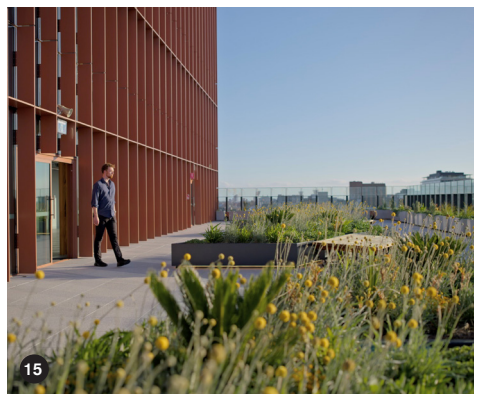
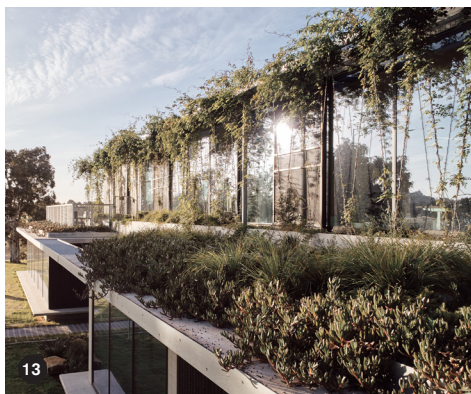
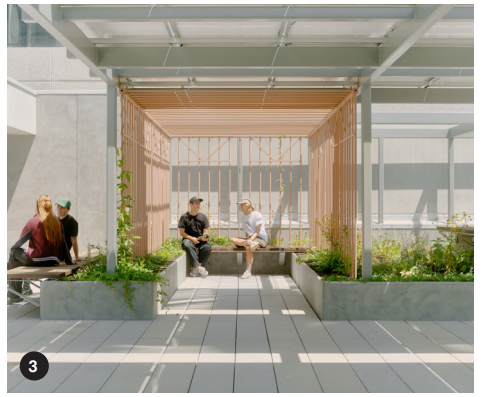


Independent Landscape Architectural Statement
INDEPENDENT EXPERT EVIDENCE
AMENDMENT C376 TO
THE MELBOURNE PLANNING SCHEME
7th August 2024

Prepared by
Professor Mark Jacques
Director
Openwork pty ltd
Landscape Architecture Urban Design Research and Speculation
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Opposite:

Images of my work on medium to large residential and commercial developments that have incorporated green infrastructure and that are the type and scale of development that the Amendment would seek to influence.

Areas of Expertise

1. My professional expertise is in the physical and spatial design of landscapes, landscape architecture and urban design, dealing with a range of project types, including communal open space, public realm design, master planning, streetscape design, residential design, open space design, urban furnishings and vegetation on structure.
2. My professional practice encompasses many medium to large residential and commercial developments that have incorporated landscape spaces, planting on structure and green infrastructure and that are the type and scale of development that Amendment C376 (**the Amendment**) would seek to influence. My expertise is in the design and documentation of landscapes and while that work is informed by ecology, economics and environmental engineering, I am not an expert in those fields.
3. My work designing landscape and planting on structure includes:
 - Albert Fields, Brunswick (1)
 - *Blackwood Street Proposal, North Melbourne* **
 - Bourke and Bowden, Green Square (2)
 - Centre for Higher Education Studies, South Yarra (3)
 - Chessell Street Commercial Project, South Melbourne (4)
 - Collins Street East Garden, Melbourne (5)
 - Eastern Road, South Melbourne
 - 11 Gordon Street, Cremorne (6)
 - 22 Gordon Street, Cremorne (7)
 - Grattan Street Student Housing **
 - Little Miller Residential Project, Brunswick East (8)
 - Macaulay Road Precinct, Kensington **
 - Melbourne Connect ELC for Froebel, Carlton (9)
 - Nightingale 3.0, Brunswick
 - Nightingale Albion, Brunswick
 - Nightingale Anstey, Brunswick (10)
 - Nightingale Ballarat, Ballarat (11)
 - Nightingale Village, Brunswick (12)
 - Northumberland Street Project, Collingwood
 - Parks Victoria Office and Depot, Albert Park (13)

- *Rupert Street Development, Collingwood (14)*
- *Russell Street Proposal ***
- *Queen Victoria Market Southern Development Site Towers 1, 2 and 3 ***
- Wellington Street Collingwood (15)

(*Italic text* denotes projects that are not built or not currently being built.)

(** Denotes projects that submitted a Green Factor Scorecard.)

(Numbers refer to images on page 2.)

4. I am a Landscape Architect and Urban Designer with 25 years experience across a broad scope of projects in Australia, Asia, The United States and Europe.
5. My work has been recognised by awards and publication locally, nationally and internationally.
6. After working for five years in the Sydney studio of Oculus, I relocated to Melbourne in 2002 and established their Melbourne practice. In 2016, I established Openwork pty ltd to undertake landscape architectural and urban design projects and research and speculation into cities.
7. In 2015, I was appointed Professor of Architecture (Urbanism) Industry Fellow within RMIT's School of Architecture and Urban Design. Additionally, I have lectured for the School of Design and the Faculty of the Built Environment at the University of NSW and the Faculty of Architecture, Building and Planning at Melbourne University. I am currently on the Program Advisory Committee for RMIT's Masters of Urban Design program.
8. I have made previous statements relating to development proposals, matters of Urban Design and Neighbourhood Character for the Victorian Civil and Administrative Tribunal and Advisory Panel Hearings.

Instructions Which Defined the Scope of this Statement

9. My instructions in this matter (which are appended to this statement) were to provide the City of Melbourne a preliminary opinion on Amendment C376 on matters within my area of expertise, including the controls in the proposed DDO73 that relate to landscape architecture matters such as green cover, urban heat island effect, the use of the Green Factor Tool, the effectiveness, maintenance and costs of green infrastructure and integrated water management, and any issues (arising from submissions, or otherwise) which warrant further consideration.
10. I was subsequently instructed to prepare this expert evidence statement and reviewed the documents supplied to me which included:
 - Amendment C376 Explanatory report;
 - Amendment C376 Instruction Sheet;
 - Exhibited Policy, Ordinance, Mapping and Incorporated Document;
 - Clause 2.03 Strategic Directions;
 - Clause 15.01-2L-01 Sustainable development;

- Clause 19.03-3L Stormwater management (Water Sensitive Urban Design);
- Schedule 73 to the Design and Development Overlay (DD073);
- Schedule 1-7 to the Capital City Zone (CCZ1);
- Schedule 1-6 to the Docklands Zone (DZ1);
- Schedule to Clause 72.03 What Does this Scheme consist of?;
- Schedule to Clause 72.04 Incorporated Documents;
- Schedule to Clause 72.08 Background Documents;
- Green Our City Strategic Action Plan: Strategic Justification for regulatory requirement for sustainability, Arup, 18 October 2019;
- Sustainable Building Design, Scheme Amendment C376, Background Report, Hansen, September 2020;
- Climate Change Adaptation Strategy Refresh, City of Melbourne, 2017;
- Climate Change Mitigation Strategy to 2050, City of Melbourne, 2018;
- Climate Emergency Response, City of Melbourne, 2020;
- Fishermans Bend Water Sensitive City Strategy, DJPR, 2022 (Part 1);
- Fishermans Bend Water Sensitive City Strategy, DJPR, 2022 (Part 2);
- Green Our City Strategic Action Plan 2017-2021, City of Melbourne, 2017;
- Growing Green Guide, City of Melbourne 2014;
- Municipal Integrated Water Management Plan, City of Melbourne, 2017;
- Waste and Resource Recovery Strategy 2030, City of Melbourne, 2019;
- Green Our City Action Plan – Draft Planning Requirements, Economic Feasibility Testing, HillPDA, November 2020;
- Green Our City Action Plan – Draft Planning Requirements, Economic Feasibility Testing, Addendum (5 Additional Sites), HillPDA, February 2022;
- Future Melbourne Committee, 15 September 2020;
- Report – Amendment C376: Sustainable Building Design
- Report – Melbourne Green Factor Tool
- Minutes
- Submissions received to the Amendment, particularly the following submissions:
 - (a) #5
 - (b) #8

- (c) #38
- (d) #42
- (e) #45
- (f) #50
- (g) #53
- (h) #55
- (i) #57
- (j) #62
- (k) #66
- (l) #68
- (m) #69

11. I was also instructed to consider the 21 May 2024 FMC version of the Amendment.
12. I have also reviewed an Expert Witness Statement prepared by Gavin Ashley of HIP V. HYPE Sustainability dated June 2024 and have viewed a video summary prepared by Mr Ashley titled "Green Factor-20240621_143235-Meeting Recording.mp4".
13. This statement has been prepared with reference to Practice Note 1: Expert Evidence, published by Planning Panels Victoria. I have included my CV as an appendix to this Statement. 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.

Reason for the Amendment

14. I understand that the Amendment seeks to introduce new sustainable building design standards into the Melbourne Planning Scheme (**the Scheme**) that will apply to new buildings as well as substantial alterations and additions to existing buildings. These standards draw on established and industry accepted rating tools as well as Green Factor, a bespoke tool that has been developed by the City of Melbourne.
15. The Amendment also introduces changes to policy.
16. The Amendment recognises that private development is a critical contributor to any overarching municipal goals or environmental and that the planning system remains a key tool in facilitating changed practices on private land for public benefit.
17. Further, I understand that while policy documents including "The City of Melbourne's Green Our City Strategic Action Plan 2017-2021: Vertical and Rooftop Greening in Melbourne (GOCAP)" identify the key benefits of increasing green infrastructure across the city, there is no metric or standard currently in the Scheme to guide the design of landscape on structure, green roofs and vertical greening.

18. In response, the City of Melbourne has developed the Green Factor Tool, as a method to achieve and assess proposed green infrastructure and urban ecology through applications within the Scheme.

Structure of this Statement

19. Having reviewed the documents supplied to me including submissions to the Planning Panel, I have chosen to provide an overview of my experience using the City of Melbourne's Green Factor Tool using three case studies from projects that my office has submitted for planning permit applications.
20. With that as context, I will then provide a commentary on that experience and expand upon it through responses to submissions to the Planning Panel. I conclude with a summary of my opinions on the matters raised as well as other matters relating to the Amendment which warrant further consideration.

My use of the Green Factor Tool

21. My practice has prepared seven landscape architectural reports associated with planning permit applications using the Green Factor Tool. The use of the Green Factor Tool was voluntary in these applications, with each proponent agreeing to score the scheme (usually at our suggestion) as a way of becoming familiar with it.
22. The tool is a web-based application that calculates a score (Green Factor Scorecard) based on the relative volume of proposed green elements expressed as a proportion of the overall area of the site.
23. The tool asks users to enter details on the project site including total site land area, land use and building typology. A separate section asks users to enter details of the green infrastructure elements of their proposed development for each of the following types of greening: Existing in ground planting, new in ground planting, green wall, green façade, planters on structure and green roof.
24. Based on the input data, the tool generates a Green Factor Score. The tool weighs the value of proposed green elements in the calculation of this score. For instance, an area planted with edible species attracts a higher score than the same area planted with non-edible species. Similarly, a small tree in a raised planter on structure attracts a lower score than a small tree planted in natural ground.
25. The three projects that I use to illustrate my experience of the tool have not been identified and where represented, are in sketch form only. This is to ensure that the specifics of each project remain confidential. They are identified as Project 1 (a large residential development) Project 2 (a medium scale mixed-use development) and Project 3 (a smaller scale commercial development).
26. As is usual in our office, full planting plans were not produced for the Planning Application, but a plant palette was prepared noting plants, their installation size, general location and size at maturity. This list included a matrix identifying if each plant was indigenous to Melbourne, native to Australia, exotic and / or productive.

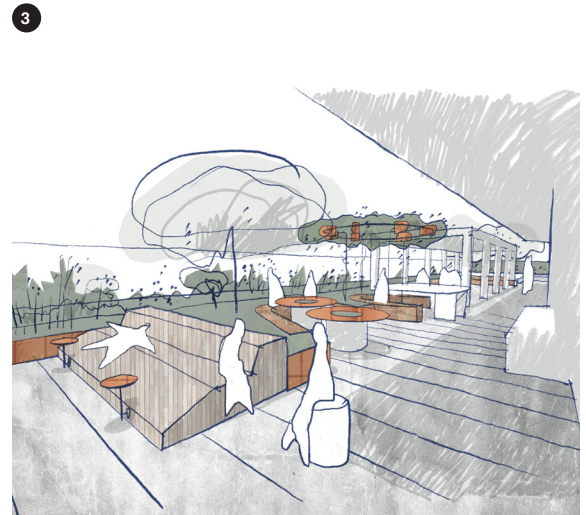
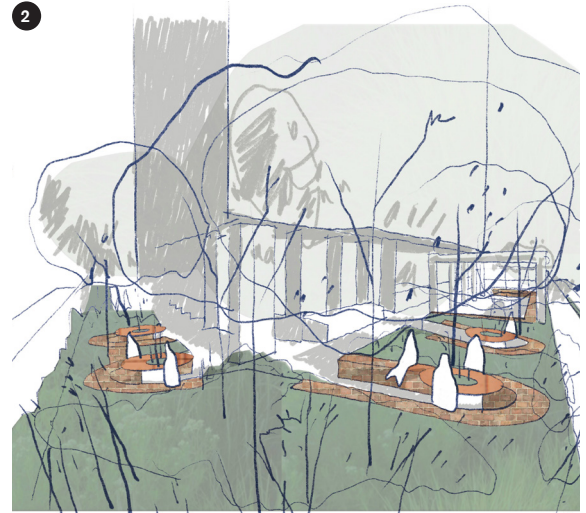
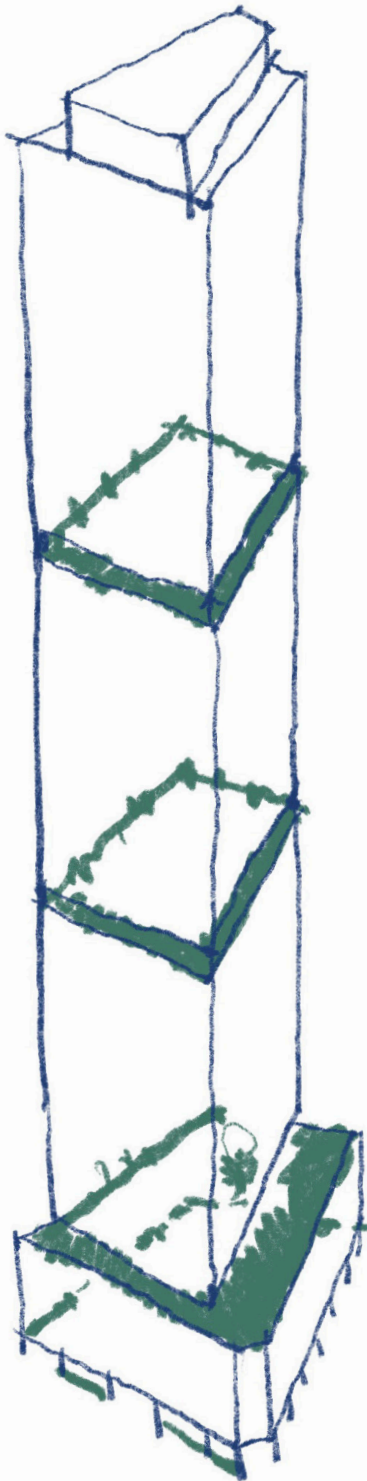
27. In this statement, an indigenous plant is defined as any species that can be found in the book "Flora of Melbourne Guide to the Indigenous Plants of the Greater Melbourne Area, 4th Edition". A native plant is native anywhere in Australia. A productive plant is defined as one that produces food for human use. An exotic plant is a plant that is not native to Australia, but which can survive and reproduce there.
28. As is usual in our office, none of the projects discussed below have proposed green walls as part of the design response. By green wall, I mean a (usually proprietary) vertical built structure which includes soil or a substitute substrate, hydro-culture felt and an integrated hydration and fertilisation delivery system. We have reservations about them as a generic design response and concerns about the resources that they use to stay alive and the implications for our work if those resources fail.
29. As is usual in our office, planting design is driven by an ambition to privilege indigenous and native vegetation, with the use of exotic plants limited in low-light areas (where they typically perform better than natives) and where self-supporting climbing plants are desired on the facade (an acknowledgment that few native plants can perform this role).
30. For each of the examples discussed below, a risk review was undertaken with the design team, preliminary loading for soil on structures was coordinated with the project's structural engineer and walls and edges for retaining soil were checked against balustrade levels to design out the safety risk of people being able to climb and fall from external areas.

Project 1

31. Project 1 is a 55 storey residential project in Central Melbourne on a site area of approximately 1,600m². My practice, Openwork was engaged to provide landscape architectural advice in the early stages of the project formation and prepared a landscape report and Green Factor Scorecard to support the planning permit application which was lodged in late 2023. The client for this project has a number of similar buildings in cities across Australia. The project received a planning permit, has been documented to design development and is currently at tender.
32. The massing of the project was driven by the volumetric and setback controls of the Scheme and resulted in a tower / podium typology with a terrace formed on top of the podium at level 5 and a plaza, laneways and street interface at ground. A basement with services and end of trip facilities took up a footprint of 100% of the site area. The project has no heritage encumbrances, existing vegetation or easements.
33. Based on the project's massing and my experience with similar projects of this type and scale, I would speculate that an orthodox approach (or one that didn't need to take Green Factor into account) would use the podium as a landscape space for communal resident amenity, would provide landscaped spaces at ground level to assist with the scale, materiality and invitation of pedestrian interfaces and would likely use balcony greening at lower levels. I speculate that it seems very likely that such an approach would be close to achieving a compliant Green Factor score of 0.55.

Project 1

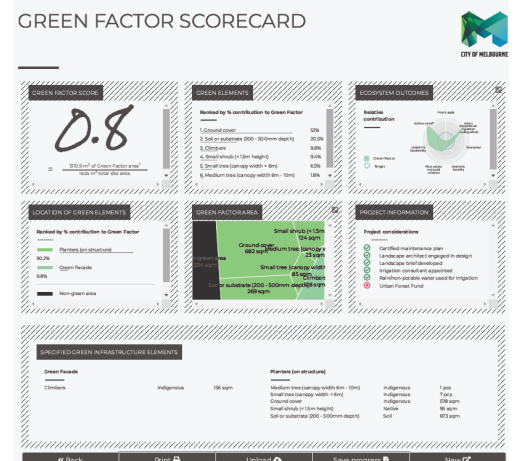
1. A sketch of the proposed built massing with the distribution of green infrastructure.
2. A sketch showing the containment of soil and planting on structure.
3. A sketch showing the containment of soil and planting on structure.
4. A copy of the Green Factor Scorecard for Project 1.



4

0.80

Green Factor Scorecard Summary
1310 m² of GF area / 1635 m² total site area



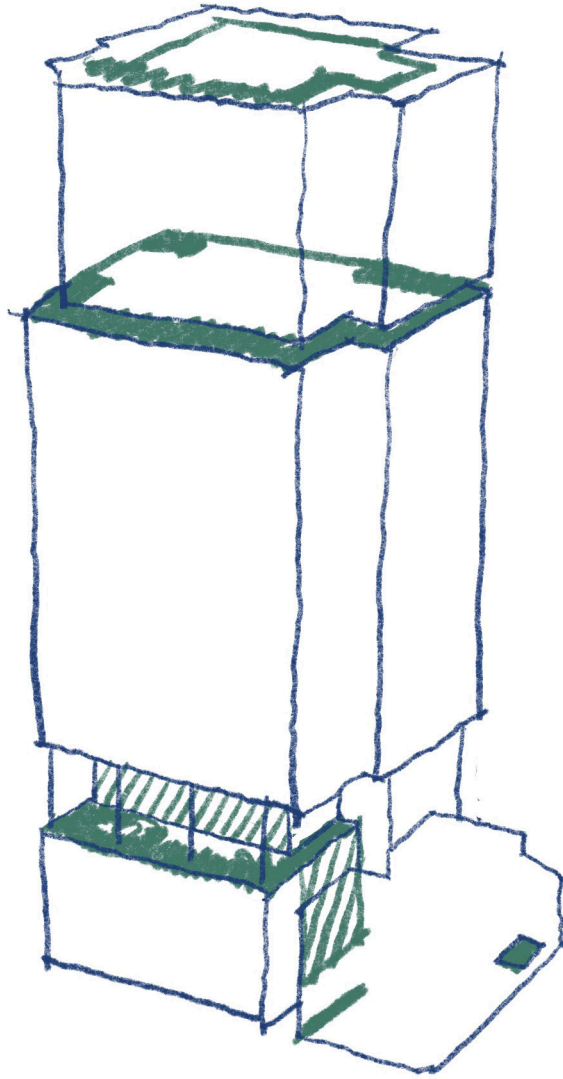
34. In reality, the project did in fact use the podium formed by the tower setback as a landscaped space for communal resident amenity and provided landscaped spaces at ground to punctuate and animate the ground plane. No lower level balconies were provided by the project, however the inclusion of two whole-floor resident amenity levels within the tower provided an opportunity for two non-accessible perimeter gardens that wrapped the floor plate and that provided planting for the visual amenity for those using communal spaces. Refer to the project 1 sketch on the previous page for the distribution of these landscape zones.
35. Soil volume was provided on the ground level slab through raised planters, integrated with the building facade. These planters host ground covers and self-supporting climbing plants. A small tree was provided in the plaza space with a custom timber stoop concealing soil volume to a depth of 1m. All landscape maintenance for this zone was able to be undertaken from the ground level without special equipment.
36. Soil volume was provided on the podium level through the use of seats and steel edges as retaining structures, allowing for a minimum soil depth of 450mm for mass planting. Where small trees were desired on the podium, localised mounding was provided a depth of 900mm for the rootball. All landscape maintenance for this level was able to be done from within the balustrade of the podium, with materials and scissor lift for accessing the green facade on the core and brought up from ground via the elevator.
37. Soil volume was provided to the edge of the communal space via an integrated set down in the building slab allowing for a minimum soil depth of 450mm for mass planting. Landscape maintenance to this space was via the balcony and a clip-line fixed to the facade for use by specially trained crew with materials and equipment were brought up from ground via the elevator.
38. The large areas for landscape provided by the massing and setbacks of the built form, along with the large areas of planting to the perimeter of each of the communal tower floors made achieving a Green Factor score of 0.55 relatively easy.
39. Percentage mixes of indigenous, native, exotic and productive plants were identified and put into the Green Factor Tool for each zone. These percentages were driven by an ambition to privilege indigenous and native vegetation and the desire to include productive foods on the podium deck for the use of residents. The Green Factor Scorecard submitted for planning was 0.80. Refer to figure 4 on the previous page.
40. As is normal for design resolution at a planning permit application stage, a complete facade maintenance access report had not been prepared nor co-ordinated with the landscape design. As a result, we were aware that the Green Factor score would likely reduce in design development depending on whether a Davit arm solution was required for maintenance access or if a more extensive service walkway is needed. Given the high Green Factor score, we were confident that the relatively minor adjustment to this could be accommodated and still achieve a score of more than 0.55.

Project 2

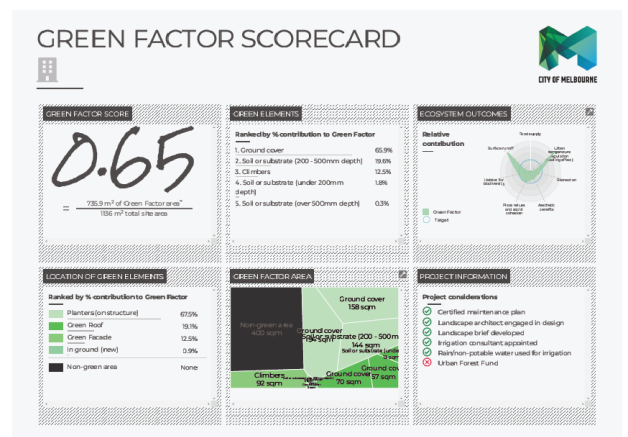
41. Project 2 is a 23 storey mixed project in Central Melbourne on a site area of approximately 1,130m². My practice, Openwork was engaged to provide landscape architectural advice in the early stages of the project formation and prepared a landscape report and Green Factor Tool scorecard to support the planning permit application which was lodged in mid 2023. My instructions are that the application has now lapsed.
42. The project site included listed heritage buildings with took up 290m² of the site area (or approximately 25% of the site). While one of these buildings had a flat and accessible roof, due to structural and heritage constraints, no planting was proposed on either of the existing buildings, although their interiors were remodeled as part of the development. A basement with services took up a footprint of almost 100% of the non-heritage building site area.
43. The massing of the project was broadly consistent with the setback controls of the Scheme and resulted in a tower set back from the heritage buildings. As an acknowledgment of the scale of those existing buildings, a 3 storey podium was proposed with a roof garden and a double height void to the tower cantilevered above.
44. The landscape scheme proposed a series of laneway spaces at ground that met in a small urban plaza under the cantilever of the tower. The western edge of the plaza featured an open stair and circulation system to the level 3 roof garden which was planted with climbers as a kind of green facade.
45. Based on the project's massing and my experience with similar projects of this type and scale, I would speculate that an orthodox approach (or one that didn't need to take Green Factor into account) would use the podium as a landscaped space for communal amenity, would provide landscaped spaces at ground level to assist with the scale, materiality and pedestrian interfaces with the podium and would use balcony greening at lower levels. I speculate that such an approach would be close to achieving a compliant Green Factor score of 0.55.
46. In reality, the project did in fact use the podium formed by the tower setback as a landscaped space for communal amenity. No lower level balconies were provided by the project, however the inclusion of a shadow break in the building at level 18 provided an opportunity for a perimeter garden that wrapped the floor plate and provided planting for the visual amenity for occupants of that floor. A semi-extensive green roof was also provided at the edge of the roof space surrounding the plant zone. Refer to the project 2 sketch on the next page for the distribution of these landscape zones.
47. Soil volume was proposed to be provided on the ground level slab through raised planters integrated with the circulation stair and balustrade. These planters would host self-supporting climbing plants creating a green facade for the lower 3 floors of the tower form, as seen from a new public plaza. All landscape maintenance for this zone is able to be undertaken from the access stair without special equipment.

Project 2

1. A sketch of the proposed built massing with the distribution of green infrastructure.
2. A sketch showing the podium-top green space.
3. A sketch showing the containment of soil and planting on structure.
4. A copy of the Green Factor Scorecard for Project 2.



T2 Green Factor Scorecard Summary
736 m2 of GF area / 1136 m2 total site area



48. Soil volume was provided on the level 3 garden through the use of a set down across the whole roof slab, allowing for a minimum soil depth of 450mm for mass planting. Where small trees were desired, oversized steel pots were proposed that allowed 900mm soil depth for the rootball. All landscape maintenance for this level was able to be done from within the balustrade of the podium without the need for use special equipment with materials brought up from ground and directly into the garden via a service elevator.
49. Soil volume was provided to the level 18 building break and outside the end-of-corridor windows to levels 06-17 via an integrated set down in the structural slab allowing for a minimum soil depth of 450mm for mass planting. Landscape maintenance to these planters was via Davit arm and rope from the roof.
50. A semi extensive green roof of 250mm depth was provided to the perimeter of the roof space with suspended webforge grates to provide maintenance access. All landscape maintenance for this level was able to be done from within the roof space.
51. The main contribution to the Green Factor score in this project was the soil volume and planting of the level 3 roof garden, the green access stair 'facade' and the level 18 building break. As the combined Green Factor score for these was slightly less than 0.55, the scheme added the end of corridor window planting to levels 06-17, the semi extensive planting to the roof and 'tuned' some of the planting mixes in the Green Factor Tool to increase the proportion of indigenous and productive plants.
52. The 'tuning' of the areas and planting proportions of the proposal beyond the score of 0.55 was our conscious attempt to provide flexibility for the coordination of services and facade access requirements that typically occur at design development, once a Planning Permit is granted. The Green Factor score submitted for planning was 0.65. Refer to figure 4 on the previous page.
53. The Green Factor Score of 0.65 gave the project a buffer to accommodate post-planning coordination and change, but in this example, we were hopeful that if required, a appeal could be made that reflected the heritage encumbrance on the site. That is to say, while our total site areas was 1,130sm, the constraints around existing heritage assets within the site made it impossible for 290m2 of the site area to contribute to the Green Factor score.
54. The submitted Green Factor score of 0.65 reflected the whole 1,130m2 area, but a site area of 840m2 that subtracted the areas of the heritage assets (1,130 minus 290) resulted in a Green Factor score of 0.89. In the absence of any guidance within the Green Factor Tool about how heritage assets, easements or site specific constraints should be dealt with, we chose to follow the tool faithfully, even though this resulted in a lower score.

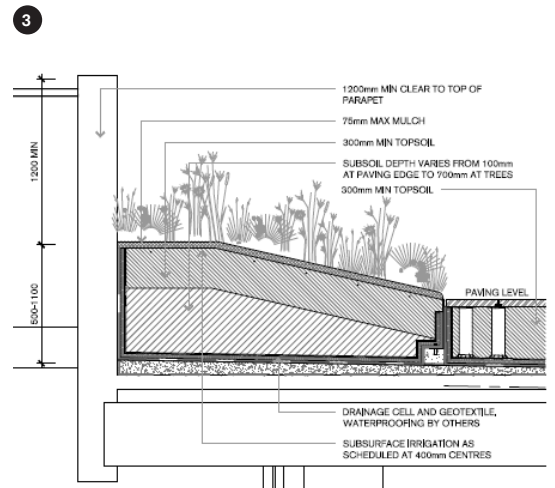
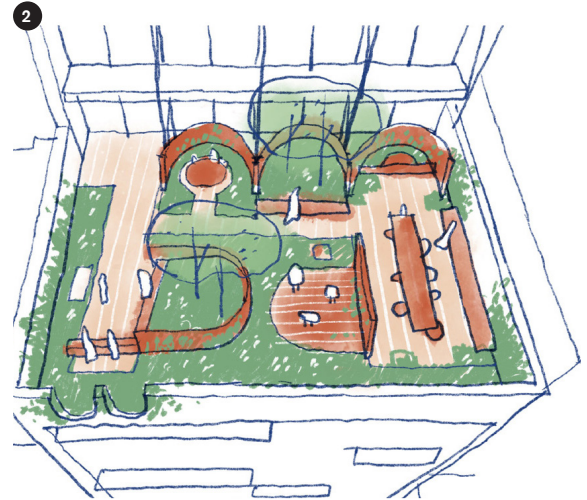
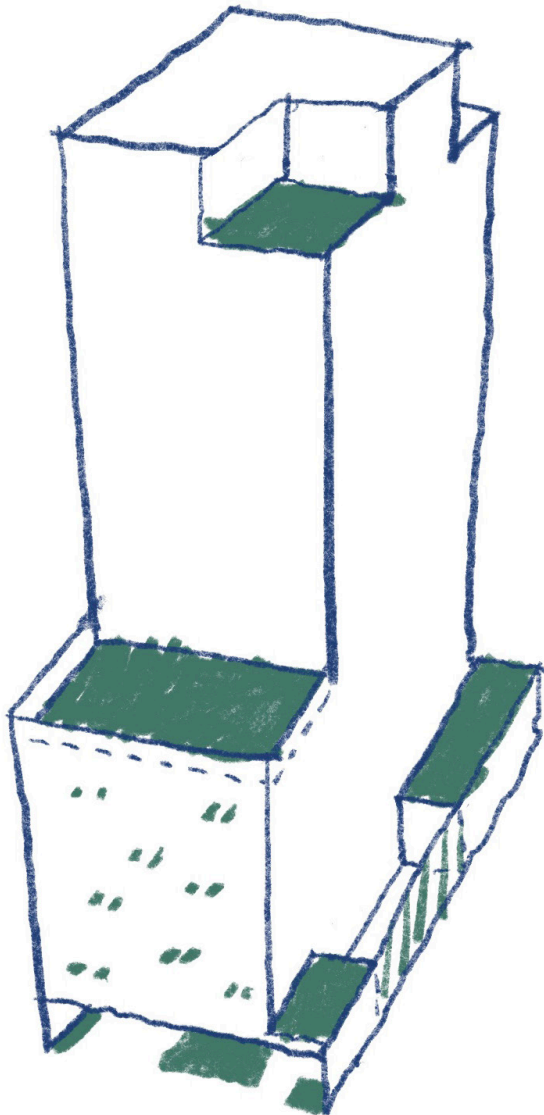
Project 3

55. Project 3 is a 16 storey commercial project in Central Melbourne on a site area of approximately 1,000 m2. My practice, Openwork was engaged to provide landscape architectural advice in the early stages of the project formation and prepared a landscape report and Green Factor Tool scorecard to support the planning permit application which was lodged in late 2023. The client for this project was a builder, which meant that the design benefited from feasibility and build-ability review during the planning process. The project is under consideration by the planning department.

56. The massing of the project was driven by the volumetric and setback controls of the Scheme and resulted in a single form with a tower setback at level 8 forming a north facing terrace. A basement with parking, services and end of trip facilities took up a footprint of 100% of the site area, but there was sufficient distance between the finished footpath level and top of car park structure to include tree planting at ground level. The project had no heritage encumbrances, existing vegetation or easements.
57. Based on the project's massing and my experience with similar projects of this type and scale, I would speculate that an orthodox approach (or one that didn't need to take Green Factor into account) would use the level 8 setback as a landscaped space for communal amenity, would provide landscaped spaces at ground level to assist with the scale, materiality and pedestrian interfaces and an amenity space on the roof with some landscape included. I speculate that such an approach would be close to achieving a compliant Green Factor score of 0.55.
58. In reality, the project did in fact use the terrace formed by the tower setback as a landscape space for communal amenity and provided landscaped spaces at ground to punctuate and animate the groundplane. The street facing facade included episodic greening along its balcony spaces which included climbing plants to form a green facade. A light well introduced in the southern setback zone provided light and air to a ground floor retail tenancies and a series of stacked potted plants provided landscape amenity for that space. The roofscape featured productive planting and a semi-enclosed arbor for climbing plants. Refer to the sketch of Project 3 on the opposite page for the distribution of these landscape zones.
59. Soil volume was provided on the ground level slab through raised planters integrated with the building facade. These planters host ground covers and self-supporting climbing plants. A small tree was provided in the plaza space with soil volume to a depth of 1m between pavement level and the basement structure below. All landscape maintenance for this zone was able to be undertaken from the ground level without the use of special equipment.
60. Soil volume was provided on the terrace level through the use of a set down across the whole roof, allowing for a minimum soil depth of 450mm for mass planting. Where small trees were desired, localised mounding was proposed that allowed 900mm soil depth for the rootball. All landscape maintenance for this level was able to be done from within the terrace without the need to use special equipment with materials and brought up from ground via an elevator.
61. Soil volume was provided to the roofscape and balconies via raised beds and pots for a minimum soil depth of 450mm for mass planting and climbing plants. Landscape maintenance for this space was via the internal tenancies of the building.
62. The Green Factor score submitted for planning was 0.60. Refer to figure 4 on the page opposite.
63. The main contribution to the Green Factor score in this project was the soil volume and planting of the level 8 terrace and the productive garden on the roof. As the combined Green Factor score for these was close to 0.55, the scheme added the extensive roof planting on the level 1 setback along with additional pots on the ground floor light well. The combination of these elements resulted in a Green Factor score of closer to 0.70, but the planning application only claimed elements to a score of 0.60. This was deliberate strategy to under promise and over deliver - to allow a buffer for future co-ordination with structure and services that might require a reduction to the extent of landscape zones and green infrastructure.

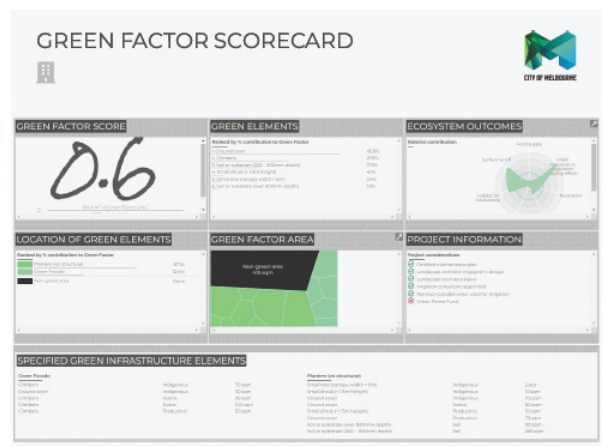
Project 3

1. A sketch of the proposed built massing with the distribution of green infrastructure.
2. A sketch showing the containment of soil and planting on structure.
3. A sketch showing the containment of soil and planting on structure.
4. A copy of the Green Factor Scorecard for Project 3.



0.60

Green Factor Scorecard Summary
616 m² of GF area / 1082 m² total site area



My experience of the Green Factor Tool

64. Since 2023, I have prepared and lodged seven planning permit applications that have included a Green Factor scorecard.
65. All seven of these projects were already entertaining the idea of providing planting on structure as part of their proposals. The provision of this greening was largely developer driven. We were engaged by a developer to provide landscapes within and upon the building as a way of making spaces that offered amenity to the ultimate users of the building. Part of this engagement was also about using landscape and the provision of greening to create a project of distinction for the planning permit application and for the eventual presentation of the project in marketing.
66. Six of those seven projects were able to surpass a Green Factor score of 0.55 either without having to do anything that we won't normally do in our work, or by a modest increase of the landscape areas being proposed and a refinement of planting types that privileged the indigenous and productive planting that the Green Factor Tool weights as more valuable than exotic or native species. These changes were done without any objection by the developer.
67. For the remaining one of seven projects, the developer elected not to pursue a Green Factor score of 0.55, citing the tool's voluntary status. That project achieved a Green Factor score of 0.27 and was granted a permit.
68. My reflection on using the Green Factor Tool over the last few years is that it has begun to formalise and measure design outcomes and design ambitions that were already happening in the industry. That is to say, its been a long time since the developer of a residential or commercial project has forgone the inclusion of landscape upon or within their project. The provision of landscape and green infrastructure is not innovative - it has become an orthodox and accepted outcome for new buildings.
69. The Green Factor Tool's innovation is in providing a way of measuring the provision of green infrastructure on buildings and framing that measure in terms of urban ecology. I would say that the tool has enabled us to push the things that we're already doing in practice a little harder - to find a little more area for planting, to argue for a little more deep soil and to advocate for higher proportions of indigenous planting. My experience is that this is about tweaking accepted industry norms rather than reinventing them.
70. I agree that the target Green Factor score of 0.55 is an appropriate standard for Amendment C376, because in my experience, there are no significant technical constraints with achieving this score and that flexibility is available within the tool for designers to further increase Green Factor scores by, for example, specifying productive or indigenous plants.
71. In light of this, I strongly support Amendment C376's mandatory requirement that new buildings be designed and constructed to achieve a minimum Green Factor score of 0.55 using City of Melbourne's Green Factor Tool.
72. Having said that, my experience of the tool has raised concerns and I think there are opportunities for its development and improvement. These concerns might be categorized into three types: the communication of the values and objective of the tool, the agency of the tool after planning and problems with the interface and usability of the tool. I've provided brief commentary on each below.

1. Images of studies undertaken by me to determine the relative weighting of value ascribed to indigenous, native, exotic and productive plants by the Green Factor Tool.
2. My own ranking of various values derived through these studies.
3. The in-house spreadsheet developed by Openwork as a working design tool in tallying and calculating Green Factor scores.

Figure 10 displays a comparison of four groundcover types (Indigenous, Native, Exotic, and Productive) across two sets of metrics. Each type is represented by a 3D model, a numerical value, and a set of four small images showing different views or details.

Left Set of Metrics:

- 220m2 Indigenous Groundcover:** 1.58
- 220m2 Native Groundcover:** 1.48
- 220m2 Exotic Groundcover:** 1.28
- 220m2 Productive Groundcover:** 1.83

Right Set of Metrics:

- 220m2 Indigenous Groundcover:** 0.56
- 220m2 Native Groundcover:** 0.53
- 220m2 Exotic Groundcover:** 0.46
- 220m2 Productive Groundcover:** 0.59

Below each set of metrics, there are four small images showing different views or details of the groundcover types, with numerical values: 1.23, 1.15, 1.0, and 1.42.

1.18	1.38	1.58
Example 1 100m2 site Species 100% Exotic Species Plant Types 100% Grassland/For Soil 100% Soil >500mm	Example 2 100m2 site Species 100% Indigenous Species Plant Types 100% Grassland/For Soil 100% Soil >500mm	Example 3 100m2 site Species 100% Productive Species Plant Types 100% Grassland/For Soil 100% Soil >500mm
1.64	2.06	3.54
Example 4 100m2 site Species 100% Productive Species Plant Types 50% Grassland/For 50% Small Shrubs Soil 100% Soil >500mm	Example 5 100m2 site Species 100% Productive Species Plant Types 50% Grassland/For 25% Small Shrubs 25% Small Trees Soil 100% Soil >500mm	Example 6 100m2 site Species 100% Productive Species Plant Types 50% Medium Canopy Trees 50% Small Shrubs Soil 100% Soil >500mm

17

Communicating the values and objectives of the Green Factor Tool

73. There is very little communication within the Green Factor Tool about what it values, how it achieves its scores and what its objectives are. The Green Factor Tool website (<https://www.greenfactor.com.au/>) contains no commentary on these topics.
74. A completely different site (<https://www.melbourne.vic.gov.au/community/greening-the-city/green-infrastructure/Pages/green-factor-tool.aspx>) contains a link to the article "Integrating Green Infrastructure into Urban Planning: Developing Melbourne's Green Factor Tool" by Bush, Ashley, Foster and Hall. While this article contains a description of the development of the tool and its broad objectives, it is pitched in the language of an academic journal rather than the language of clear explanation.
75. In the absence of a clear statement of the tool's values, I started my use of the tool by testing a series of hypothetical scenarios intended to get it to confess its biases.
76. By entering a hypothetical 10x22m site and testing four scenarios where the complete footprint was covered in 100% indigenous ground covers, then 100% native ground covers, then 100% exotic ground covers and then 100% productive ground covers (Green Factor scores of 1.58, 1.48, 1.28 and 1.83 respectively), I was able to determine that the tool saw productive plants as 142% more valuable than exotic plants - but no rationale was provided as to why. In this context, its possible to imagine a podium covered with an urban farm achieving the same Green Factor score as the same podium covered in salt bush. Both are defined as productive plants, but the ecological and food supply outcomes of each are starkly different.
77. By testing the same hypothetical 10x22m site with three scenarios where the complete footprint was covered completely in soil of under 200mm depth, then 500mm depth and then over 500mm depth (Green Factor scores of 0.4, 0.4 and 0.1 respectively) I was able to determine that while deeper soil on structure is seen in the industry as a positive outcome for plant growth, the Green Factor Tool sees no difference in value for soil that is 500mm deep versus 1,000mm deep.
78. Finally, testing the same hypothetical site with 100% native ground covers yielded the same result (1.48) regardless of whether the tool was told that planting was available for building occupants to use or whether the planting wasn't available for to use, whether planting was visible by the general public or not visible by the general public and whether the planting was located on top of the tower, at its mid-rise or at ground level. The tool's inability to make a distinction between green infrastructure that can be used and seen by people and that which can't seems problematic in light of its ambitions around place value, social cohesion and aesthetic benefits.
79. I understand and accept that the science and objectives behind the tool require it to use value weighting to achieve its ambitions, but if the tool is to be widely adopted, trusted and used with purpose, there needs to much more explanation about how it works and what it values. This explanation needs to be visual and spatial as well as text based, needs to be in plain language and needs to be couched in terms of creating value and impact.

The agency of the Green Factor Tool after planning

80. In my estimation, the strength of the Green Factor Tool rests in its ability to provide a city wide and industry measure for the provision of green infrastructure on new buildings at the time at which those buildings are submitted for planning approval. While none of the Planning Applications for which I've prepared Green Factor scores are in construction, in my experience, the arc of design development post-planning tends to result in a reduction (however small) of landscape when compared to stamped drawings.
81. This isn't necessarily a complaint about opportunistic changes by developers or builders - its an admission that many of the decisions that effect the delivered outcome of landscape projects and green infrastructure are made by contractors and consultants who simply aren't at the table during the planning phase of work.
82. In my experience, these include inputs provided post tender by builders and subcontractors around the detailed design of facade and building access including the provision of Davit arms, walkways and structures for fall arrest, Building Maintenance Units, shop drawings for services that expand roof plant, the use of alternative planter construction, the adoption of different water proofing systems etc. - all of which impact assumptions made at the planning stage about the extent of green infrastructure.
83. As Gavin Ashley states on page 30 of his Expert Evidence Statement, "as a planning stage design and policy tool, the Green Factor Tool does not address design detail and construction stage implementation issues, however I acknowledge their importance".
84. If the intent of the Amendment is that new buildings must be designed and constructed to achieve a minimum Green Factor score of 0.55 and if, as I suspect, its likely that a project that achieves a 0.55 Green Factor score at planning is going to have that score put under pressure in its development post-planning stage, then part of the explanation of the tool should be around scenarios for capturing and dealing with that change. Its unclear to me whether this will be a secondary consent submission to the responsible authority, how the as-built compliance with a score of 0.55 will be assessed and what the ramifications might be if the as-built falls below the mandatory measure.
85. I understand and accept that the tool in its current form has a primary interest in the planning phase of projects, but if the tool's objectives are to be met, there needs to be more consideration of its agency after the permit has been issued.

Problems with Interface and usability of the Green Factor Tool

86. I appreciate that the Green Factor Tool aims to balance comprehensiveness with ease of use. In my experience, the tool's ability to capture landscape types (green wall, green roof, planting on structure etc.) and the quantum of planting types (trees, ground covers, native plants, productive plants etc.) successfully negotiates the need to capture the specifics of a project without getting side tracked on unnecessary detail.
87. However, one of the difficulties with the tool is the web-based interface that users are required to navigate in order to lodge an assessment.

88. In part, this difficulty is caused by features that don't appear to work. The "save progress" button on the Green Factor Scorecard screen doesn't do anything (users have to go back to the main Green Factor Tool page in order to save their work). When it comes time to extract the Green Factor score as a PDF file, a lot of the data doesn't print, making it illegible. I acknowledge that these are essentially 'bugs' that can be fixed if the tool were to form part of the Amendment.
89. A larger issue, that to my mind requires a more comprehensive rethinking of the structure of the site, are the multiple pages and pages with pages (sixteen in total by my count) that users must navigate in order to lodge information into the tool. I can accept that if the site is used simply as a reporting tool, then this structure may not be as frustrating. That is to say, if a design has already been done and final quantities known by a designer, then it's not so difficult to input figures and get a result.
90. The problem is that in my experience, the site is not used as a reporting tool, but as a design tool - part of using it is to tune proportions of planting or to increase one type of green infrastructure over another and to see how these iterations effect the ultimate score. Using the tool in its current form in this way is difficult. Multiple page navigations, the inability to see values for all landscape types simultaneously and the convoluted way of saving files makes using the tool iteratively very difficult.
91. I note Gavin Ashley's point in paragraph 110 of his expert witness statement that "for a larger development where green infrastructure is documented over multiple levels with complexity it could take approximately 3 – 4 hours" to complete a Green Factor submission. If we acknowledge that this process doesn't happen once, but may happen multiple times in the development of a planning scheme, then the adoption and success of the tool will require that it allow changes, adjustments and iterations to be made with ease, not with difficulty.
92. To work around the limitations of the web-based interface, our practice has produced an excel spreadsheet as a proxy Green Factor Tool, where the inputs across all landscape types and (importantly) all floors of a multistory development can be seen and adjusted in real time with the Green Factor score updating instantly. Regrettably, as the weighting of the actual tool is so unclear, our spreadsheet isn't able to match the tool's actual results, but it's an acceptable working version.
93. It seems to me that it would be not only possible, but highly desirable to provide two versions of the tool using the same values - a web based version similar to the current one but comprehensively redesigned with a more intuitive interface and a web-based or version-stamped downloadable spreadsheet that designers can use with greater specificity and ease of navigation. The redesign of the web based version could consider a single page interface where all the project inputs can be seen at once rather than navigating back and forth through multiple sets of pages.

Responses to submissions.

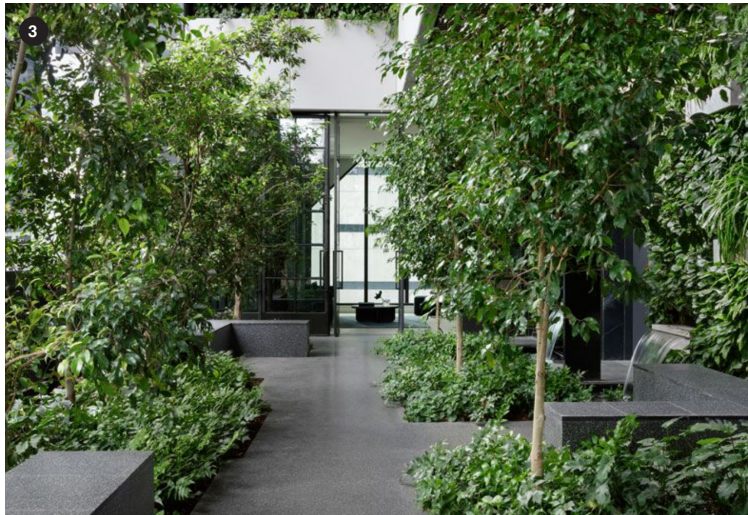
94. I understand that the Amendment was on public exhibition from 2 March 2023 – 17 April 2023 and attracted 73 submissions. A number of submissions are supportive of the Amendment while others raised concerns, including those that are relevant to my field of expertise. I have briefly outlined and discussed the submissions below that I've been instructed to review.

95. **Submission #5** notes that "... if mandating a Green Factor score, then the on-line tool needs to work seamlessly with no bugs, and very clear instructions need to be provided on how to use it. Currently there are a lot of definitions open to interpretation and the tool itself has a number of bugs in the calculation and the output of results." In response, I note only that this submitter may have difficulties with the tool similar to those that I've raised in paragraph 88 above.
96. **Submission #8** notes under a section titled Green Roofs that "To make the city more environmentally sustainable, new buildings will have to meet higher environmental ratings and incorporate green roofs. While this will undoubtedly benefit the city in the long run, it poses a challenge for developers and construction companies, as they have to bear additional costs during a time when development and construction costs are already high. This could have an impact on the viability of many projects or even affect affordability initiatives in the short term".
97. In response, I take it as read that Green Roofs here is shorthand for the outcomes imagined by the Green Factor Tool which encompass green roofs as well as planters on structure, green facades and planting in ground. I agree with the point that the costs need to be managed in regard to their impact on the viability and affordability of a project and note that Bulah's current and recent projects already successfully balance the cost of providing green infrastructure with the value that that infrastructure creates for residents and for differentiation in the market. Refer to images on page 23.
98. The majority of these projects would already appear to be at quantum of greening required to achieve a 0.55 Green Factor score, suggesting that the Green Factor Tool is a way of measuring provisions already in the industry rather than asking for new forms of innovation.
99. I'm unclear what the submitter means when they say that "The site area ratio must [sic] be given serious consideration to reduce to .2 as the proposed ratio will have a serious impact on the commencement of future projects". It may be referring to the Green Factor Tool's ambition for a green infrastructure as 40% site coverage, or maybe a suggestion to reduce the compliant score from 0.55 to 0.20. As noted above, many of the submitters projects appear to be or are close to achieving these levels of green infrastructure and in my experience, I would say that a score of 0.20 is well under the level of greening proposed currently in most projects.
100. The submitters point that "The council should allow for discretion within the types of proposed controls that have an unfeasible, detrimental impact to an existing building if they are forced to be implemented" echoes my own experience that existing sites can be encumbered by heritage fabric that is not able to structurally accommodate new green infrastructure. It seems to me that the Amendment should have a mechanism for including retained heritage material (as per Project 2 above) where those areas are subtracted from the total site area for purpose of the Green Factor calculation.
101. In this regard, it seems to me that the Amendment's wording that it need "... not apply to the requirement at Table 6 where it can be demonstrated to the satisfaction of the responsible authority ... That the use of the Green Factor Tool is not practical" is a trigger for Green Factor to be abandoned on any site that contains any encumbrance or constraint preventing it from achieving a compliant score. I'd suggest that the controls have the capacity to subtract the area of the encumbrance from the site area for Green Factor Calculation rather than removing the need for Green Factor altogether.

- 102. Submission #38** notes in regard to the Green factor tool that “MBV applauds the greening of the city. However, we are concerned that this may encourage practices that increase the risk to the construction process. The incorporation of rooftop gardens, or vegetation areas on the side of buildings can cause water ingress problems with repercussions to the industry in the future. Root systems can penetrate small crevices allowing water to follow, which can then damage the building structure. There needs to be a clear understanding of the risks that extra vegetation might have on the building structure and the risk of fire and guidance on how to deal with these risks.”
103. I accept and agree that vegetation on structure can pose risks around waterproofing, and fire. In practice those risks exist irrespective of the presence of vegetation and that standards and review processes exist to identify and design out such risks.
104. In terms of water proofing, “AS 4654.2 Waterproofing membranes for above ground use - Part 2: Design and installation” contains accepted provisions for the tanking and protection of a new building and the arrangement of planting on structure.
105. In terms of fire, our recent projects have achieved performance solutions allowing the use of vertical greening with provisions such as ensuring that planting on green facades is non-deciduous, that a monitored valve be installed for the irrigation system of green façades and that planter box and growing armature material shall be concrete, block work or metal.
- 106. Submission #42** notes concerns around the “failure of the proposed policies to achieve their stated aims. It also considers the problem of affordability and the role of “black box” planning controls such as the Green Tool [sic]”. It also states that while “A good garden can bring real joy to visitors ... they are private spaces and their aesthetic benefits are not available to the wider community. It would be overreach for the planning scheme to mandate the aesthetics of private spaces.”
107. In my experience very few of the gardens that we’ve provided on structure are absolutely private. They tend to be communal spaces that the occupants of a building share with one another and with visitors. Even when private gardens are provided, the expression of the garden tends to turn to the street, allowing its amenity to be shared in the public realm.
108. I note the submitters point that planting on structure needs to be well irrigated. While planting on structure certainly needs to be watered, industry standard approaches to irrigation design privilege water efficient systems using in-line drip supply with moisture sensors and zones that can be programmed to reflect seasonality, orientation and exposure of the beds. Roof gardens tend to use light weight soils that are free draining. In our experience, best results are achieved by watering with small amounts several times a day rather than keeping the substrate saturated. This also ensures that there is capacity to retain water in the soil during a storm event.
109. The submitters point around the skilled attention required to maintain planting is well made and reflects the emergence of industry led maintenance practices and guidelines for green infrastructure, notably “Maintenance Guidelines for Australian Green Goofs” but The University of Melbourne’s Green Infrastructure Research Group (https://girg.science.unimelb.edu.au/files/2022/04/GreenRoofMaintenance_Guidelines_2022_Secured.pdf). I note that our recent work in the City of Melbourne has included the provision of a Green Infrastructure Maintenance Plan as a condition of the permit, situating ongoing maintenance as part of the approval.

Below:

1. Render of Beula's "STH BNK by Beulah" project
2. Render of Beula's "STH BNK by Beulah" project
3. Image of Beula's "Paragon" project
4. Render of Beula's "Gardenhill" project
5. Render of Beula's "Fawkner House" project
6. Render of Beula's "Provenance" project

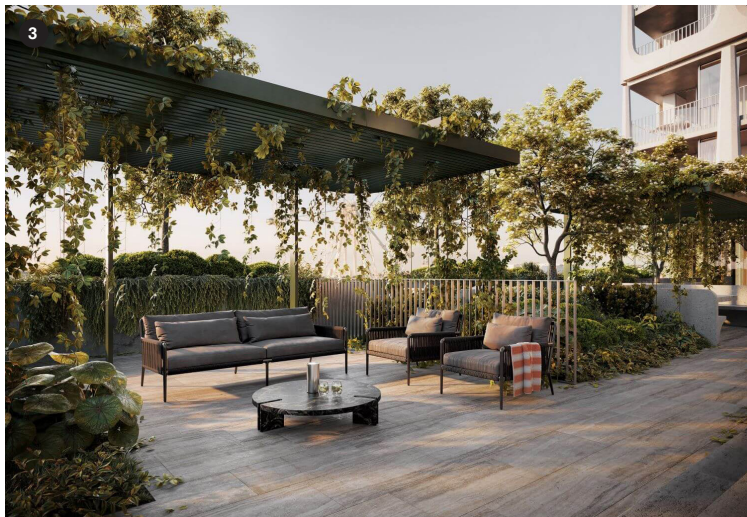


110. The submitters point around the 'black box' planning control is well made and reflects my commentary in paragraphs 73-79 above. The ability to communicate the Green Factor Tool's workings and values (both environmental and mathematical) is essential to its adoption and use.
- 111. Submission #45** notes that "It is not clear how the proposed application of City of Melbourne's bespoke Green Factor Tool will work in practice, or how it will be employed alongside existing mechanisms for measuring environmental performance. In addition to this, it is not a widely recognised, standard or industry-wide tool (like NatHERS, BESS, Green Star) and there is no evidence provided regarding its appropriateness".
112. I note that in my experience of the tool, the Green Factor Tool is simply a metric or measure of the amount of green infrastructure included on a building at planning. In my experience, this does not compete or contradict ESD / ESG tools such as Nathers, BESS or Green Star. They can in fact be complimentary - the data that we assemble for the Green Factor Tool can be readily provided to ESD consultants for their assessment using those other tools.
113. I address the submitters point around the cost of including green infrastructure and the risk associated with maintenance and water egress in paragraphs 103-105 above.
- 114. Submission #50** notes that it is unlikely that the Amendment's requirement for new buildings be designed and constructed to achieve a minimum Green Factor score of 0.55 is feasible for single dwellings.
115. I note that while I haven't prepared a recent planning application in the City of Melbourne for a new single dwelling, the tool's value bias toward in-ground planting and productive landscape (both typical in single residential dwellings) makes achieving a score of 0.55 possible depending on the site coverage of the building. Where the context or constraints of a new single dwelling site make the Green Factor Tool unachievable, the alternative of providing at least 40% of the total site area as green cover (Schedule 73, 2.3 in the Report to the Future Melbourne Committee of 21 May 2024) seems achievable in the context of recent single dwelling projects that our office has prepared.
- 116. Submission #53** notes that the outcomes sought be the Amendment are unreasonable and "There is no information on the Green Factor Tool exhibited with the Amendment and it is not proposed to be a background document. This is not an industry-wide applied tool like NaTHERS, BESS, Green Star, etc. so should this Amendment not be examining this tool, its machinations and its appropriateness in detail [sic]".
117. In my experience of the tool in practice it is simply a metric or measure of the amount of green infrastructure included on a building at planning. This metric does not compete or contradict tools such as Nathers, BESS or Green Star.
118. The submitter also notes that "The requirements for Green Cover are excessive, Green roofs and green walls are a major capital cost and maintenance burden for Owners Corporations and residents with these areas being highly susceptible to water leaks with limited access for major repairs once cranes have been removed. The relative ecological benefits are questionable and should be weighed against the cost."
119. While I can't talk as an expert to the ecological benefits of the Amendment, I note that many of the submitters projects already use the kind of green infrastructure that the amendment seeks to encourage (refer to images on page 26).

- 120. Submission #55** notes that “The Green Factor scoring displayed on the web site is totally inadequate. This is window dressing only. We need the greening issue properly addressed. Australian natives etc planted around/between buildings at ground level, open spaces and quiet places to sit. Roof and wall plantings are not enough and should not take the place of solar panels etc. We must have less concrete and more space round the buildings at ground level for plantings and open spaces. This requires Amendments to reduce the footprint of buildings relative to the site.”
121. In my experience the outcomes encouraged by the Green Factor Tool are not only about window dressing. It's fair to say that the tool takes the kind of green infrastructure and urban greening already being integrated by the building industry (much of which might be said to decorative in its application) and provides a framework and metric for that greening to do more.
122. I note that the Green Factor Tool has a value bias toward the kind of planting in ground that the submitter is advocating for and that (contrary to their assertion) rooftop greening is not incompatible with the provision of rooftop solar as shown by recent projects by Lend Lease at Daramu House in Sydney and by Nightingale Housing in Brunswick (refer to images on page 26).
- 123. Submission #57** notes general support for the Green Factor Tool.
- 124. Submission #62** notes that “AILA believes that the implementation of tools (such as the Green Factor Tool) to assist with the quantifying the extent of ‘greening’ buildings an appropriate approach to ensuring increased greening and increased sustainability in the City of Melbourne. AILA considers that embedding this in the planning scheme ensures a level playing field across all new developments that effectively removes the perceived costs incurred by developers in providing landscapes to roofs, balconies and façades”.
125. In response, I particularly agree with the sentiment the tool provides for an industry-wide metric for quantifying the provision of green infrastructure and that embedding this in the planning phase of the project creates a fair and orderly way of describing and measuring how that infrastructure is supplied.
126. I'm not persuaded of the need to “include the provision of community spaces in the Green Factor tool” or that such a move will support the delivery or performance of the ecological objectives of the Amendment. The tool's capacity to quantify spaces that can be seen and used by occupants of the building should be a sufficient way of measuring exposure to nature if such a metric is required in the future.
127. The suggestion that the tool should have the ability to include public space improvements to adjacent public land such as laneway or street or forecourt is an interesting one, but in practice may open up an unintended consequence where green infrastructure is allowed to be offset rather than a development being responsible for accommodating it within its site.
128. This would also open up complexities around ongoing maintenance costs for shared assets and ambiguity around responsibility for the longevity of shared green infrastructure in public space. Noting the above, I'm not convinced that the Amendment should entertain contributions to Green Factor outside the site boundary of a given application. I note that private developer improvements to public realm are still routinely undertaken as voluntary or negotiated contributions through the planning process and this will continue to be the case irrespective of the Amendment.

Below:

1. Image of MAB's "The Quays" project
2. Image of MAB's "Escala" project
3. Render of MAB's "Circa New Quay" project
4. Image of solar array and planting at Nightingale 1
5. Image of solar array and planting at Daramu House
6. Image of solar array and planting at Daramu House

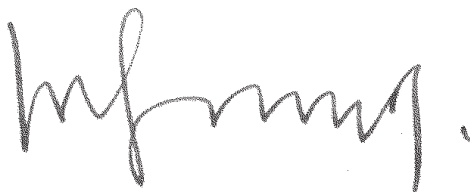


129. While I'm sympathetic to AILA's proposal for mandated involvement of accredited landscape architects in all stages of the design and application process, I don't believe that the compulsory involvement of registered landscape architects for all new developments will have a material impact on the objectives of the Amendment. I note though that should this Amendment be adopted, AILA could take a leading role in the communication of the objectives of the Green Factor Tool, how it works and importantly, how its members and the wider industry can respond or become accredited to new requirements for Green Infrastructure Maintenance Plans.
- 130. Submission #66** doesn't refer to the Green Factor Tool specifically, although the submitters call for clarification on the definitions contained within the Amendment such as 'green infrastructure', 'ecosystem services' and 'hardscape' is reasonable.
- 131. Submission #68** notes that "in regard to the achievement of the Green Factor tool requirements in DDO73 (i.e. the Urban Ecology requirements), the University considers that a new building on the University's Parkville campus should be able to rely on the existing contribution made by the wider Parkville campus to green cover, in meeting the relevant requirements in Table 6 in the schedule. A similar ability should exist for new University-owned buildings in the adjacent 'urban campus' (e.g. within the City North area south of Grattan Street)".
132. I note that University Campuses such as UoM's Historic Campus (north of Grattan Street) at Parkville are not always required to seek a planning permit and are an anomaly in the way that a Green Factor score is determined as existing and proposed buildings don't have conventional property boundaries. In that sense, if a permit is required, it seems fair that a project boundary be established as a proxy site boundary for the purposes of calculating a Green Factor assessment and that this boundary could reasonably include existing adjacent campus landscapes in the calculation of a Green Factor score. I'd only support the inclusion of landscapes that were adjacent to the project being assessed with the Green Factor Score. The idea that a new building on one side of the campus would rely on the contribution of a landscape on the other side of the campus is antithetical to the ambitions of the amendment.
133. Having said this, my position is that other parts of the Campus - for example those in the City North area south of Grattan Street that do have conventional property boundaries should have the policies in the Amendment applied to them as they would be to any other landholder or applicant.
- 134. Submission #69** notes support for Amendment and states that "we believe that generally NABERS 5.5 Star and a Green Factor score of 0.55 can be obtained simultaneously, although only just! We've recently had a lot of issues getting tiered structures (with terraces and continual setbacks) to achieve 5.5 Stars – due to their small roofs that can't support highly efficient plant or solar PV, noting that these are the best type of buildings for supporting high levels of vegetation".
135. I note that there is no provision in the amendment requiring a Green Factor score of 0.84 and that the submitter may have misconstrued a score from an examples provided in the Scenario Testing Report by Hip V. Hype. I'd also note the example in paragraph 122 above that shows that planting on structure and the provision of solar PV are not necessarily incompatible.

Conclusion

136. My professional experience over the last 25 years has confirmed that the provision of landscape and green infrastructure on new buildings is not innovative - it has become an orthodox and accepted outcome.
137. The Green Factor Tool's innovation is in providing a way of measuring the provision of green infrastructure on buildings and framing that measure in terms of urban ecology. My experience is that the application of the Green Factor Tool is about tweaking accepted industry norms rather than reinventing them.
138. I agree that the target Green Factor score of 0.55 is an appropriate standard for Amendment C376, because in my experience, there are no significant technical constraints with achieving this score and that flexibility is available within the tool for designers to further increase Green Factor scores by, for example, specifying productive or indigenous plants.
139. In light of this, I strongly support Amendment C376's mandatory requirement that new buildings be designed and constructed to achieve a minimum Green Factor score of 0.55 using City of Melbourne's Green Factor Tool.
140. I support a rethinking of the current interface for the tool to enable a clear and transparent statement of how the tool works and what it values. This explanation needs to be visual and spatial as well as text based, needs to be in plain language and needs to be couched in terms of creating value and impact.
141. Within this interface, I support the provision of guidance or scenarios that show proponents and designers how the inevitable changes to a project between planning and construction can be captured, reported and approved.

142. I support a comprehensive redesign of the Green Factor Tool website to remove bugs and provide it with a simpler and more intuitive interface that supports its use as an iterative design tool as well as a tool for reporting tool. Further, I support the inclusion of a web-based or downloadable spreadsheet that designers can use with greater flexibility.
143. I support the ability for the Green Factor Tool to take consideration of site encumbrances such as retained heritage buildings and believe that the tool or its application should have the capacity to subtract the area of the encumbrance from the wider site area for the purposes of determining Green Factor score.
144. I agree that the Amendment provides for an industry-wide metric for quantifying the provision of green infrastructure and that embedding this in the planning phase of the project creates a fair and orderly way of describing and measuring how that infrastructure is supplied.
145. In the case of new buildings proposed for Campuses without conventional site boundaries, it seems fair that a project boundary be established as a proxy site boundary for the purposes of calculating a Green Factor assessment and that this boundary could reasonably include existing adjacent campus landscapes in the calculation of a Green Factor score. Where new buildings do have a conventional property boundary (even if the proponent sees them as part of a wider Campus), its my position that any new building should have the Amendment applied to them as they would be to any other landholder or applicant.

A handwritten signature in dark ink, appearing to read 'Mark Jacques', with a stylized, cursive script.

Mark Jacques

7th August 2024



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Mark is an Urban Designer and Landscape Architect with more than twenty years experience across a broad scope of public projects in Australia, Asia, North America and Europe. Mark graduated from the UNSW's College of Fine Arts in 1994 and was awarded the inaugural Richard Dovey Medal. In 2002 he co-established the Melbourne studio of Oculus as Associate Director until 2016 when he founded Openwork as an office undertaking projects in public space, landscape architecture, urban design, research and speculation. In 2015, Mark was appointed Professor of Architecture (Urbanism) Industry Fellow within RMIT's School of Architecture and Urban Design. In addition to leading design studios in the Architecture and Urban Design programs of RMIT since 2012, Mark has lectured for the School of Design and the Faculty of the Built Environment at UNSW and the Faculty of Architecture, Building and Planning at Melbourne University. Mark is a regular expert witness at the Victorian Civil and Administrative Tribunal and is currently on the Program Advisory Committee for RMIT's Master of Urban Design program. His projects have won significant awards, including the Australia Award for Urban Design, The Melbourne Prize and the Premier's Design Award. In 2021 Mark was appointed to the inaugural Melbourne Design Review Panel, part of the City of Melbourne's Design Excellence Program. In 2022, he completed his PhD at RMIT's School of Architecture and Urban Design entitled 'Interloping and its consequences: Poaching, opportunism and making mischief in the design of public spaces'.

Professional Experience

OPENWORK

2016 - Present
Landscape Architecture Urban Design
Research and Speculation. Melbourne, VIC
Director

RMIT

2015 - Present
School of Architecture and Urban Design
Professor of Arch. (Urbanism) Industry Fellow

Oculus

1997 - 2016
Landscape Architecture Urban Design Environmental
Planning, Melbourne, VIC
Associate Director
Urban Designer

Selected Works

- 2024 **The Place for Indigenous Art and Culture**, Melbourne University
Project director for Openwork in collaboration with JCB.
- 2024 **Powerhouse Museum Redevelopment**, Ultimo
Project director for Openwork in collaboration with Durbach Block Jagers.
- 2023 **Queen Victoria Market Southern Development Site**, Melbourne
Project director for Openwork in collaboration with NH, KTA, 3XN and SXWA.
- 2022 **New Bendigo Art Gallery**, Bendigo
Project director for Openwork in collaboration with JCB.
- 2022 **Heide Museum of Modern Art Healing Garden**, Bulleen
Project director for Openwork.
- 2022 **Saxon Street Arts Precinct**, Brunswick
Project director for Openwork in collaboration with Kennedy Nolan and Finding Infinity.
- 2021 **NGV Contemporary Stage 2**, Southbank
Project director for Openwork in collaboration with Durbach Block Jagers, Edition Office and Architectus.
- 2021 **Melbourne Showgrounds Master Plan**, Flemington
Project director for Openwork in collaboration with NH Architecture.
- 2020 **St Andrews Place / Family Violence Memorial**, Melbourne
Project director for Openwork in collaboration with Muir Architecture.
- 2018 **2018 NGV Architecture Commission**, Southbank
Project director for Openwork in collaboration with Muir Architecture.
- 2018 **Heide Museum of Modern Art Business Plan**, Bulleen
Project director for Openwork in collaboration with Carmody Groarke.
- 2018 **Nightingale Village**, Brunswick
Project director for Openwork in collaboration with Breathe, WOWOWA, Clare Cousins Architect, Austin Maynard Architects, Hayball and Architecture Architecture.
- 2018 **RMIT Building 100 Pedestrian Improvements**, Melbourne
Project director for Openwork.
- 2017 **Monash University Chancellery**, Clayton
Project director for Openwork in collaboration with ARM Architecture.
- 2017 **Trinity College Building 100**, Parkville
Project director for Openwork in collaboration with Hayball.
- 2016 **2016 NGV Architecture Commission**, Southbank
Project director for Openwork in collaboration with M@Studio.
- 2016 **New Bendigo Hospital**
Project director for OCULUS in collaboration with Bates Smart and STH.
- 2016 **Arts Centre Melbourne Master Plan**
Project director for OCULUS in collaboration with Snohetta and NH Architecture.
- 2014 **Melbourne School of Design**, Melbourne University
Project director for OCULUS in collaboration with John Wardle Architects and NADAAA.
- 2010 **MONA**, Hobart
Project director for OCULUS in collaboration with Fender Katsalidis Architects.

AMENDMENT C376MELB TO THE MELBOURNE PLANNING SCHEME

MELBOURNE CITY COUNCIL

BRIEF TO EXPERT – LANDSCAPE ARCHITECTURE

INTRODUCTION

1. Amendment C376melb to the Melbourne Planning Scheme (**Amendment**) has been prepared by Melbourne City Council (**Council**).
2. Council is the Planning Authority for the Amendment.
3. The Amendment was on public exhibition from 2 March 2023 – 17 April 2023. Seventy three (73) submissions have been received.
4. Pre-set Panel/Advisory Committee hearing dates are scheduled as follows:¹
 - 4.1 Directions Hearing in the week commencing Monday 2 October 2023;
 - 4.2 Panel Hearing in the week commencing Monday 13 November 2023 (anticipated to extend for 2-4 weeks) (**Hearing**).
5. Subject to your preliminary opinion, we may engage you to prepare an expert evidence statement and appear at the Hearing of this matter in November 2023.

AMENDMENT C376

Amendment Land

6. All land in the municipality is proposed to be affected by the Amendment².

Contents of Amendment C376

7. In terms of what the Amendment does:³

This amendment implements sustainability and green infrastructure policy into the Melbourne Planning Scheme, and new mandatory and discretionary sustainable building design standards and requirements.
8. The Amendment uses the schedule 73 to the Design and Development Overlay (**DDO73**) as the key planning control to achieve sustainable outcomes and the schedules to the Capital City Zone and Docklands Zone to achieve sustainable transport outcomes.
9. The strategic assessment of the Amendment is set out in the Explanatory Report, stating:⁴

Climate change is happening now.

¹ See Planning Panels Victoria letter, dated 22 December 2022, in Folder #2.

² Amendment C376melb, *Explanatory Report*, at page 1 (see Folder #4).

³ Ibid.

⁴ Amendment C376melb, *Explanatory Report*, at page 2, in Folder #4.

Melbourne is already dealing with a hotter climate, and our climate in Victoria has already warmed by 1°C. Our city currently averages 11 days greater than 35 degrees. By 2050 we will experience an average 16 days greater than 35 degrees (Department of Environment, Land, Water and Planning, 2019).

Victoria has had longer fire seasons since the mid-1990s and fire days are projected to increase by 42 per cent per year in Melbourne by 2050. The deadly bushfires of 2019-2020 across Australia destroyed more than 10 million hectares (Rumpf, Legge, van Leeuwen, Wintle & Woinarski, 2023), damaging thousands of homes and properties and killing at least 34 people. Professor Dickman estimated one billion animals were killed (University of Sydney, 2020), and many more bats and insects are likely to die as a result of lost habitat and food sources.

By 2050, there will be 20 per cent less spring rainfall. We are also facing far more severe rainfall events, flooding and storm surges. The 2016 thunderstorm asthma events in Melbourne resulted in serious health impacts for thousands and some fatalities. The Victorian Government estimates that by 2050 sea levels will rise by 24 cm on 1990s levels (DELWP, 2019).

Temperature increases mean we could lose 35 per cent of the city's trees in the next 20 years (Kendal & Baumann, 2016). Elms and some species of indigenous eucalypts won't survive. Melbourne is home to many threatened species including the powerful owl, grey-headed flying fox and the swift parrot.

Climate change could cost our local economy \$12.6 billion by 2050 (City of Melbourne, 2018), impacting agriculture, tourism, insurance and finance.

The Intergovernmental Panel on Climate Change (IPCC) 2022 report found that even more urgent action to adapt to climate change and to cut greenhouse gas emissions is required - including by amending planning regulations to stop dangerous development. The IPCC also found that if emissions remain high, deaths caused by climate change related heat are estimated at 600 people each year in Melbourne, Sydney and Brisbane between 2031 and 2080, totalling 30,000 people over 50 years.

On 16 July 2019, the City of Melbourne declared a climate and biodiversity emergency, recognising that a temperature rise above 1.5°C would cause major and irreversible damage to the City and its ecosystem. On 18 February 2020, the City of Melbourne endorsed the acceleration of the ten priority actions to respond to the climate and biodiversity emergency including mandating greening and zero emission buildings through the Planning Scheme.

Currently the Melbourne Planning Scheme encourages sustainable development at clause 2.03-4 of the Scheme. While sustainability outcomes are being negotiated through the development application process, the current planning framework requires updating to achieve the baseline needed for Council to reach its target of zero net emissions by 2040, to improve biodiversity, to reduce the urban heat island effect, to manage water effectively, and to reduce the amount of waste going to landfill.

10. In explaining why the Amendment is required, the Explanatory report outlines:⁵

The amendment is required to introduce new sustainable building design standards into the Planning Scheme and will apply to new buildings as well as substantial alterations and additions that meet a specified size threshold. The standards address environmentally sustainable design, energy efficiency and renewables, waste and resource recovery, urban heat island response, urban ecology, integrated water management and for the Central City and Docklands, sustainable transport. The standards draw on established and industry accepted rating tools (Green Star, NatHERS, NABERS and BESS) as well as the Green Factor Tool which has been developed by the City of Melbourne.

The amendment will introduce minimum mandatory requirements for certain standards and preferred requirements. The preferred requirements provide a greater contribution towards Council's sustainability, greening and emissions goals.

Sustainable building design requires current generations to choose how they meet their needs without compromising the ability of future generations to be able to do the same. The City of

⁵ Amendment C376melb, *Explanatory Report*, at page 2.

Melbourne owns and controls less than one third of the municipality's land area, with the majority of the land in private ownership or other government ownership.

In terms of built form, City of Melbourne owns less than 2 per cent of the buildings in the municipality. Private development is therefore a critical contributor to any overarching municipal goals or targets. While the City, in partnership with other public entities, can drive change on public land, the planning system remains a key tool in facilitating changed practices on private land for public benefit.

11. At an ordinance level, the Amendment proposes to:⁶
- 11.1 Amend the Municipal Planning Strategy (MPS) to ensure alignment between the MPS and the purpose of the amendment, by making changes to Clauses: 02.03-2 Environment and landscape values; 02.03-4 Built environment and heritage; and 02.03-7 Transport.
 - 11.2 Amend the Planning Policy Framework (PPF) to ensure alignment between the PPF and the purpose of the amendment, by making changes to Clauses: 15.01-2L Sustainable development and 19.03-3L Stormwater management (Water Sensitive Urban Design).
 - 11.3 Insert Schedule 73 to Clause 43.02 (Design and Development Overlay – Sustainable Building Design) to include provisions for:
 - environmentally sustainable design;
 - energy efficiency and renewables;
 - waste and resource recovery;
 - urban heat island response;
 - urban ecology; and
 - integrated water management.
 - 11.4 Amend Schedules 1, 2, 3, 4, 5 and 7 to Clause 37.04 (Capital City Zone) and Schedules 1, 2, 3, 4, 5 and 6 to Clause 37.05 (Docklands Zone) to include provisions for:
 - bicycle, motorcycle and car share parking;
 - electric vehicle infrastructure;
 - the design of car parking facilities; and
 - the retention of car parking spaces as common property.
 - 11.5 Amend the Schedule to Clause 72.03 (What does this Planning Scheme consist of?) to include reference to the new map sheets for Schedule 73 to Clause 43.02 (Design and Development Overlay – Sustainable Building Design).
 - 11.6 Amend the Schedule to Clause 72.04 (Incorporated Documents) to include:
 - 11.6.1 the Guidelines for Waste Management Plans, (City of Melbourne, June 2021).

⁶ Amendment C376melb, *Explanatory Report*, at page 1.

11.7 Amend the Schedule to Clause 72.08 (Background Documents) to include relevant background documents as listed below:

11.7.1 Climate Change Adaptation Strategy Refresh (City of Melbourne, 2017)

11.7.2 Climate Change Mitigation Strategy to 2050 (City of Melbourne, 2018)

11.7.3 Climate Emergency Response (City of Melbourne, 2020)

11.7.4 Fishermans Bend Water Sensitive City Strategy (DJPR, 2022)

11.7.5 Green Our City Strategic Action Plan 2017-2021 (City of Melbourne, 2017)

11.7.6 Green Our City Strategic Action Plan: Strategic justification for C376melb regulatory requirements for sustainability (Arup, 2019)

11.7.7 Growing Green Guide (City of Melbourne, 2014)

11.7.8 Municipal Integrated Water Management Plan (City of Melbourne, 2017)

11.7.9 Sustainable Building Design: Planning Scheme Amendment C376 (Hansen Partnership, September 2020)

11.7.10 Transport Strategy 2030 (City of Melbourne, 2019)

11.7.11 Waste and Resource Recovery Strategy 2030 (City of Melbourne, 2019)

12. The following documents are 'supporting documents' to the Amendment:

Supporting

12.1 Green Our City Action Plan – Draft Planning Requirements, Economic Feasibility Testing, HillPDA, November 2020;

12.1.1 Attachment 1 – GOCAP Standards Testing, Breathe Architecture, Rev 0, 4 November 2020

12.1.2 Attachment 2 – GOCAP – Cost Summary, Rider Levett Bucknall, May 2020

12.2 Green Our City Action Plan – Draft Planning Requirements, Economic Feasibility Testing, Addendum (5 Additional Sites), HillPDA, January 2022

12.2.1 Attachment 1 – GOCAP Standards Testing, Breathe Architecture, 24 January 2022;

12.2.2 Attachment 2 – GOCAP – Cost Summary, Rider Levett Bucknall, 19 January 2022.

12.3 Off-street Bicycle & Motorcycle Parking Review, Final Report, Phillip Boyle & Associates, 16 March 2016

12.4 Transport Strategy refresh, Background paper, Increasing the Use of Bicycles for Transport, Phillip Boyle & Associates, May 2018

13. The Exhibition documentation, including the Explanatory Report, all background and supporting documents are provided in the OneDrive Brief at Folder #4.

14. A number of Planning Panels have considered, in part, aspects sought to be advanced by the Amendment. We enclose a sample of Planning Panels reports at Folder #6 of the OneDrive Brief.

Exhibition & Submissions

15. The Amendment was on public exhibition from 2 March 2023 – 17 April 2023.
16. Exhibition attracted 73 submissions⁷.
17. A number of submissions are supportive of the Amendment, or parts of the Amendment.
18. Other submissions raise concerns with the Amendment, or aspects of the Amendment, including those that are relevant to the field of landscape architecture such as the way in which the amendment has sought to address the urban heat island effect, the use of the Green Factor tool, the effectiveness, maintenance and costs of green infrastructure and integrated water management.

Future Melbourne Committee (FMC) consideration

Future Melbourne Committee – 21 November 2017 (Green Our City Action Plan)

19. At its meeting on 21 November 2017, the Future Melbourne Committee (**FMC**) resolved as follows⁸:

That the Future Melbourne Committee:

Endorses the Green Our City Strategic Action Plan to enhance the City of Melbourne's existing education and incentive-based approach whilst developing a business case for a future regulatory mechanism, for Council consideration.

Authorises the Director City Strategy and Place to make any further minor editorial changes to the Green Our City Strategic Action plan prior to publication.

20. The *Green Our City Action Plan* (**GOCAP**) is proposed as a Background Document in the schedule to Clause 72.08.⁹
21. One of the actions in the (GOCAP) is to:

Pursue changes to the planning scheme to require all types of development in the City to play a part in achieving environmentally sustainable design targets, including green walls and vertical greening. Review the planning scheme to determine the most effective planning scheme tools to deliver improved green infrastructure outcomes. Include an economic feasibility study to ensure that green infrastructure can be delivered by developers without compromising feasibility. Economic analysis should include consideration of other planning requirements such as affordable housing provision and design requirements to understand the cumulative impact of all controls. Considerations will include: - how best to work with other Councils, including the work of CASBE, and the State and build on existing reforms - how to ensure that real change is delivered, while engaging productively with the development community and ensuring the commercial context is understood - how best to adapt world leading initiatives such as Seattle's Green Factor in a City of Melbourne context.

Future Melbourne Committee – 18 February 2020 (City of Melbourne's response to the Climate and Biodiversity Emergency Declaration)

⁷ A copy of all submissions received to the Amendment can be found in Folder #5.

⁸ The FMC report and minutes are provided in Folder #3a.

⁹ A copy is provided at Folder #4aa of the OneDrive Brief.

22. At its meeting on 18 February 2020, the FMC resolved as follows¹⁰:

That the Future Melbourne Committee endorses management's review and response to the Climate and Biodiversity Emergency, and the acceleration of the ten priority actions, subject to future annual plan and budget processes.

23. The document, *Responding to the Climate and Biodiversity Emergency, 18 February 2020*, is proposed to be listed as a Background Document in the schedule to Clause 72.08.¹¹

24. One of the actions from Responding to the Climate and Biodiversity Emergency, 18 February 2020, is:

Mandate greening and zero emissions buildings through the Planning Scheme.

Future Melbourne Committee – 15 September 2020 (Green Factor Tool)

25. At its meeting on 15 September 2020, the Future Melbourne Committee resolved as follows¹²:

That the Future Melbourne Committee:

Endorses the Melbourne Green Factor Tool for use through the Melbourne Planning Scheme as the preferred approach for demonstrating urban ecology outcomes on new developments.

Authorises the establishment of a governance structure to oversee technical updates to the tool and to ensure the tool continues to meet its objectives.

26. Use of the Green Factor Tool is embedded in the DDO73 as a mandatory and discretionary requirement.

Future Melbourne Committee – 15 September 2020 (Amendment C376 Sustainable Building Design)

27. At its meeting on 15 September 2020, the Future Melbourne Committee resolved as follows¹³:

That the Future Melbourne Committee:

Seeks authorisation from the Minister for Planning to prepare and exhibit Melbourne Planning Scheme Amendment C376 Sustainable Building Design (refer to Attachment 2 of the report from management).

Requests that the Chief Executive Officer write to the Minister for Planning to request that he:

- introduce a state-wide planning provision to champion environmentally sustainable design, city greening and green infrastructure with a local schedule to enable mandatory requirements and allow tailoring by councils, attaching draft provision to assist (refer to Attachment 3 of the report from management);
- work with the City of Melbourne and Council Alliance for Sustainable Built Environments councils to finalise and implement the state-wide provision, enabling local governments to localise their requirements in line with their Council's endorsed positions.

¹⁰ The FMC report and minutes are provided in Folder #3b.

¹¹ A copy is provided at Folder #4aa of the OneDrive Brief.

¹² The FMC report and minutes are provided in Folder #3c.

¹³ Ibid.

Commends the development of the Green Factor tool, as a method to achieve and assess an urban ecology standard, and endorses its use through the Melbourne Planning Scheme.

Authorises the General Manager Strategy, Planning and Climate Change to make any minor and editorial and referencing changes and as required to accord with the Victorian Government's planning policy framework translation to Melbourne Planning Scheme Amendment C376 (refer to Attachment 2 of the report from management).

INSTRUCTIONS

28. You are kindly instructed to:

28.1 Review the documents in the OneDrive brief including:

28.1.1 All exhibited documents in Folder #4;

28.1.2 Submissions received to the Amendment in Folder #5, particularly the following submissions:

- (a) #5 – Sarah Magner
- (b) #8 - Beulah
- (c) #38 – Master Builders;
- (d) #42 – John Blake;
- (e) #45 – Urban Development Institute of Australia (UDIA);
- (f) #50 – Jan Talacko;
- (g) #53 – MAB Corporation Pty Ltd;
- (h) #55 – Christina Drummond
- (i) #57 – Southbank Residents Association;
- (j) #62 – Australian Institute of Landscape Architects (AILA);
- (k) #66 – Property Council of Australia (PCA);
- (l) #68 – University of Melbourne;
- (m) #69 – ADP Consulting.

28.2 Provide us with a preliminary opinion on Amendment C376 on matters within your area of expertise, including the controls in the proposed DDO73 that relate to landscape architecture matters such as green cover, urban heat island effect, the use of the Green Factor Tool, the effectiveness, maintenance and costs of green infrastructure and integrated water management, and any issues (arising from submissions, or otherwise) which warrant further consideration.

29. Please advise us if you require anything further to inform your views.

30. Please be clear if a particular issue or matter falls outside your area of expertise.

31. We would be grateful if we could meet to discuss your preliminary views on the Amendment in conference. Once you have had a chance to familiarise yourself with the documents, please contact us to arrange a time.

32. Subject to your preliminary opinion, we may engage you to prepare an expert evidence statement and appear at the Hearing of this matter in November 2023. We understand you are available to prepare an evidence report and give evidence at the Hearing which is scheduled to commence on **13 November 2023**.
33. Before starting any work, we kindly request you provide us with an electronic copy of your fee proposal for work to inform your preliminary opinion, as well for preparing an expert evidence report and appearing as an expert witness at the Hearing. Please also provide a schedule of fees and rates in the event that you are required to perform additional tasks in the future relating to this matter.
34. As an independent expert, it is important that you are free from any possible conflict of interest in providing your opinion. We understand you have no such conflict. If any conflict or potential conflict becomes apparent to you during your work on this matter, please advise without delay. Please also ensure that you are familiar with *Practice Note 1: Expert Evidence*, published by Planning Panels Victoria, a copy of which has been provided in your brief in Folder #2.
35. This instruction and any communications arising from this instruction are subject to legal professional privilege. Please treat all communications relating to the scope of works as confidential.
36. Link to OneDrive Brief [City of Melbourne C376 - Briefing Material](#).

Date delivered: **30 May 2023**

Index – Brief to Expert

No.	Document
Folder #1 – Brief to Expert	
	Brief to expert
Folder #2 – Panel related	
a	Planning Panels Victoria – Practice Note PN01 – Expert Evidence
b	Pre-set Panel hearing letter from Panel's Victoria (December 2022)
Folder #3 - Future Melbourne Committee (FMC) meetings	
a	Future Melbourne Committee, 21 November 2017 - Report – Green Our City Strategic Action Plan - Minutes
b	Future Melbourne Committee, 18 February 2020 - Report – Climate and Biodiversity Emergency 2020 - Minutes
c	Future Melbourne Committee, 15 September 2020 - Report – Amendment C376: Sustainable Building Design - Report – Melbourne Green Factor Tool - Minutes
Folder #4 – Exhibited documents	
	- Amendment C376 Explanatory report - Amendment C376 Instruction Sheet
a	Exhibited Policy, Ordinance, Mapping and Incorporated Document - Clause 2.03 Strategic Directions - Clause 15.01-2L-01 Sustainable development - Clause 19.03-3L Stormwater management (Water Sensitive Urban Design) - Schedule 73 to the Design and Development Overlay (DD073); - Schedule 1 to the Capital City Zone (CCZ1) - Schedule 2 to the Capital City Zone (CCZ2) - Schedule 3 to the Capital City Zone (CCZ3) - Schedule 4 to the Capital City Zone (CCZ4) - Schedule 5 to the Capital City Zone (CCZ5) - Schedule 7 to the Capital City Zone (CCZ7) - Schedule 1 to the Docklands Zone (DZ1) - Schedule 2 to the Docklands Zone (DZ2) - Schedule 3 to the Docklands Zone (DZ3) - Schedule 4 to the Docklands Zone (DZ4) - Schedule 5 to the Docklands Zone (DZ5) - Schedule 6 to the Docklands Zone (DZ6) - Schedule to Clause 72.03 What Does this Planning Scheme consist of? - Schedule to Clause 72.04 Incorporated Documents - Schedule to Clause 72.08 Background Documents - Guidelines for Waste Management Plans, 2021, City of Melbourne (Proposed Incorporated document);

No.	Document
aa	Background documents - Green Our City Strategic Action Plan: Strategic Justification for regulatory requirement for sustainability, Arup, 18 October 2019 - Sustainable Building Design, Planning Scheme Amendment C376, Background Report, Hansen, September 2020 - Climate Change Adaptation Strategy Refresh, City of Melbourne, 2017 - Climate Change Mitigation Strategy to 2050, City of Melbourne, 2018 - Climate Emergency Response, City of Melbourne, 2020 - Fishermans Bend Water Sensitive City Strategy, DJPR, 2022 (Part 1) - Fishermans Bend Water Sensitive City Strategy, DJPR, 2022 (Part 2) - Green Our City Strategic Action Plan 2017-2021, City of Melbourne, 2017 - Growing Green Guide, City of Melbourne 2014 - Municipal Integrated Water Management Plan, City of Melbourne, 2017 - Transport Strategy 2030, City of Melbourne, 2019 - Waste and Resource Recovery Strategy 2030, City of Melbourne, 2019
ab	Supporting Documents - Green Our City Action Plan – Draft Planning Requirements, Economic Feasibility Testing, HillPDA, November 2020; - Green Our City Action Plan – Draft Planning Requirements, Economic Feasibility Testing, Addendum (5 Additional Sites), HillPDA, February 2022; - Off-street Bicycle & Motorcycle Parking Review, Final Report, Phillip Boyle & Associates, 16 March 2016; - Transport Strategy refresh, Background paper, Increasing the Use of Bicycles for Transport, Phillip Boyle & Associates, May 2018.
Folder #5 – Submissions	
Various (Submissions #1 - #73)	
Folder #6 – Panel Reports	
a	Victorian Planning Authority Projects Standing Advisory Committee - Referral 6 (AC) [2022] PPV 24 (2 May 2022)
b	Melbourne C309 (PSA) [2019] PPV 55 (11 October 2019)
c	Fishermans Bend Planning Review Panel (AC) [2018] PPV 71
d	Environmentally Efficient Design Local Policies (AC) [2014] PPV 40 (7 April 2014)
e	Melbourne C187 (PSA) [2012] PPV 132 (7 November 2012)

7 May 2024

Mark Jacques
Director
Openwork Pty Ltd
1/25 Elizabeth Street
Melbourne VIC 3000



CITY OF MELBOURNE

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Melbourne VIC 3001
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ABN 55 370 219 287

By email to mark@openwork.info

Dear Mr Jacques

LETTER OF INSTRUCTIONS TO PREPARE INDEPENDENT EXPERT EVIDENCE AMENDMENT C376 TO THE MELBOURNE PLANNING SCHEME – ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT

Purpose

1. The purpose of this letter is to retain you as an independent expert witness in the proceeding concerning Amendment C376 to the Melbourne Planning Scheme (**Amendment**) which is anticipated, in due course, to be considered by an independent planning panel (**Panel**).

Key Dates

2. The Panel hearing to consider the Amendment is scheduled to commence in the week beginning Monday 19 August 2024 (**Panel Hearing**) and is expected to be held at Planning Panels Victoria, 1 Spring Street, Melbourne.
3. You will be expected to be available to appear before the Panel and present your expert evidence. Your expert evidence will be filed and served prior to the commencement of the Panel Hearing. We will be in a position to advise when you can expect to attend the Panel once we've had the Directions Hearing, and a Panel Hearing timetable is issued.
4. While we don't yet know when final expert evidence statements will be due, we kindly request a draft copy of your expert evidence statement be provided by no later than **Monday 27 May 2024**. We will then ask you to update that draft, as necessary, after the consideration of the Amendment by the Future Melbourne Committee (**FMC**).
5. In addition to the preparation of your expert evidence statement, it would be helpful for you to prepare a "Powerpoint style" summary document for the presentation of your evidence. The presentation must not contain any new material to that within your expert evidence statement. We will advise you of the date the presentation is due for circulation following the Directions Hearing.

Documents

6. Below is the link to your electronic brief containing material you are to consider to prepare and inform your evidence.

[City of Melbourne C376 - Mark Jacques Briefing Material](#)

7. Please advise if you require anything further to inform your views.

Overview

8. The Amendment, among other things, seeks to use the schedule 73 to the Design and Development Overlay (DDO73) as the key planning control to achieve sustainable building design outcomes, while the sustainable transport outcomes of the Amendment are to be achieved by the proposed changes to Schedules 1, 2, 3, 4, 5 and 7 to Clause 37.04 (Capital City Zone) and Schedules 1, 2, 3, 4, 5 and 6 to Clause 37.05 (Docklands Zone).
9. The Amendment was on public exhibition from 2 March 2023 – 17 April 2023.
10. Exhibition attracted 73 submissions.
11. At an upcoming meeting, the FMC will consider management's response to the submissions received where it is anticipated the FMC will resolve to refer all submissions received to the Amendment to the Panel for its consideration.

Instructions

12. You are kindly instructed to:
 - a. review and consider the documents provided in your electronic brief;
 - b. prepare an expert evidence statement and "Powerpoint style" presentation; and
 - c. appear as an independent expert witness in relation to this proceeding.
13. Your statement of independent expert evidence is to:
 - a. consider, formulate and express opinions on matters relating to your area/s of expertise, including by having regard to;
 - a. the Scheme;
 - b. the exhibited Amendment;
 - c. relevant background material as provided in your electronic brief;
 - d. a version of the Amendment that Council prepares as its preferred version of the Amendment.
 - b. consider and respond to the issues raised in all submissions to the Amendment as referred to the Panel in areas relating to your area/s of expertise (noting that some submissions may not disclose any substantive matters to respond to).
 - c. be prepared in accordance with the Practice Note 1: Expert Evidence, published by Planning Panels Victoria (a copy is enclosed in your brief).
14. In the preparation of your expert evidence statement we will expect that you've had regard to the materials in your brief (as you see relevant) and any additional documentation we upload to your brief upon it becoming available.

Conflict of Interest

15. Thank you for confirming you have no conflicts and that you are able to accept these instructions.
16. If any conflict or potential conflict becomes apparent to you during your work on this matter, please advise us without delay.

Please do not hesitate to contact me on the details below if you have any queries or require anything further.

Yours sincerely



Ann Maree Drakos

Legal Counsel, Planning (Finance and Corporate)
City of Melbourne

E-mail: ann-maree.drakos@melbourne.vic.gov.au

Phone: 0481 097 494

Mark Jacques

From: Ann-Maree Drakos <Ann-Maree.Drakos@melbourne.vic.gov.au>
Sent: Monday, 13 May 2024 1:12 PM
To: Mark Jacques
Subject: Amendment C376melb - Update regarding Future Melbourne Committee meeting

Importance: High

Dear Mark

I want to provide you an update regarding Amendment C376melb (**Amendment**).

The Amendment will be considered at the Future Melbourne Committee (**FMC**) meeting on Tuesday 21 May 2024.

The Council officer report summarising and responding to submissions received to the Amendment has been uploaded to your brief at [3d FMC 21 May 2024 - Consideration of submissions](#).

Also forming an attachment to the FMC report is:

- a summary of recommended changes to the exhibited version of the Amendment; and
- a preferred version of the Amendment to be considered by the FMC.

Please have regard to this FMC report in the preparation of your draft expert evidence report.

I will update you once FMC has considered the FMC report.

Please don't hesitate to contact me should you have any questions.

Kind regards

Ann-Maree

Ann-Maree Drakos | Legal Counsel – Planning | Finance and Corporate

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www.melbourne.vic.gov.au | [whats.on@melbourne.vic.gov.au](https://whatsapp.com/channel/00299a11111111111111)
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The City of Melbourne respectfully acknowledges the Traditional Owners of the land we govern, the Wurundjeri Woi Wurrung and Bunurong Boon Wurrung peoples of the Eastern Kulin and pays respect to their Elders past, present and emerging. We acknowledge and honour the unbroken spiritual, cultural and political connection the Wurundjeri, Bunurong, Dja Dja Wurrung, Taungurung and Wadawurrung peoples of the Eastern Kulin have to this unique place for more than 2000 generations. We are committed to our reconciliation journey, because at its heart, reconciliation is about strengthening relationships between Aboriginal and non-Aboriginal peoples, for the benefit of all Victorians.

This email is intended solely for the named addressee.

If you are not the addressee indicated please delete it immediately.

