

1 March 2019

Tennis NSW
C/- AECOM
PO Box Q410
QVB PO SYDNEY NSW 1230

Attention: Mark Davis
E-mail: mark.davis@aecom.com

Dear Mark,

**RE: SOPTC – KEN ROSEWALL AREA – ROOF UPGRADE
BCA & DDA COMPLIANCE STATEMENT FOR DA SUBMISSION**

This statement has been prepared to verify that Blackett Maguire + Goldsmith Pty Ltd have undertaken a review of the architectural documentation that will accompany the Development Application to the Consent Authority for the proposed upgrade works to Sydney Olympic Park Tennis Centre Ken Rosewall Arena against the Building Code of Australia 2019 (BCA) and Disability (Access to Premises-Buildings) Standards 2010 (Access to Premises Standard).

PROPOSED DEVELOPMENT

The proposed development comprises upgrade of Sydney Olympic Park Tennis Centre Ken Rosewall Arena to install a roof covering, creating an all-weather high-performance venue for tennis.

COMPLIANCE STATEMENT OBJECTIVES

The objectives of this statement are to:

- confirm that the DA architectural documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Certifier.
- confirm that the proposed new building works can readily achieve compliance with the BCA pursuant to clause 145 of the *Environmental Planning & Assessment Regulation 2000*.
- confirm the proposed new building works and existing building can readily achieve compliance with the Access to Premises Standard.
- accompany the Development Application submission to enable the Consent Authority to be satisfied that subsequent compliance with the fire & life safety and health & amenity requirements of the BCA, will not necessarily give rise to design changes to the building which may necessitate the submission of an application under Section 4.55 of the *Environmental Planning and Assessment Act 1979*.

It should be noted that it is not the intent of this statement to identify all BCA provisions that apply to the subject development. The development will be subject further assessment following receipt of more detailed documentation at Construction Certificate stage.

This statement has been prepared pursuant to clause 18 of the *Building Professionals Regulation 2007*.

RELEVANT VERSION OF THE BCA

Pursuant to clause 145(1)(b) the proposed building is subject to compliance with the relevant requirements of the BCA as in force at the time the application for the Construction Certificate was made. The current version of the BCA is the BCA 2016 (incorporating Amendment 1), with the next version of the BCA coming into effect on the 1 May 2019. For the purpose of this compliance statement, it is assumed that the Construction Certificate Application will be lodged after 1 May 2019, and as such the proposed development will be subject to compliance with the BCA 2019.



REFERENCED DOCUMENTATION

This report has been prepared based on a review of the preliminary DA architectural plans prepared by Cox Architecture:

Plan	Revision	Date
A-DA-KRA-1100	1	22/02/2019
A-DA-KRA-1101	1	22/02/2019
A-DA-KRA-1110	1	22/02/2019
A-DA-KRA-2100	1	22/02/2019
A-DA-KRA-2110	1	22/02/2019
A-DA-KRA-2120	1	22/02/2019
A-DA-KRA-2200	1	22/02/2019
A-DA-KRA-2250	1	22/02/2019
A-DA-KRA-3000	1	22/02/2019
A-DA-KRA-4000	1	22/02/2019
A-DA-KRA-4200	1	22/02/2019

BUILDING CLASSIFICATION

The new building works have been classified as follows:

+ BCA CLASSIFICATION:	Class 9b (Entertainment Venue)
+ IMPORTANCE LEVEL (STRUCTURAL):	3
+ RISE IN STOREYS:	Three (3)
+ TYPE OF CONSTRUCTION:	Type A
+ EFFECTIVE HEIGHT:	Greater than 12m, Less than 25m.
+ MAX. FIRE COMPARTMENT SIZE:	
FLOOR AREA:	Maximum of 8,000m ² for Class 9b buildings.
VOLUME:	Maximum of 48,000m ³ for Class 9b buildings.
+ SPRINKLER PROTECTED THROUGHOUT:	No
+ CLIMATE ZONE:	Zone 5

BCA COMPLIANCE STRATEGY

In addition to all new works being required to comply with the BCA it will be necessary for certain parts of the existing building to be reviewed in relation to the fact that the new roof structure redefines the building as an *entertainment venue* as described in the Environmental Planning and Assessment Regulation 2000. From a BCA perspective this will require the existing building and new building works to be reviewed against the requirements of NSW Part H101 of the BCA.

In relation to the existing building it will be necessary to ensure that existing level of fire safety will not be adversely affected or exacerbated by the new roof structure. Consideration is placed on reviewing the current level of fire safety within the building and which aspects of such are reduced by the introduction of the roof.

Each storey of the new building will be served by at least two exits and the exits will discharge to open space. Noting the large population due to the nature of the building, the adequacy of aggregate exit widths will be addressed under a Fire Engineered Performance Solution. A list of additional currently identified Fire Engineered Performance Solutions has been provided within the body of this report.



SUMMARY OF KEY REGULATORY COMPLIANCE ISSUES

Pursuant to the following clause of the Environmental Planning and Assessment Regulation 2000:

+ 162D COUNCIL TO BE NOTIFIED OF SIGNIFICANT FIRE SAFETY ISSUES

Where significant fire safety issues are identified, they will be addressed by the development that affects the building, being development that is the subject of a development consent or a construction certificate.

If a significant fire safety issue is unable to be addressed by the development, written notice will be given to Council in accordance with this clause.

SUMMARY OF KEY BCA COMPLIANCE ISSUES

Arising from our review, the following comprises a summary of the key BCA compliance issues that will need to be addressed prior to issue of the Construction Certificate:

+ FIRE SAFETY ENGINEERED ALTERNATIVE SOLUTIONS

1. BCA cl. C1.1: To justify the presence of unprotected structural steel supporting the tiered seating in lieu of treating the steel to achieve an FRL of 120/120/120.
2. BCA cl. C1.1: To justify the roof covering not being non-combustible.
3. BCA cl. D1.5: Extended exit travel distance comprising up to 80m between alternative exits on Ground Floor.
4. NSW BCA cl. D1.6: To justify an aggregate exit width of 39.5m in lieu of 105m.
5. BCA cl. E1.3 To justify the location of external hydrants. Dual valve fire hydrants are noted as installed under the seating tiers and within entry corridors to the venue, with no radiant heat shield from the building openings.
6. BCA cl. E1.4 We understand there may be certain points in the building which do not achieve fire hose reel coverage and will need to be addressed.
7. BCA Table E2.2 To rationalise smoke detection from the seating area based on the provision of natural ventilation.
8. BCA Table E2.2 To rationalise the provision of smoke exhaust based on natural ventilation.
9. BCA cl. E4.5 & E4.8 To rationalise the provision and visibility of exit signage from the upper seating areas.
10. NSW BCA cl. H101.11.5: To justify the distance between the back of a seat and the back of the seat in front of that seat comprising less than 975mm. We could not measure this accurately on site – confirmation to be provided to determine if a performance solution is required.

Please note that the above matters have been identified arising from a review of the DA architectural plans. A further detailed assessment of the Construction Certificate architectural plans will be undertaken prior to issue of the Construction Certificate.

PRELIMINARY FIRE SAFETY SCHEDULE

The following comprises a preliminary fire safety schedule containing statutory fire safety measures that will apply to the new works.



Statutory Fire Safety Measure	Design / Installation Standard
Access Panels, Doors & Hoppers	BCA Clause C3.13 & AS 1530.4 – 2005 and Manufacturer's specifications
Alarm Signalling Equipment	AS 1670.3 – 2004
Automatic Fail Safe Devices	BCA Clause D2.21
Automatic Fire Detection & Alarm System	BCA Spec. E2.2a & AS 1670.1 – 2015
Emergency Lighting	BCA Clause E4.4 & AS 2293.1 – 2005
Emergency Evacuation Plan	AS 3745 – 2010
Exit Signs	BCA Clauses E4.5, E4.6 & E4.8; and AS 2293.1 – 2005
Fire Blankets	AS 3504 – 1995 & AS2444 – 2001
Fire Dampers	BCA Clause C3.15, AS 1668.1 – 2015 & AS 1682.1 & 2 – 1990 and manufacturer's specification
Fire Doors	BCA Clause C2.12, C2.13, C3.5, C3.7, C3.8; and AS 1905.1 – 2005 and manufacturer's specification
Fire Hose Reels	BCA Clause E1.4 & AS 2441 – 2005
Fire Hydrant Systems	Clause E1.3 & AS 2419.1 – 2005
Fire Seals	BCA Clause C3.15, AS 1530.4 & AS 4072.1 – 2005 and manufacturer's specification
Lightweight Construction	BCA Clause C1.8 & AS 1530.3 – 1999 and manufacturer's specification
Mechanical Air Handling Systems (Shutdown)	BCA Clause E2.2, AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012
Paths of Travel	EP&A Regulation Clause 186
Portable Fire Extinguishers	BCA Clause E1.6 & AS 2444 – 2001
Required Exit Doors (power operated)	BCA Clause D2.19(b)
Smoke Hazard Management Systems	BCA Part E2 & AS/NZS 1668.1 – 2015
Sound System & Intercom Systems for Emergency Purposes (SSISEP)	BCA E4.9 and AS1670.4-2015
Warning & Operational Signs	Section 183 of the EP&A Regulation 2000, AS 1905.1 – 2005, BCA Clause D2.23, D3.6, E3.3 & H101.8

Please note that the above schedule will need to be revised prior to issue of the Construction Certificate to reference any proposed Fire Engineering Report and incorporate any additional measures required by the proposed Alternative Solutions. It is also noted that the existing building Annual Fire Safety Statement has not yet been obtained, and as such will inform the schedule in relation to existing measures.

DISABILITY (ACCESS TO PREMISES-BUILDINGS) STANDARDS 2010

The Disability (Access to Premises-Buildings) Standards 2010 (the Access to Premises Standards) requires the new building work to comply with the Access Code (BCA Part D3 & AS 1428.1-2009).

With respect to the proposed new building, compliance with the Access Code is achieved if the new building works, and accessible path of travel thereto, complies with:

- + BCA clauses D3.1 to D3.12;
- + BCA clause E3.6;
- + BCA clauses F2.2 and F2.4.

The Construction Certificate plans will be required to detail compliance to the degree necessary, however, compliance is readily achievable.

CONCLUSION

This report confirms that BM+G have undertaken a review of the DA architectural plans for the proposed upgrade works to Sydney Olympic Park Tennis Centre Ken Rosewall Arena against the deemed-to-satisfy



provisions of the Building Code of Australia 2019 and the Disability (Access to Premises – Buildings) Standards 2010.

It is our experience that such compliance matters raised in this report are not uncommon for a development of this nature and that they can be readily addressed at Construction Certificate stage. In this instance, we are of the opinion that any amendments required to the design documentation in order to comply with the BCA can be addressed in the preparation of the detailed documentation for Construction Certificate without giving rise to significant changes to the proposal as submitted for Development Application.

Arising from our review, it is considered that the proposed development can readily achieve compliance with the relevant provisions of the BCA.

Yours sincerely,

Michael Potts
Senior Building Surveyor
Blackett Maguire + Goldsmith
A1 Accredited Certifier (NSW) – BPB No. 2516