

Fadi Shakir

Industry Assessments
Department of Planning Housing and Infrastructure
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Re: State Significant Development Application SSD-65490715 – Bradfield Central Park

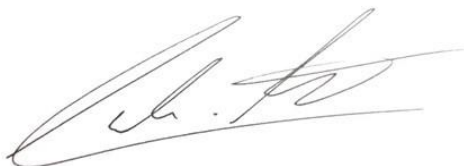
Dear Fadi,

Liverpool City Council was invited to provide comments on State Significant Development Application SSD-58591961 for the development of Bradfield Central Park.

Attachment A of this letter provides detailed comments that the Department may wish to consider in relation to the proposed design. Please note that recommendations included within Attachment A are denoted in ***bold italics***.

Should you require further information please contact Peter Nelson, Principal Strategic Planner on 0475 585 429.

Yours sincerely,



Luke Oste
Coordinator Strategic Planning

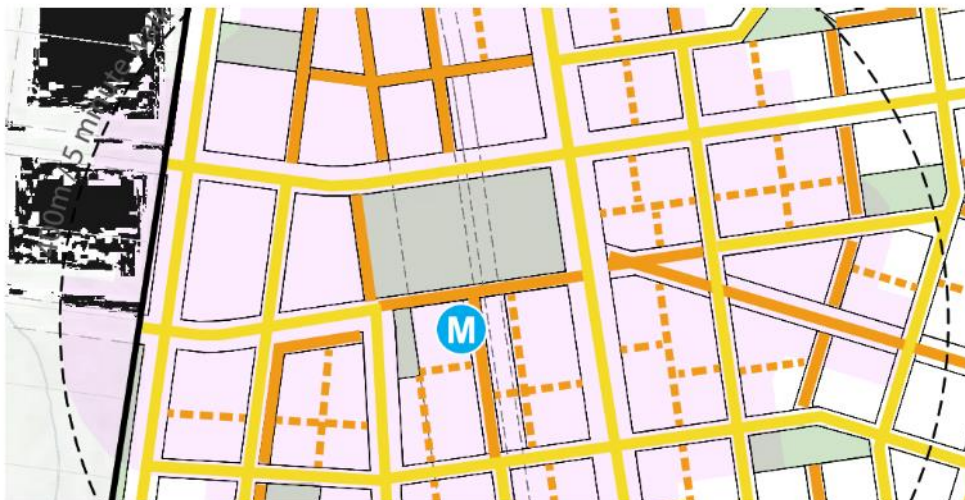
Attachment A – Detailed comments

1. Strategic Context





The Central Park is located to the immediate north of Bradfield Railway station and will provide a focal point of useable open space to service early developments within the Bradfield City Centre. Council notes the significant effort undertaken to make Central Park this focal destination point and believes that this function will be achieved with the current design.

As Bradfield City develops, it is important that the design of the Central Park is able to adapt to the rigors and demands of an expanding city that will primarily be one of providing open space to workers commuting to Bradfield City. In this regard, the park will be used both as open space and as a pedestrian and active transport route from the railway station and sites south of the station to street blocks to the north-west, north and north-east of the railway station.

In this function both as a focal point and as a through link, it is important that the pathway design within the park is designed with pedestrian desire lines in mind. It is recommended that the park pedestrian access points and through-park pathways align with the likely future higher traffic demand identified in the Pedestrian Network Map and supporting text on page 84 and 85 of the exhibited Master Plan Report.



Pedestrian network

-  Pedestrian Priority (shared zones and car-free)
-  Footpaths both sides of street
-  400m walkable distance from Metro station
-  Indicative mid-block permeability

An excerpt of the exhibited Master Plan Report Pedestrian Network Map, detailing Central Park, is included above. As Bradfield City develops, it is likely that the identified pedestrian priority zones will be primary access routes for pedestrians and commuters. It is unclear how the proposed footpaths within the park are intended to align with the likely pedestrian desire lines that are created by the street grid adjacent to Central Park.

It is also unclear how the footpaths within the park in the area bounded by the rail protection corridor will be impacted, especially if the future rail is not underground. Figure 3, from the “Central Park, Bradfield City Centre – Rail Corridor Plan of Management,” below, indicates that the park will be significantly impacted if this link is not underground, see:

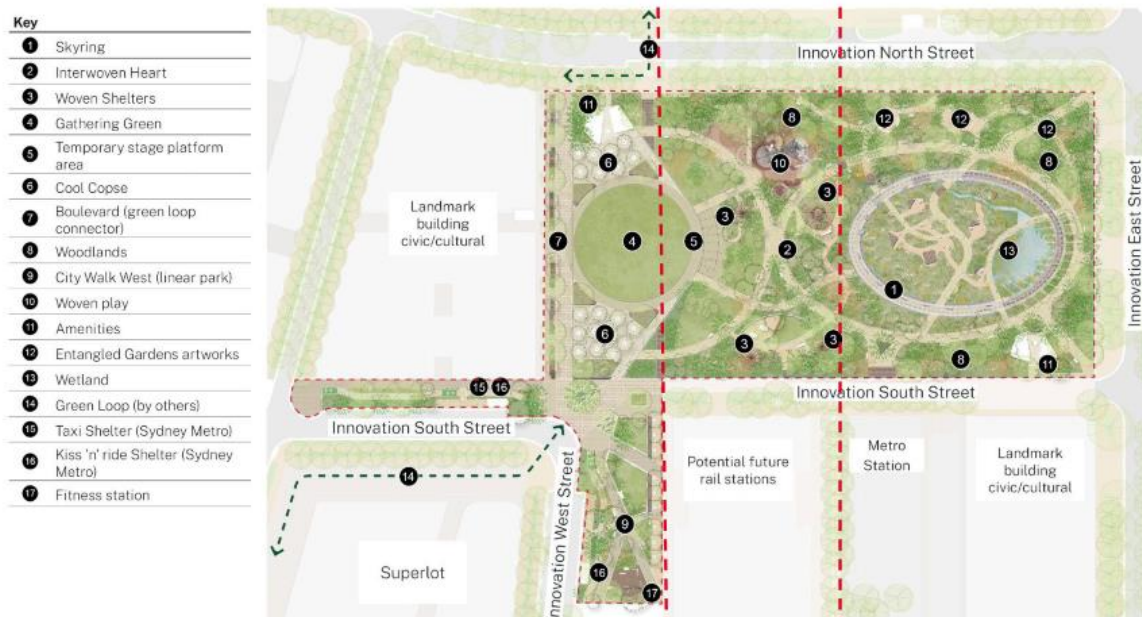


Figure 3 Bradfield Central Park Design Proposal with Rail Protection Corridor

From the above it is recommended that:

- ***A pedestrian desire line analysis is undertaken in relation to the identified pedestrian network in the exhibited Bradfield City Centre Masterplan. The desire line analysis should also consider potential adaptation of the park design in response to potential impacts of the Rail Protection Corridor that runs through Central Park.***
- ***Footpaths within the park should be aligned to desire lines identified within the desire line analysis or, alternatively that park design and planting is undertaken to prevent pathway erosion in areas where desire lines exist and where no path is provided.***

Council requests this is undertaken at the design stage as Central Park may eventually be handed over to Council for ownership and maintenance. It is important that pathway erosion is discouraged (either through the placement of pathways or the inclusion of appropriate planting to

discourage pedestrian movements along desire lines where no path is provided) as this issue has the potential to result in an ongoing maintenance burden and an amenity issue for Central Park.

If Council ownership is sought, Council is unlikely to agree to handover of Central Park until all works within the park are complete. This would also include any works required as part of the future rail corridor. Council can provide further comment in this regard as required.

2. Flood Plain Engineering

- ***It is recommended that Water quality treatment measures be provided for the development to treat stormwater flows before discharging into receiving waters and should achieve Council's stormwater treatment targets. Water quality treatment devices should be designed as per the Technical Guidance for achieving Wianamatta South Creek stormwater targets, September 2022. The design should be undertaken using the MUSIC Modelling Toolkit – Wianamatta including calibrated MUSIC model and spreadsheet to analyse and present results obtained from NSW Government Department of Planning & Environment.***

4. Engineering

- ***Council advises that civil and stormwater designs will be required in accordance with the WSA DCP and Design & Construction Specification requirements, noting that the infrastructure may be dedicated to Council in the future.***

5. Traffic and Transportation

- ***Council recommends that further coordination occurs with Sydney Metro and TfNSW for the surrounding street network including the design, construction and delivery timing of Innovation North, Innovation South Street and City Walk West.***

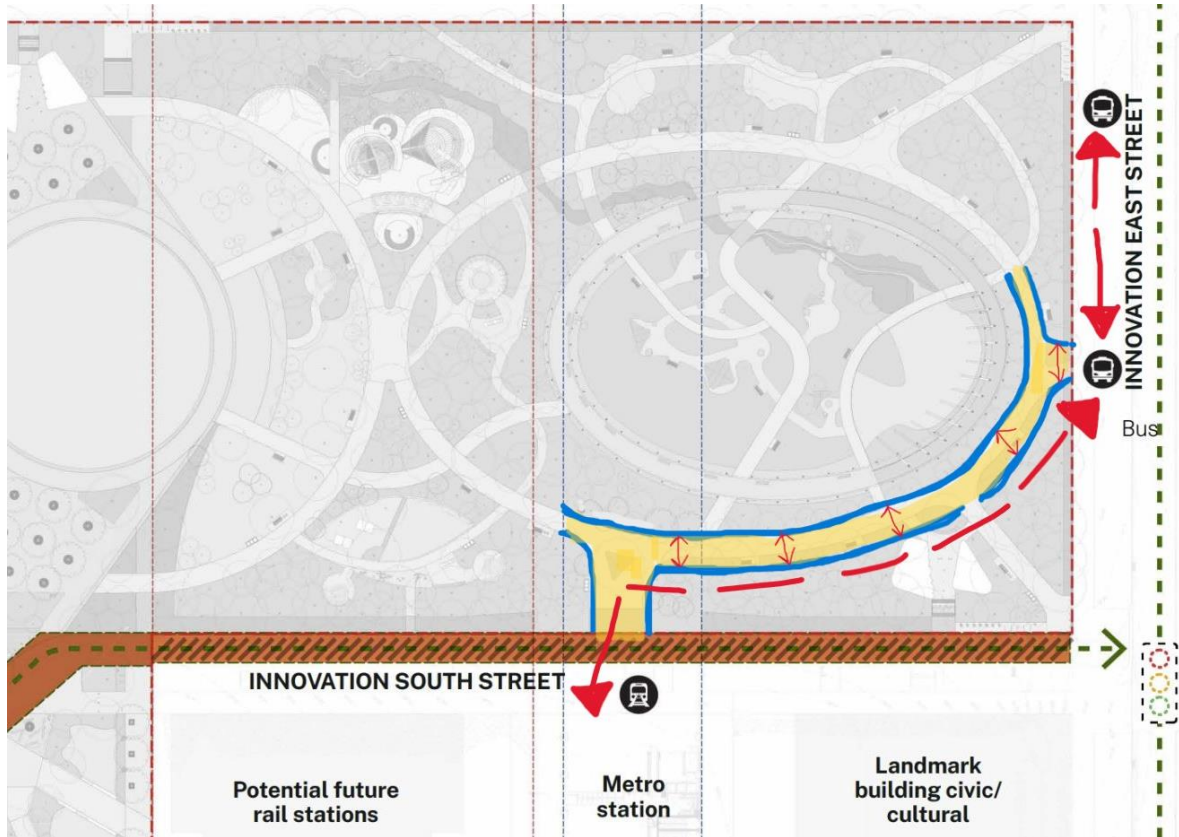
6. Urban Design and Public Domain

It is noted, 'Appendix B - Landscape Drawings by Aspect Studios' referenced in the Environment Impact Statement, has not been submitted by the applicant for Council assessment. In this regard, a review of the landscape and urban design aspects of this proposal cannot be completed.

- ***To ensure a proper assessment, the Landscape Drawings should be submitted to Council for review as part of the broader package.***

As previously raised by Council, the curved path (within Central Park) linking the Metro station and the bus interchange will likely be preferred by pedestrians, as the most direct route between the two key sites. In this regard, the capability of the proposed 3m wide path to accommodate a high volume of pedestrian traffic (particularly during peak hour), is questioned.

- ***As part of a revised proposal, it is strongly recommended that a wider path (including entry points) be considered by the applicant, to better accommodate a larger volume of pedestrian movement between the Metro and Bus Stations. (Refer to markup below);***



As the main public transport arrival point for Bradfield, it is crucial Central Park is designed to accommodate a high volume of pedestrian traffic particularly where it can facilitate the most direct movement path.

The current masterplan summer analysis diagrams in 'Appendix H – Integrated Design Report', indicates that the seating platforms within Sky Ring area lacks sufficient shading, which can lead to safety issues for visitors during hot summer months. As noted by Council in the earlier referral;

- ***deciduous trees should be strategically placed to provide opportunities for shade within this key recreational space without major obstruction to views and vistas.***

In addition to the above, it is suggested that;

- ***a comprehensive sunshade analysis of the Sky Ring is undertaken to ensure the paths and seating areas beneath or around it receive adequate shading throughout the day.***

This will guarantee that the visitors are provided with sufficient shade during critical periods, enhancing safety, comfort and usability.

- ***It is recommended the possibility of enhancing shading by incorporating climbers along the Sky Ring columns be explored.***

One effective approach could involve connecting these columns with stainless steel wires or cables that can facilitate vegetation growth to provide additional shade along pathway without obstructing views, thereby optimising the thermal comfort and aesthetic appeal of the space.

Council notes that the Sky Ring & Wetland interface is designed for both ecological and recreational purposes. The seating proposed along the wetland boundaries will enhance visitor experience by allowing people to observe wildlife and appreciate the wetland environment. However, it is important to consider the impact of having seating along the wetland's edge as it might attract visitors feeding wildlife or leaving rubbish, potentially harming the ecosystem.

Council raises concern regarding the safety of visitors due to the risk of tripping and falling near the open edge of the wetland.

- ***It is recommended to consider visible railings and/or barriers where necessary to prevent accidental entry into sensitive areas and proper waste management (location of bins) to help prevent pollution of the wetland water.***

As noted in the previous referral, Council raises concerns around some of the materials and finishes proposed that have the potential to absorb heat in some of the more open and exposed areas of the site. During the summer months, Western Sydney can encounter days of up to 42 degrees.

- ***Council suggests considering the strategic planting of more advanced shrubs and trees around surfaces and use of materials that have the potential to absorb and/or radiate heat.***

More advanced planting can facilitate shading in the short term and provide a buffer for the safety of visitors, especially young children.

As recommended by Council in the previous referral;

- ***all proposed park facilities (including play, seating, workstations, engagement with artwork and cultural programs), pathways and wayfinding signage should prioritise accessibility for all individuals, regardless of their abilities. Council advises that the pathway surfaces should be level, slip-resistant and easy to navigate.***

In addition to the above, it is suggested that;

- ***wayfinding signage must be clear and visible with large fonts, high contrast colours and tactile elements (such as Braille) for individuals with visual impairments.***
- ***Similarly, artwork should be displayed at varying heights with accompanying audio or tactile descriptions.***
- ***Workstations, tables, benches, BBQ or seating areas must be DDA compliant.***

Prioritising the above will ensure that parks are equitable, safe and enjoyable for everyone, fostering more inclusive and supportive community environment.

As previously noted by Council, there are concerns regarding the proposed locating of all active open space assets (i.e. interwoven heart, play elements/shelters etc) within the designated ZP2 zone allocated for the future Transport Infrastructure Corridor which may require their future relocation or removal.

- ***It is encouraged the design to seek more sustainable long-term solutions by positioning some of these assets in other open areas within the park where these will not need to be relocated and such that they remain accessible and well-connected to the other assets.***
- ***Council recommends considering the use of some modular designs and movable elements for woven play and woven shelters to enhance flexibility and reduce the costs associated with future relocations due to the future Transport Infrastructure Corridor.***

Planning for adaptability can help accommodate changes more efficiently and economically.

7. Public Art

Council commends the public artwork undertaken with Janet Lawrence.

Council notes the Art Strategy identifies an Illumination Program for Bradfield Metro and Central Park and this is not identified in the CPBIDP.

- ***Council recommends that the Illumination Program for Bradfield Metro and Central Park are identified in the CPBIDP.***

The Art Strategy refers to an Idea Space “a sculptural, contemplative space that ignites creative conversation”, Council notes this is not identified in the CPBIDP, however could align with Lawrence’s public artworks.

Council also notes the pavilion identified and Innovation Cluster are not incorporated into the CPBIDP.

- ***Council notes the Central Park, Bradfield Integrated Design Report (CPBIDP) does not align or reference the “Art Strategy; Cultural Infrastructure, Public Art and Cultural Programs, June 2023, Bradfield City Centre Master Plan” (Art Strategy). Council recommends that this is addressed to ensure consistency in delivery and adherence to endorsed Master plan documentation.***

8. Local Economy

- ***Adequate lighting both within the park and along pedestrian walkways to and from the employment zones and the Metro station is essential to ensure worker safety.***

- ***The proponent is encouraged to address the Destination Management Plan, Economic Development Strategy. As a minimum, a vibrant 18 hour economy activation should be addressed as the new airport and Metro opens.***

9. Environmental Health

Council has reviewed the proposal from an Environmental Health perspective and notes the following:

Contamination

Section 6.8 of the “Central Park Scoping Report” mentions the site is to be levelled and remediated with contamination to be confirmed at a later date by a suitably qualified consultant.

Further to the above, as the proposed development may be impacted by contaminated soils, Clause 4.6 of the State Environmental Planning Policy (Resilience and Hazards) 2021 requires a consent authority when assessing a development application to consider whether the land is contaminated, it is suitable in its contaminated state for the purpose for which the development is proposed to be carried out, and/or if the land requires remediation, it is satisfied the land will be remediated before the land is used for that purpose.

A Stage 1 - preliminary investigation for the property has been provided and was prepared by Douglas Partners Pty Ltd.

The report primarily reviews previous contamination and remediation works at the subject premise. This includes both site audit reports, RAP's and Detailed site assessments.

An additional site inspection was undertaken in March 2024 to validate previous works and to identify any additional areas that may require assessment.

The contents of the report are satisfactory and are in accordance with accepted industry guidelines and standards.

- ***Recommendations made within the report should be implemented prior to or as part of the development of this project.***

The following recommendations have been made:

- review of the validation report for the Sydney Metro site prior to commencement of construction of the Sydney Metro areas of the site to confirm suitability and successful remediation and validation has been completed;
- a visual inspection of the site surface for potential asbestos after the site is handed over and an investigation of shallow soils to assess whether there have been any impacts from both the on site and adjacent construction works;
- implementation of the existing AMP to the site:

- inclusion of an unexpected finds protocol in the construction environmental management plan for other potential contamination find (noting only unexpected finds of asbestos are covered by the AMP); and
- All excavated soils determined for offsite disposal must be classified in accordance with the NSW EPA waste classification guidelines prior to removal.

Council also recommends that:

- ***Requested reports and documents should also be provided to Council and/or the relevant authority for comment and review.***
- ***Prior to acceptance of the information and recommendations made within this report, it should be confirmed with the consultancy firm that they are “suitably qualified” and meet the minimum requirements as per the NSW EPA Contaminated Land Consultant Certification Policy (Jan 2022).***

Suitably qualified is defined as someone who is certified under either the Environment Institute of Australia and New Zealand’s Certified Environmental Practitioner (Site Contamination) Scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) Scheme.

- ***The report's cover or title page of the document shall include a personalised electronic seal for either the CEnvP(SC) or CPSS CSAM scheme.***

Council is unable to recommend specific consultants or auditors.

Acoustics

The provided “Central Park, Bradfield City Centre Noise and Vibration Impact Assessment” has appropriately covered construction noise and vibration, park use noise impacts and noise impacts on park use.

The report has been prepared in accordance with the relevant industry standards and practices and is satisfactory.

- ***There may be additional work and assessment required in response to the conclusions made under this report. The following is noted:***
 - i. Large events may require a separate acoustic assessment specific to the nature of the event;
 - ii. A noise management plan for the park (inclusive of the precinct) is to form part of the recommended event specific acoustic assessment;
 - iii. Certain options will require assessment if adopted such as “a well-considered sound system design featuring directional loudspeakers. This should be inclusive of the

proposed stage location is favourable in that it is expected to direct sound towards the west, minimising sound spill to the east of the park.

- iv. If landscaped mounding or an “alternative approach” in the use of soundscapes to mask the intrusive urban environment are considered favourable for adoption, the subject acoustic must be revised to incorporate such noise attenuation measures to ensure effective design outcomes.
- v. It was noted that mitigation measures “should” ideally be considered during the design of the rail line. Once information and plans become available for the transport infrastructure corridor, a review is to be carried out by a suitably qualified acoustic consultant to review any proposed mitigation measures proposed as part of the transport infrastructure corridor to ensure it has no further potential impacts to the precinct, impacts upon or changes any prior acoustic conclusions made regarding the use of the site.
- vi. Council also recommends an acoustics review once the park is operational to validate all theoretical design matters raised within the report to ensure compliance is achieved and can be maintained.

It is noted that Marshall Day Acoustics have prepared this report, however, it is not known whether they are “suitably qualified”.

- ***Acoustic reports accompanying this development should be prepared and/or peer reviewed and a suitably qualified person must conduct this assessment. A ‘Suitably qualified acoustic consultant’ means a consultant who possesses Australian Acoustical Society membership or are employed by an Association of Australasian Acoustical Consultants (AAAC) member firm.***
- ***The report's cover or title page must confirm membership details or include a watermark for the relevant certification body.***

Council is unable to recommend specific consultants or auditors.

Communal/recreational spaces

- ***Should the design incorporate any interactive water feature, splash pad or the like the design must incorporate and consider the relevant sections of the following:***
 - i. ***Public Health Act 2010 and its regulation (2021); and***
 - ii. ***NSW Health Swimming Pool and Spa Pool Advisory Document (2013)***

Odour potential

Consideration must be given to potential odour impacts on the proposed development from the current and future surrounding land uses.

- ***A suitably qualified and experienced air quality consultant is to undertake an assessment to identify the impacts odour may have on the development.***

The odour assessment is to be undertaken in accordance with the NSW EPA's Approved Methods for the Modelling and Assessment of Air Pollutants (revised 2016, published 2017), Technical Framework for the Assessment and Management of Odour from Stationary sources in NSW produced by the Department of Environment and Conservation November 2006, administered by the NSW Environment Protection Authority and any subsequent documents. Detailed guidance is also provided in the Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW produced by the Department of Environment and Conservation November 2006, administered by the NSW Environment Protection Authority.

The assessment must include modelling of the odour impact at the nearest affected receptor. Recommendations resulting from the report shall be in accordance with AS/NZS 1668.1-2015, AS 1668.2-2012 (if required) and relevant NSW EPA Guidelines.

Note: A 'suitably qualified and experienced air quality consultant' is a person who is a Certified Air Quality Professional CAQP member administered by the Clean Air Society of Australia and New Zealand (CASANZ) or is a Certified Environmental Practitioner (CEnvP) administered by the Environment Institute of Australia and New Zealand (EIANZ).

The report's cover or title page must include membership details or include a watermark for the relevant certification scheme.

Council is unable to recommend specific consultants or auditors.

Regulated systems

- ***Any proposed installation of warm water systems and water cooling systems (as defined under the Public Health Act 2010) must comply with the Public Health Act 2010, Public Health Regulation 2022, AS/NZS 3666:2011 Air handling and water systems of buildings and the NSW Guidelines for Legionella Control in Cooling Water Systems published by Health Protection NSW and any subsequent revision endorsed by NSW Health.***

Food and Drink Premises

- ***Any future provision for the inclusion of any food and drink premise within the precinct must be designed and constructed in accordance with:***
 1. Food Standards Code (Australia) and Food Safety Standard 3.2.3 – Food Premises and Equipment
 2. Food Act 2003 and Food Regulation 2015
 3. Australian Standard 4674:2004 :Design, Construction and Fit-out of Food Premises – this shall also include any relevant standards related to mechanical ventilation under Australian Standard 1668: - The use of ventilation and air-conditioning in buildings;

4. Plumbing Code of Australia and Australian Standard/New Zealand Standard AS/NZS 3500 series on Plumbing and Drainage
5. Any commercial trade wastewater requirements specific to Sydney Water's requirements for food premises, and
6. any relevant Water Services Association of Australia codes of practice, guidelines, policies and requirements.