SJB Architects

Expert Evidence Statement

01 December 2020

Statement prepared by Beaudene Fulwood, SJB Architects.

1. Introduction

1.1. My name is Beaudene Fulwood and I am an Associate Architect at SJB Architects. I have been working in Architecture for 13 years and I am a registered Architect (Reg: 18520). Further details of my experience are attached in my CV in appendix A.

1.2. I was assisted by Owen Chow and Tristan Wong of SJB Architects in preparing this report. Both are Directors and registered Architects at SJB Architects and their CVs are attached in appendix A.

1.3. I have been instructed by Jill Cairns from the City of Melbourne in a written letter dated 18 February 2020 to 'prepare a report setting out your expert opinion in relation to built form testing.'

1.4. SJB Architects has been engaged by the City of Melbourne to provide a Sunlight to Public Parks Built Form Testing Study to independently test the planning controls proposed by the City of Melbourne's Planning Scheme Amendment C278. The purpose was to identify the possible impact Amendment C278 would have on the built form of selected test sites. It is the built form testing within this report I am responding to in this statement.

1.5. The brief for the report required a study that utilised built form modelling software to test a number of sites across the Amendment area in order to:

- Determine the achievable built form outcomes under the current planning controls and the planning controls proposed by Amendment C278
- Compare the maximum built form achievable under the current planning scheme controls with the achievable built form under the proposed Amendment C278 planning controls to understand the variance in development capacity
- Determine the high level potential spatial outcomes for a range of typical uses; and
- Understand the potential changes to any shadowing on the nominated public parks.

1.6. The study is presented as a graphic report titled '*Sunlight to Public Parks Built Form Testing Study Planning Scheme Amendment C278'*. It is further referred to as 'the report' within this statement.

1.7. The 'tasks' involved were to:

- Test the built form and spatial design outcomes achievable under the current planning controls
- Test the built form and spatial design outcomes achievable under proposed DDO8
- Describe the difference in development capacity between both current and proposed planning controls (undertaking a high level development feasibility assessment of each property)
- Show the shadow impacts on the nominated public parks.

1.8. The scope and tasks are described in more detail on page 10 of the report.

1.9. The brief and resources supplied by City of Melbourne to allow SJB Architects to undertake the study and prepare the report are outlined on page 9 of the report. These included a written brief, park type

Level 5, 18 Oliver Lane
Melbourne VIC 3000

info@sjb.com.au
sjb.com.au

T 61 3 9699 6688

SJB Architecture Pty Ltd ACN 065 207 490 Michael Bialek 12804 Owen Chow 14643 Tristan Wong 18127

mapping, a draft of the proposed amendment and 3D files generated from GIS data of both terrain and built form features.

1.10. The sites for the study were provided by the City of Melbourne. These sites are listed on page 17 of the report.

1.11. Our methodology for undertaking the study involved a set of assumptions for interpreting the current planning scheme. This was derived from our initial brief from City of Melbourne and is outlined on page 11 of the report.

1.12. Our methodology also described assumptions for testing development outcomes on each site. This was proposed by SJB Architects as a way of ensuring a level of consistency across each site. It also provided background into our decision making of which there could possibly be multiple outcomes or solutions in a real-world context. These development assumptions were discussed with City of Melbourne and accepted as part of our methodology. This is outlined on page 11 of the report.

1.13. Our methodology also described our process for the testing of each site. This is outlined on pages 12 and 13 of the report.

2. Built Form Testing of Sites and Report

2.1. Each site was presented by showing:

- Site Plan and Existing Building model
  - Provides aerial and 3D representation of current context and current built form on the site.
  - Identifies the address or addresses of the site within the study and the proximity to the park it may impact.
- Current Planning Controls and Planning Envelope
  - Provides a summary of key planning controls that affect the site or sites and would influence the built form or development assumptions of the site.
  - Provides a 3D representation of what the planning control envelope would look like.
- Current Planning Control Developable Envelope and Plan
  - Provides a plan and 3D representation of a possible development envelope.
  - Highlights development assumptions that influence the development envelope shown
  - Provides a high-level development summary.
- Current Planning Control Developable Envelope Shadow Study
  - Provides a plan representation of the shadow impacts (if any) to adjacent or nearby parks as identified in the brief. It shows the cumulative shadow impacts per hour for the relevant time period.
  - Provides a conclusion if the development envelope is deemed to be not impacted by the proposed DDO8 Planning Controls.

2.2. If it is determined that applying the DDO8 Planning Controls to the development envelope results in any amendments to the envelope, then each site has in addition:

Level 5, 18 Oliver Lane
Melbourne VIC 3000

info@sjb.com.au
sjb.com.au

T 61 3 9699 6688

SJB Architecture Pty Ltd ACN 065 207 490 Michael Bialek 12804 Owen Chow 14643 Tristan Wong 18127

- DDO8 Amendment Developable Envelope and Plan

  - Provides a plan and 3D representation of the amended development envelope.
  - Highlights development assumptions that influence the development envelope shown (if any).
  - Provides a high-level development summary and an area difference and percentage to highlight the impact the DDO8 Planning Controls have had on the development envelope.

- DDO8 Amendment Developable Envelope and Shadow Study

  - Provides a plan representation of the amended shadow impacts (if any) to adjacent or nearby parks as identified in the brief. It shows the extent of removed shadow impacts per hour for the relevant time period. It also makes a delineation between existing and/or allowable shadow impacts and the (now removed) additional shadow caused by the proposed development envelope.
  - Provides a conclusion highlighting that the development envelope is impacted by the proposed DDO8 Planning Controls.

2.3. Each site is presented in a similar format for ease of comparison.

2.4. A summary of sites is provided at the end of the report on page 98 and highlights the proportion of the studied sites that are impacted by the DDO8 Planning Controls and indicatively by what amount.

2.5. Overlaid shadows shown in plan format were determined by the team to be the best way to demonstrate shadow impacts to parks rather than showing separate hour by hour breakdowns. The purpose of the study was to understand overall impacts to parks within a specified time period. Hour by hour delineations were also identified on the plans.

2.6. Differentiation of existing shadows were shown to demonstrate the impact already impacting the park and what impact future development would have. DDO8 describes the reduction of additional shadow so delineation between existing and additional shadows was required.

2.7. Where an understanding of 'allowable' shadow was required, such as for Type 2 parks, it was shown in a similar way as existing shadows, however only shown on the DDO8 Amended Planning Control shadow studies and labelled accordingly.

2.8. The development envelopes and amendments for each site were either done by myself or Owen Chow. These were then peer reviewed by each other. Tristan Wong also peer reviewed the development envelopes generally. The variety of approaches and peer reviewing ensured there was due diligence in the thought and justification of both the interpretation of the Planning Controls and possible development envelope outcomes.

2.9. Meetings and reviews with the City of Melbourne team were held during the testing period. These sessions reviewed both the graphic output and format of the report along with our approach and interpretation of the planning controls and development outcomes of each site.

2.10. It was agreed within these sessions:

- To not include submitted or approved planning envelopes in the shadow testing. They could be shown in the axonometric view for reference, however they were to be excluded from the shadow studies. Existing and under construction envelopes could be included. It was determined that submitted and approved envelopes had a lower possibility of becoming a reality than under construction envelopes. It was found within some sites, such as 701-713 Swanston Street, that including submitted or approved envelopes would affect the amended development envelope when the DDO8 controls were applied.

- When interpreting the 'allowable' shadow requirement within the DDO8, it meant the lesser of the nominated streetwall heights if more than one was applicable, such as for a corner site with 2 different streetwall heights. It was determined that the streetwall height requirement was a

Level 5, 18 Oliver Lane
Melbourne VIC 3000
info@sjb.com.au
sjb.com.au
T 61 3 9699 6688

SJB Architecture Pty Ltd
ACN 065 207 490
Michael Bialek 12804 Owen Chow 14643 Tristan Wong 18127

mandatory requirement and therefore, as per the briefing, was to take precedence. (From the brief: '*Where a property is affected by two or more planning controls that specify a height requirement, the greater of those requirements is to be adopted for the purpose of determining the potential impacted posed by C278, unless any lesser requirement is mandatory, in which case the mandatory requirement is to be adopted for the purpose of determining the potential impact posed by C278.')*

- Generally, for the purposes of both the initial development envelope and amended envelopes, the modelling was represented in a simplified way. It used the development assumptions set out on page 11 of the report for floorplate size and proportion and heights. It may not have reflected a specific architectural response that could have otherwise been explored in a real-world context.

2.11. GFA (Gross Floor Area) was chosen as the method of comparison for the before and after effect of the DDO8 control to simplify the study across different typologies that could otherwise be measured in different ways depending on definition. For example, the difference in the measurement methodology between NSA for residential apartments and NLA for commercial offices.

3. Findings of Built Form Testing

3.1. The purpose of the testing was to reveal what impacts (if any) the introduction of the DDO8 controls would have on the development potential of sites within the proposed amendment area. The testing revealed a number of these sites were impacted to varying degrees.

3.2. Of the 17 sites that were tested for the final report, 9 of the sites were not affected and 8 of the sites were affected.

3.3. Of the affected sites, the degree of impact to the development ranged from 1% to 28% reduction in GFA as a reflection of the 'before and after' GFA calculated for the site.

3.4. Depending on a range of factors, sites were impacted in different ways. However, trends did emerge around similarly affected sites.

3.5. The more affected sites tended to:

- Be to the north of subject parks so therefore impacted parks for longer periods of the day.
- Have higher allowable height limits
- Have no or minimal shadow controls in their current planning scheme requirements.

3.6. The more affected sites were:

- 2 &10 Wellington Parade, East Melbourne & 1071-1081 Hoddle Street, East Melbourne
    - North of subject park, Type 1 park – didn't have allowable shadow requirement, instead had a lower existing built form than what could be built under the original planning controls.
- 701-713 Swanston Street Melbourne
    - North of subject park separated by a narrow road. Type 2 park – had lower of 2 streetwall heights towards park.
- 32 Lincoln Square North, Carlton
    - North of subject park separated by a narrow road.

Level 5, 18 Oliver Lane
Melbourne VIC 3000
info@sjb.com.au
sjb.com.au
T 61 3 9699 6688

SJB Architecture Pty Ltd ACN 065 207 490 Michael Bialek 12804 Owen Chow 14643 Tristan Wong 18127

3.7. Lesser affected sites tended to:

- Be to the east or west of subject parks so therefore impacted parks for shorter periods of the day.
- Have lesser allowable height limits.
- Have stricter shadow controls in their current planning scheme requirements.
- Have streetwall heights nominated in the planning controls that translated to 'allowable' shadows when assessing shadow impacts.

3.8. The lesser affected sites were:

- 407-415 King Street, West Melbourne
    - West of subject park. Separated from park by a wide road easement.
- 200 Leicester Street, Carlton, 150-154 Pelham Street, Carlton, 160-170 Pelham Street, Carlton, 168-180 Leicester Street, Carlton, 195 Bouverie Street, Carlton & 183-189 Bouverie Street, Carlton
    - East and west of 2 subject parks. Type 2 park – has allowable shadow allowance as a result of the streetwall heights nominated in the planning controls
- 23-37 Boundary Road, North Melbourne & 222-232 & 234-244 Macaulay Road, North Melbourne
    - North-west of subject park. Removed slightly from park due to wide road and intersection. Type 2 park – had allowable shadow allowance as a result of the streetwall heights nominated in the planning controls
- 81 Boundary Road, North Melbourne
    - North-west of subject park. Type 2 park – had allowable shadow allowance as a result of the streetwall heights nominated in the planning controls

3.9. Non-affected sites tended to:

- Have lesser allowable height limits.
- Have significant or some shadow controls in their current planning scheme requirements.
- Have existing buildings that were already built to the maximum or exceeded the maximum planning envelope.
- If they didn't have the above planning constraints, they tended to be to the east or west of the subject park and further south than north in relation to the park. This meant their shadow at the extremes of 10am or 3pm still didn't impact the park.

3.10. The non-affected sites were:

- 163-175 Bouverie Street, Carlton
    - West and south of subject park. Type 2 park – has allowable shadow allowance as a result of the streetwall heights nominated in the planning controls
- 70 Jolimont Street, East Melbourne
    - Existing building was higher than the specified height in the planning controls
- 86-88 Jolimont Street, East Melbourne and 90-94 Jolimont Street, East Melbourne

Level 5, 18 Oliver Lane
Melbourne VIC 3000

info@sjb.com.au
sjb.com.au

T 61 3 9699 6688

SJB Architecture Pty Ltd ACN 065 207 490 Michael Bialek 12804 Owen Chow 14643 Tristan Wong 18127

- Type 2 park – had allowable shadow allowance as a result of the maximum height nominated in the planning controls

- 364-366 Albert Street, East Melbourne and 370 Albert Street, East Melbourne
    - The existing shadow requirement within the planning controls prevented any overshadowing of the subject park prior to the application of the DDO8 controls.
- 330 St. Kilda Road, Melbourne
    - The existing planning control height limit prevented any overshadowing of the subject park prior to the application of the DDO8 controls.
- 336 Albert St, East Melbourne
    - The existing building and the existing shadow requirement within the planning controls prevented any overshadowing of the subject park prior to the application of the DDO8 controls.
- 100 Wellington Parade, East Melbourne
    - The existing building, existing planning control height limit and a wide road and rail easement prevented any additional overshadowing of the subject park prior to the application of the DDO8 controls.
- 369-379 King St, West Melbourne
    - West and south of subject park, wide easement and height limit prevented any overshadowing of the subject park prior to the application of the DDO8 controls.
- Queen Victoria Market Site - Site 01
    - North to north-west of subject park and had a higher height limit than most sites. It did however have existing shadow controls but the DDO8 amended planning controls extended these by 1 hour in the morning and afternoon.
- Queen Victoria Market Site - Site 02
    - Distance from subject park and height limits prevented any overshadowing of the subject park prior to the application of the DDO8 controls.

3.11. It is difficult to conclude that one park type over another caused more impact to a development envelope from the testing done. A broader selection of sites with a more even spread of park types tested could determine this. For example, there were minimal Type 1 parks tested.

3.12. For sites that are affected by the DDO8 amendment there was a tendency for the affected portions of the envelope to be terraced or ‘wedding caked’ in order to comply. It was an assumption of the modelling that this could be a ‘real-world’ outcome where a development envelope is trying to maximise its volume.

3.13. The above outcome is not always the best urban design or architectural outcome. Several contextual, aesthetic and urban design factors need to be considered in the ‘real world’ and are subject to the typical planning process and expert consultant review. This could have further impact on the development envelope beyond what is shown by this testing.

3.14. The application of the DDO8 controls and their wording was straightforward to follow. The mandatory nature of the controls made their interpretation clear.

Level 5, 18 Oliver Lane
Melbourne VIC 3000
info@sjb.com.au
sjb.com.au
T 61 3 9699 6688

SJB Architecture Pty Ltd
ACN 065 207 490
Michael Bialek 12804 Owen Chow 14643 Tristan Wong 18127

4. Limitations of the Built Form Testing

4.1. The built form testing is not exhaustive and does not represent every scenario where a site could be impacted by the new DDO8 controls.

4.2. Each site had several development assumptions applied to their envelope modelling that resulted in a specific built form outcome. It is acknowledged that there could be other development outcomes for a site that could result in a different impact amount.

4.3. Only office or multi-unit residential outcomes were tested for each site with an assumption that some might have retail or hospitality uses at ground level. Other typologies such as public buildings, hotels etc. were not considered in this study and could have revealed different outcomes by the DDO8 controls.

4.4. Specific uses and areas of the parks within the study were not considered, investigated or assigned more importance over another area of the same park. The entirety of the park was treated as equally important.

4.5. The possible development envelopes were restricted by either mandatory or nominated discretionary controls as per the brief: *'where discretionary height controls are nominated, assign the nominated height and setback requirement in the planning scheme as the outcome'* This means where controls were discretionary, they were used to inform the development envelope for the purposes of the study.

5. Conclusion

5.1. The application of the DDO8 controls and their wording was straightforward to follow. The mandatory nature of the controls made their interpretation clear.

5.2. There could be further variance in the development outcomes of certain sites, particularly where those sites have discretionary heights under the planning controls, if an applicant were to challenge and exceed such heights. These hypothetical outcomes were not tested in this study.

5.3. The overshadowing controls are for the middle of winter (June 21st) and represent the worst possible impact overshadowing would have on a park from a potential development. If overshadowing is reduced at this time of year it is reduced even further at all other times of the year.

5.4. The sites that are affected by the DDO8 controls need careful consideration from an architectural and urban design point of view to ensure a considered and appropriate built envelope result. Direct interpretations that comply with the overshadowing constraints should avoid an overly terraced or 'wedding cake' effect unless there is sound architectural or urban design justification.

5.5. I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the Panel.

Beaudene Fulwood
SJB Architects.

Level 5, 18 Oliver Lane
Melbourne VIC 3000

info@sjb.com.au
sjb.com.au

T 61 3 9699 6688

SJB Architecture Pty Ltd ACN 065 207 490 Michael Bialek 12804 Owen Chow 14643 Tristan Wong 18127

Appendix A

Level 5, 18 Oliver Lane
Melbourne VIC 3000

info@sjb.com.au
sjb.com.au

T 61 3 9699 6688

SJB Architecture Pty Ltd

ACN 065 207 490

Michael Bialek 12804 Owen Chow 14643 Tristan Wong 18127