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Addendum to Expert Witness Report - Sustainability

Brigid,

Please find following brief report I have prepared as an addendum to my Expert Witness Report – Sustainability report. This forms my response to the letter of instruction received from you dated 16th April 2018, with additional points in response to your most recent correspondence dated 1st May 2018, including recent correspondence from the Green Buildings Council of Australia and the Property Council of Australia.

I understand I have been instructed to read and respond to four key reports concerning sustainability subjects I previously covered in my original Expert Witness Report, dated 6th March. The reports are:

- *Review of Sustainability Standards*, prepared by Arup,
- *Climate Readiness Strategy – Organising Framework Stage 1 Report*, prepared by AECOM,
- *Net Zero Carbon Strategy* report and,
- *Baseline Assessment* report, both prepared by Point Advisory.

In summary, my opinion has not changed greatly nor have my recommendations changed from my original Expert Witness Report.

There are, however, several additional points presented in the information that I agree with and I believe support my previous recommendations in a complementary manner.

A detailed response to these additional reports follows below.

Review of Sustainability Standards Prepared by Arup

- The Arup report does not address whether the proposed 4 Star Green Star Design and As Built standard will meet the objectives of the FBdF. It provides only a basic analysis of the ability of 4 Star Green Star Design and As Built tool to align with the Sustainability Objectives of the FBdF. 13 credits have been identified as required by the draft planning controls but doesn't give evidence of how effective a 4 Star or 5 Star Design and As Built standard could be in achieving the objectives of the FBdF.

- The analysis accompanying the recommendations does not indicate what energy and water performance standards are likely to be achieved by a 4 Star Green Star Design and As Built standard, and it is not clear how far these outcomes will support the overarching Sustainability Goals and Objectives of the FBdF.
- In the Executive Summary of the report it notes that;
 - “...approximately 59 points are aligned in intent with the goals, targets and strategies outlined in the Framework. The total number of credits aligned with the Framework is almost sufficient for a 5 Star Green Star rating (60 points)...”
- Arup report goes on to support a 4 Star Green Star Design and As Built standard for all buildings and appears reluctant to encourage a higher standard of ESD. This appears overly cautious and contrary to the FBdF and supporting background documents which repeatedly note the unique opportunity that the urban renewal of Fishermans Bend presents.
- Arup supports a 4 Star Green Star Design and As Built standard, but does not recognize the contradiction of the proposed planning controls, particularly the existing *Energy, Water, Waste Local Policy* Clause 22.19 of the City of Melbourne that requires building over 5,000m² to reach a 5 Star Green Star standard.
- Arup does not present any benefit or justification to retreating to a 4 Star Green Star Design and As Built standard in the proposed planning controls for Fishermans Bend.
- It is possible that the authors of the report may have changed their opinion during drafting the report as it references a 5 Star Green Star Standard (page 41) which is somewhat contradictory.
- I note that in their recent letter to the Fishermans Bend Planning Review Panel, that the Property Council of Australia, dated 18th April 2018, supports an increase in the standard to a 5 Star Green Star standard, supporting my recommendation that this standard be introduced for buildings over 5,000m².
- Although the threshold of 5,000m² is significant, I do not support Arup's recommendation for a 4 Star Green Standard (page 35) that states:
 - “...Amend the planning control to apply the 4 Star Green Star standard or equivalent for building greater than 5,000 sqm gross floor area...”
- Arup does not address the discrepancies between existing policies in the Cities of Melbourne and Port Phillip and the proposed planning controls.
- Arup has minor errors concerning the number of councils with ESD Local Policies and fails to include the Cities of Darebin and Manningham who

have had the ESD Local Policies gazetted into their planning schemes.

- Arup report does not offer a convincing argument of why a 7 Star NatHERS standard of thermal energy performance should not be required. The Arup report simply states that this requirement is “new” and may have unknown outcomes and consequences. This appears overly precautionary given that numerous larger developments across Melbourne and Victoria have reached this thermal energy performance standard.
- If any unforeseen perverse outcomes do arise from requiring an average 7 Star NatHERS rating, which is highly unlikely in my opinion, then these can be easily addressed through a review process. This review process should only be based on evidence of any perverse outcomes occurring, not from a fear of the unknown.

Verification and Certification

- Arup’s comments in Section 4.8 on verification and comments regarding smaller developments are helpful and worth noting.
- It supports my previous recommendation for the use of other ESD tools, such as BESS, for smaller scale projects.
- In general I support their rationale and approach and I agree with their points that;
 - “...Reviewing this evidence must not pose an undue burden on the planning authority. The requirement for third party certification should ease the burden on the planning authority, not increase it...”

And that,

“...We recommend that DELWP develops a template to be completed by the applicant. The applicant would update the template for review by the responsible authority at each of the stages outlined in Table 7. The template should set out how a project would demonstrate progress towards 4 Star Green Star certification, in the form of a Green Star pathway or similar. Where a project seeks alternative certification, the template should set out how the applicant can demonstrate that the alternative scheme responds to the criteria for equivalency in Section 5...”

- I also support Arup's recommendation (page 37) to:
 - “...Prepare a template to be completed by the applicant at each project review stage. The template should demonstrate the means by which the projects will achieve the 4 Star Green Star certification, or equivalent...”.
- The Arup report supports my recommendation that smaller scale projects (under the 5,000m² threshold) should achieve a 4 Star Green Star standard of 'best practice', that can be demonstrated through Green Star Design and As Built or an equivalent tool (page 2 and 34-39, 41 onwards).

- The recent Property Council of Australia letter to the Fishermans Bend Planning Review Panel (18th April 2018) is clear that they support a GBCA certified 5 Star Green Star Design and As Built standard for buildings over 5,000m². They raise concern that these larger buildings could be assessed by an equivalent rating tool, such as BESS, and state cost and certainty as reasons to require GBCA certification for developments over 5,000m², although no evidence to support this was provided.
- The Property Council of Australia's letter goes to clarify that an equivalent rating tool, such as BESS, would be suitable for developments *less* than 5,000m², providing that independent third party verification can be given at completion stage, or close to it.
- Arup has interesting point that it is likely that most developments in Fishermans Bend will be over the 5,000m² threshold, given lot size and development potential of the area (page 35).
- I support their recommendation (page 35) that the threshold of 5,000m² in the planning controls be reviewed if necessary in future revisions.
- I support their recommendation (page 35), which states:
"...In planning controls, require the developments of Sustainability Management Plan to be developed for buildings up to 5,000 sqm. Prepare a template for a Fishermans Bend Sustainability Management Plan, with supporting guidance on demonstrating equivalent performance to 4 Star Green Star..."

Green Star Communities

- Arup did not comment on Green Star Communities tool and what standard should be achieved to assist reach the Sustainability Objectives of the FBdF.

Climate Readiness Strategy – Organising Framework Stage 1 Report Prepared by AECOM

- The report provides useful background information to the challenges faced by adaptation to climate change, it provides a valuable risk analysis and a useful gap analysis of current policy initiatives which helps to identify in some detail where further work is required.
- The climate readiness work clearly needs further development into a strategy document that includes actual actions and measures to fill the gaps identified, a timeline and action plan.
- The catalogue of climate response measures is extensive and useful.

- The ability of some measures identified within the gap analysis to actually be effective in mitigating climate change risks needs further investigation. For example, the integrating water management actions 'Storage and Retention' within the gap analysis appear to be assessed better than Urban Greenery and Shading. However it is not clear from the report whether these actions identified within 'Storage and Retention' will be an adequate response to the challenges climate change presents. I recognize the challenges of climate change include managing a complex and interactive series of unknown elements.
- I encourage this valuable climate change adaptation work to continue and build upon this useful preliminary strategic planning document and develop clear and effective climate change responses for the Fishermans Bend urban renewal area.

Net Zero Carbon Strategy and Baseline Assessment reports Prepared by Point Advisory

- Overall the Point Advisory reports indicate that large amounts of carbon offsetting will be required.
- Point Advisory has raised the important point that no clear governance arrangements have been established to oversee sustainability aspects of planning controls, carbon offsetting, ongoing monitoring and reporting.
- Point Advisory supports the recommendation that built form planning controls are one of the most cost effective mechanisms to reduce emissions.
- On Page 11 of the Net Zero Carbon Strategy supports my concerns with a 4 Star Green Star Design and As Built standard, stating these standards: "...will need to be rapidly ramped up to avoid locking in poor building performance..."
- Point Advisory state that the National Carbon Offset Standard appears to be the most suitable framework to align zero net emissions actions (page 21), though not through a formal certification process which I support.
- I agree with the two key opportunities identified on page 27 of the Net Zero Carbon Strategy report as critical to achieved a net zero emissions goal; (i) the electrification of buildings and (ii) the decarbonisation of the electricity supply).
- On page 36 and 37 of the Net Zero Carbon Strategy there are suggestions

to rewarding increased development intensity (FAU) if residential or non-residential building achieve higher standards of; a 5 Star Green Star Design and As Built rating with an average 8 Star NatHERS.

- Similarly on page 41 it recommends that a 6 Star NABERS building with 6 points in the Green Star greenhouse calculator be rewarded with FAU or greater building heights.
- These FAU incentives are an interesting mechanism that should be further investigated. If such an incentive scheme is developed then clear maximum FAU and heights need to be defined to avoid other indirect perverse planning outcomes.
- On page 49 of the Net Zero Carbon Strategy report Point Advisory discusses opportunities to increase renewable energy by requiring that all buildings consider solar PV and storage where possible, unless overshadowed or allocated as a green roof. This is worth pursuing and I support the intent of the recommendation, although it would be improved if the terms “consider” and “where possible” were replaced with clear and unambiguous language to clarify the requirements.
- Page 67 of the Net Zero Carbon Strategy report contains a summary of recommendations that I generally support and encourage their ongoing development and refinement.
- Particularly, I'd like to see how the Net Zero Carbon Strategy could inform the facilitation of PPAs (power purchasing agreements) or renewable energy and onsite renewable energy generation and storage.

Additional Recent Submissions to Fishermans Bend Planning Review Panel

Both the Property Council of Australia and the Green Building Council of Australia has provided additional letters to the Panel in recent weeks in response to my original evidence. The following brief discussion follows:

Property Council of Australia – Letter dated 18th April

- Property Council is advocating for all buildings to be certified 5 Star Green Star Design and As Built. This supports my proposed standard for building over 5,000m², but emphasizes that buildings over 5,000m² must be certified Green Star Design and As Built with the GBCA. The requirement for certification differs from my recommendation.
- It states that for smaller projects under 5,000m² an equivalent rating is suitable.
- I don't disagree strongly with this suggested approach to certification, as one possible approach, but I am not convinced at the Property Council's justification for requiring Green Star as the only tool.

- The Property Council states reduced costs and increased certainty by using 5 Star Green Star, but provides no evidence to support this claim.
- I note that the Chief Executive of the Property Council of Australia is a member of the Green Building Council of Australia.
<https://new.gbca.org.au/about/board/>

Green Building Council of Australia – Letter dated 29th March

- GBCA letter emphasises how important Green Star certification is and advocates that all projects should be certified.
- GBCA raises valid point that there is a resource requirement for the assessment of larger developments. I agree that adequate resources and a high level of skill are required to assess ESD submissions.
- The GBCA's response to questions I raised about potential bias and verification/accuracy of Green Star focuses on the certification trademarks (CTM) brand protection, governed by the *Trade Marks Act 1995*.
- I note that no independent audits of Green Star rated buildings were offered and I can only assume that these have not occurred. Furthermore, I note that evidence for Green Star certification is largely paper based, with no onsite assessment required. There is no complete guarantee that all credits are being implemented correctly in all instances.
- I acknowledge that minimum scores are required for some selected categories within the tool (Energy, Land Use and Ecology) but these are a low proportion of the overall credits available and have a minimal impact in addressing concerns of the trade-offs within the Green Star tools that are widely recognized across industry and government as a weakness in the stringency of the Green Star tools.
- Furthermore, the flexibility of Green Star Design and As Built means that individual responses to the objectives of the planning scheme will vary between projects and the actual performance standards of each environmental category will vary between projects.
- I am a long-term supporter of the GBCA and its suite of tools. I have participated in the review and development of Green Star credits and tools as a representative of various local government members of the Green Building Council of Australia. I acknowledge that government is *consulted* on the development and evolution of Green Star, but it should be recognized the Green Building Council of Australia is largely an industry lead initiative. The membership of the GBCA's Board of Directors reflects this.
<https://new.gbca.org.au/about/board/>

- I hope that the GBCA takes my comments constructively and considers its own governance structures carefully and the transparency and verification of its own assessment processes and standards in order continually improve its tools and organizational processes.
- GBCA offers no comment on standards or targets for either Green Star Design and As Built nor Green Star Communities.
- No further information on the overall Green Star Communities rating has been provided. No insight into what is the predicted or targeted Green Star rating of the Fishermans Bend precinct has been given, which is unusual given the stage at which the project is. It is likely that preliminary Green Star Communities tool targeting and credit analysis work has been undertaken but has been retained by the Victoria State Government and its consultant team.

I trust that this brief response addresses the Letter of Instruction, and I am happy to discuss in greater detail any of the points in this addendum document, or my previous report with you or with the Panel.

Yours sincerely,

Euan Williamson
Director
Creative Environment Enterprises