walker

TOONDAH HARBOUR

APPENDIX 1 - G

IAP FINAL
RECOMMENDATIONS
LETTER

saunders havill group

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To: **Kelli Thomas,** Development Manager, Walker Corporation

From: **Prof. Paul F Greenfield (on behalf of the Toondah Harbour Independent Advisory Panel)**

CC: **Sam Maynard,** Principal Environmental Scientist/Assoc Partner, Saunders Havill Group

Date: 01 October 2021

Re: **Panel Recommendations - Toondah Environmental Impact Statement (EIS)**

On behalf of the members of the Toondah Harbour Independent Advisory Panel (IAP), I commend Walker Corporation and the various consultants responsible for the projects for a well-constructed, comprehensive body of work. The Panel is satisfied that the technical components of the EIS employed best practice, were conducted in a rigorous manner and based on sound science. The IAP also notes the effective and rigorous project management - a critical element in delivering the excellent quality and scale of the EIS.

The Draft Environmental Impact Statement (EIS) was reviewed by the Independent Advisory Panel (IAP) individually (16-19 July) and as a whole panel (20th July). Prior to this final review, the Panel met three times to review the proposals, and progress of the different projects, including a field trip to the site at the inception meeting.

To strengthen the EIS and proposed activities, the IAP makes the following over-all recommendations:

Recommendation 1: Adaptive Management Framework be formally adopted for proposed activities.

- Adaptive management (or 'learning by doing') is particularly needed when developing management activities without a strong precedence – and some of the activities proposed, designed to minimize impacts to a Ramsar wetlands site, are quite novel and will require "learning by doing".
- The proposed construction phase of the project is quite long (ca. 18 years) and many things can change over this long time period (e.g., major environmental events, technological advances, changes in socio-economic factors). Thus, what is planned for at the outset is likely to change over the course of the construction, reinforcing the need for an adaptive management approach.
- The environmental offsets component of the project is very much breaking new ground, as restoration ecology is really in its infancy. The only way to ensure that a scientific approach is maintained is to employ adaptive management with efficient monitoring to ensure feedback, and then adjusting the management approach accordingly.
- Formally adopting an adaptive management approach will aid in the tracking and responding to the dozens of management actions that are listed in Volume 3.
- The project is being designed as a staged project, which makes sense for project management and financing, but also helps enable effective adaptive management.

Recommendation 2: Production of a 'digest' document for public dissemination that summarises the key messages in an easily assimilated manner.

A public-facing document synthesising key results and implementing effective science communication principles can be produced to communicate findings to a broader audience. The EIS contains some good graphical representations of the proposed development, conceptual diagrams, maps and data, but they are buried in the extensive volumes.

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Recommendation 3: An upfront description of the purpose of sections

The summaries and major conclusions are at the end of the relevant sections—a flipped approach of providing the summaries and conclusions at the beginning would help communicate the most important findings.

Recommendation 4: Recognition of the importance of ecological 'tipping points'

Ecological 'tipping points', also known as ecological thresholds, are ecosystem states where small changes in environmental conditions result in large or rapid shifts in ecological status or function. These tipping points may involve chemical reactions, food web interactions, or biological responses to external forcing. Because the relationship between the controlling variable and the the ecosystem state changes dramatically near a tipping point, the types of interactions involved are non-linear, and thus difficult to predict.

Detailed review comments to augment the above recommendations have been provided already.

The IAP notes that meeting the performance standards expressed in the draft EIS is dependent on the project's operational performance meeting "Beyond Best Practice" design standards in a number of key areas. In the future, an Advisory group could be established to ensure a rigorous review and evaluation of the project as it progresses (implementing an adaptive management framework), and make recommendations for management and monitoring based on this review, current best practice, and evaluation at specified intervals during the project.

At a broader level, the IAP strongly recommends that a case be made to the Queensland State and Federal governments, for the finalisation of the Ecological Character Description (ECD) and development of a management plan for Moreton Bay as a RAMSAR site. This will then take into consideration of cumulative impacts of any development on the site. The detailed management and mitigation plan for the Toondah Harbour can then be appriopriately nested in the over-all Management Plan for the RAMSAR site.

The IAP commends Walker Corporation's commitment to ensure that Toondah Harbour Development be informed by open, transparent and independent peer-reviewed science. Walker Corporation is cognizant of the critical issues around impacts (both perceived and real) on the proposed development to Ramsar-listed Moreton Bay and the Bay's environmental values.

The Toondah Harbour Independent Advisory Panel (IAP) was established to ensure the scientific and environmental integrity of the Environmental Impact Studies (EIS) process, impacts and outcomes. As Chair of the IAP, I make the above recommendations and commend the work of Walker Corporation and the consultants on behalf of the IAP which consists of:

Prof Bill Dennison – University of Maryland

Prof Max Finlayson – Charles Sturt University

Prof Rod Connolly – Griffith University

Dr Swapan Paul – Sydney Olympic Park Authority

Tony McAlister – Water Technology

Diane Tarte - Marine Ecosystem Policy Advisors

Dr Eva Abal – IAP Convenor