Climate Change Adaptation**

Council's Senior Sustainability Officer (Climate Change) – Environmental Strategy, has noted the following issues:

### **Coastal Risk**

Appendix M of the EIS makes several references indicating that the proposal will increase coastal risk due to the siting of the development, and increase in potential consequences resulting from the additional infrastructure, (whilst acknowledging that this increase is not significant). Eg. S.6.1.2 of Appendix M states: *part of the subsurface infrastructure would extend into the mapped hazard areas of the coastal zone under these scenarios (Figure 5-1), including the horizontal intake wells and the pipeline connection between the temporary desalination plant and the WWTW for brine disposal* (Appendix M shows

construction of seawater intakes (caisson) in areas of likely coastal erosion/high coastal erosion risk). Council requests that the assessment documentation address clause 15 of State Environmental Planning Policy (Coastal Management) 2018 with regards to potential increased risk of coastal hazards on the land.

In relation to the two following statements from Appendix M, Council requests preparing and resourcing an emergency response/contingency plan to be invoked in the event of a coastal hazard event occurring during and/or post construction

*Append M, Pg. 22: Should a storm occur during construction of the Project, coastal erosion could be exacerbated due to the exposure of the subsurface. The aspect of the Project most at risk is the intake structures and pipelines that lie closest to the coastline. The construction timeframe and method would define the extent of the impact, such as open trenching compared with directional drilling and the duration of earthworks.*

*Append M; Pg 34, Table 7.1 incl. following mitigation measure wrt exposure of the subsurface network by coastal processes including beach level fluctuation and storm bite. Preferentially construct subsurface structures (particularly the deep intake wells) by directional drilling (or alternative), to avoid the need for an open trench. Monitor weather forecasts when working on the horizontal intake wells and the connection pipeline and halt works when extreme coastal warnings are issued by the Bureau of Meteorology.*

#### Coastal Protection Works

Council seeks clarification if any elements of the project, including elements ancillary to the project, (including temporary measures during construction), meet the definition of 'coastal protection works'. If any aspects of the proposal meet this definition, Council requests the EIS address clause 27 of the NSW Coastal Management Act 2016, and clause 19 of State Environmental Planning Policy (Coastal Management) 2018.

#### Groundwater Draw-down

The impact of groundwater draw-down on aquatic ecosystem is requested to be addressed in greater detail. The biodiversity assessment report does not assess impacts on the aquatic environment of Belmont Lagoon, (noting that it outside the project area), yet the EIS identifies the potential for groundwater draw-down in this area, (a mapped Groundwater Dependant Ecosystem).

It is also requested that the biodiversity assessment consider impacts on stygofauna that may occur as a result of groundwater draw-down.

### **Aboriginal Heritage**

Council's Planner – Heritage has noted that the subject site is affected by the Sensitive Aboriginal Cultural Landscape under Lake Macquarie LEP 2014 and as mapped in the Lake Macquarie Aboriginal Heritage Management Strategy.

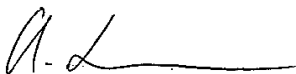
The subject site is within 50m from the DP High Water mark and within 200m of an AHIMS site.

An Aboriginal Cultural Heritage Assessment in accordance with OEH requirements has been undertaken, which included consultation with the Aboriginal Community, as per the OEH guidelines.

The recommendations in the report should be included as conditions of any approval.

Should you require further information or clarification, please contact me on [adleese@lakemac.nsw.gov.au](mailto:adleese@lakemac.nsw.gov.au) 4921 0201.

Yours faithfully,



Andrew Leese  
**Acting Principal Development Planner**  
**Development Assessment & Certification**

