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19th April, 2018

Marc Yeo
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Dear Marc,

RE: Response to Heritage Council letter dated 17 December 2017 – Maritime Archaeology

Background

On the 14 November 2017 DPT and DPPT Operator Pty Ltd submitted an amended Environmental Impact Statement (EIS) for State Significant Development (SSD) application seeking a concept approval for the redevelopment of the Cockle Bay Wharf located at 241-249 Wheat Road, Cockle Bay. A *Cockle Bay Park Redevelopment: Maritime Archaeological Assessment* (MAA) report was submitted with this application, prepared by Cosmos Archaeology Pty Ltd and dated September 2017.

On 17 December 2017 the Heritage Division, Office of Environment and Heritage, as a delegate of the Heritage Council of NSW (HC), replied to the submission with further comments and recommended conditions of consent for maritime archaeology and historical archaeology. This letter report details the comments and conditions for the maritime archaeology component and provides a response to each of the items.

Heritage Council Conditions for Maritime Archaeology

The HC reply included a list of revised conditions of consent. The fourth condition most relevant for the maritime heritage component of the EIS is as follows:

The EIS should consider the potential visual impact on the SHR listed 'South Steyne (S.S)' once the vessel is relocated to the proposed Wharf 7 mooring near the Australian National Maritime Museum in 2020

The impact of the concept design to the State Heritage Register listed item S.S. *South Steyne* was assessed in Section 8.3.3 of the MAA. This impact only assessed visual impacts to S.S. *South Steyne* in its current position at Harbourside Wharf in Cockle Bay. However, the reply from HC indicates that S.S. *South Steyne* will be relocated to a proposed Wharf 7 mooring near the Australian National Maritime Museum in 2020. As such, the impact assessment presented in Section 8.3.3 of the MAA has been updated as follows (with additional text in **bold**) and this updated assessment should be included in the future MASoHI report:

The heritage significance of S.S. *South Steyne* is in no way directly related to its current position at Harbourside Wharf **or any future positions**. As a moveable item, its significance would not be impacted by a change in location or a change



Table 1: Response to HC Conditions

HC Condition	Response
1. Any proposed demolition and excavation works should be monitored by a suitably qualified and experienced maritime archaeologist who has an understanding of the effects of dredging and reclamation processes on former submerged maritime infrastructure sites.	Acknowledged. This measure would be clearly stated in the future MASoHI and MAMP reports.
2. All the proposed archaeological maritime heritage works need to be undertaken by a suitably qualified and experienced maritime archaeologist.	Acknowledged. This measure would be clearly stated in the future MASoHI and MAMP reports.
3. There should be clear inclusion of what will be done if unexpected sites are discovered during the demolition process and how they will be recovered and or excavated, the observation techniques to be employed, and if in situ preservation and interpretation can be undertaken.	Acknowledged. The future MASoHI and MAMP reports would cover this in detail.

Responses to each of HCs comments are listed in the Table 2 below with further detail regarding S.S. *South Steyne* provided above.

² *Op. Cit.* FJMT Studio, 2017: Fig. 8, p. 100.

Table 2: Table addressing HC comments

HC Comment	Response
The results of the transect surveys undertaken under the current wharves, which have only examined the upper strata of the seabed, are not necessarily indicative of the archaeological potential of these areas. Limited test excavation of these areas would provide a better indication of the archaeological potential and nature of these areas.	Agreed. Section 9.2 of the MAA advises that additional assessments will be required for the Stage 2 SSDA and future stages once the project design is determined. Section 9.2 states that future assessments will include a full Maritime Archaeological Statement of Heritage Impact (MASoHI) and Maritime Archaeological Management Plan (MAMP) which may require additional information from pre-disturbance surveys or test excavations.
The MAS report does not provide details of the likely dredging, if any, around former wharf.	Details of dredging are not yet known as the project design is not yet known. Section 8.2 of the MAA states that, as construction details are yet unknown, impacts to heritage cannot be fully assessed, and that a full MASoHI and MAMP will be required once the design is known. The MASoHI and MAMP would then detail any dredging and assess its impact to items of heritage significance.
The MAS report has not addressed the potential impact of amended proposal on the SHR listed South Steyne (S.S)'s views once the vessel is relocated to the proposed Wharf 7 mooring near the Australian National Maritime Museum in 2020.	The relocation of South Steyne to the proposed Wharf 7 mooring near the ANMM was not known at the time of writing the September 2017 report. An updated assessment is addressed in this letter response.
The report states that there is only low archaeological potential under the positions of the former wharves, as relics do not usually accumulate under wharves. However, other studies of wharf and piers sites (e.g. long jetty in Fremantle) have shown that relics accumulate both around and under these structures. This potentially affects the proposed areas of maritime archaeological potential across the study area and should be reconsidered.	Section 6.2.3 of the MAA explains the potential for deposits to either side of wharves and beneath the wharves themselves. Figure 112 illustrates the likelihood of archaeological potential and shows a high potential beneath and around wharves (with an approximate 5-10 m buffer from the edges of the wharf), with a low potential in the gaps between.
Although there is a low relative area of suggested impacts to potential maritime archaeological sites across the study area, relative to the overall study area size, most of the potential maritime archaeological sites have been assessed as being of State level heritage significance. As the extent and nature of the sites has not yet been determined, the possible impact cannot be accurately determined until these aspects have been fully investigated using archaeological test excavation.	Agreed. Section 9.2 of the MAA report recommends a future MASoHI and MAMP once the design plans are known which may find that additional information from pre-disturbance surveys or test excavations is required to inform the impact assessment and/or management plan.
As the impact of the proposed development is currently based on concept structural plans only, the exact extent of the impact of the development cannot be accurately assessed at this time.	Agreed. This is why Section 9.2 of the MAA report recommends a future MASoHI and MAMP once the design plans are known. Section 8 of the MAA report contains a preliminary impact assessment only to provide an early indication of what may be included and required in future assessments.

HC Comment	Response
The statement in the MAS report that the impact of construction could be reduced by the use of hollow piles is not supported, as although the use of hollow piles may introduce minimal disturbance when installed, they destroy the archaeological context and stratigraphy of the site when they are eventually removed.	Acknowledged. This will be taken into consideration in the future MASoHI and MAMP reports. It may be possible to undertake controlled recovery of material within hollow piles driven into marine sediments through pumping the contents in one metre spits onto screens for sieving and collection of artefacts. This could provide an effective means with which to obtain an understanding of the cultural stratigraphy across parts of the study area.
The observation that the mitigation measures specified in MAS report should be improved and enhanced if the proposed works are modified to increase disturbance of the ground area/depth and seabed is strongly supported.	Acknowledged.

If you have any questions or comments regarding the information and replies above, please do not hesitate to contact me on the following details:

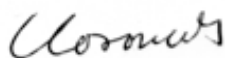
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Yours sincerely,



Director
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