



18 June 2015

APP Corporation Pty Ltd
Level 7, 116 Miller Street
North Sydney NSW 2060
Attention: Hugh Irving

Dear Hugh,

**RE: 255 - 265 MILLER STREET NORTH SYDNEY
WENONA SCHOOL - PROJECT ARCHIMEDES
BCA COMPLIANCE STATEMENT FOR DA SUBMISSION**

This statement has been prepared to verify that Blakett Maguire + Goldsmith Pty Ltd have undertaken a review of the architectural documentation that will accompany the Development Application to the Department of Planning & Environment for the proposed Project Archimedes development at Wenona School against the Building Code of Australia 2014 (BCA).

PROPOSED DEVELOPMENT

The proposed development comprises a 6 storey building which will include a new entry to the school, a 25m indoor swimming pool, a learn to swim pool, a gymnasium/ weights room, classrooms, laboratories, a new staff centre. It also includes a new connection to the existing Miller Street school building and a new bridge over Elliot Street to connect to the rest of the school campus.

COMPLIANCE STATEMENT OBJECTIVES

The objectives of this statement are to:

- a) confirm that the DA architectural documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Certifier.
- b) 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*.
- c) outline the proposed BCA compliance strategy for the building;
- d) identify essential fire safety measures that will apply to the building.
- e) 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 96 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.



REFERENCED DOCUMENTATION

This report has been prepared based on a review of the architectural plans prepared by TZG dated 16/6/2015.

BUILDING CLASSIFICATION

The new building works have been classified as follows:

+ BCA CLASSIFICATION:	Class 9b Educational Establishment
+ STOREYS CONTAINED:	7
+ RISE IN STOREYS:	6
+ TYPE OF CONSTRUCTION:	Type A required
+ EFFECTIVE HEIGHT:	Greater 12m & Less than 25m
+ CLIMATE ZONE:	5

BCA COMPLIANCE STRATEGY

The new building will be connected to the existing Miller Street school building and together will form one building.

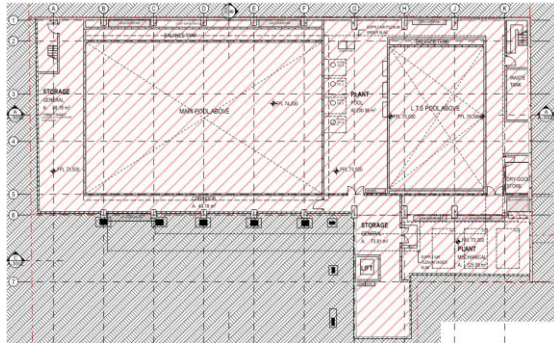
Notwithstanding the above, the proposed new building is to be fire separated from the existing building by 2hr fire rated construction. While the new building will be served by a new sprinkler system, the interface of existing and new fire safety measures such as fire hydrant system and smoke detection and alarm system will be developed as part of the preparation of the Fire Engineering Brief.

The primary aim of the fire separation is to ensure that the existing level of fire safety within the existing building will not be adversely affected by the new building, and to also provide fire separation between the sprinkler protected new building and non-sprinkler protected existing building, which is required under AS 2118.1-1999.

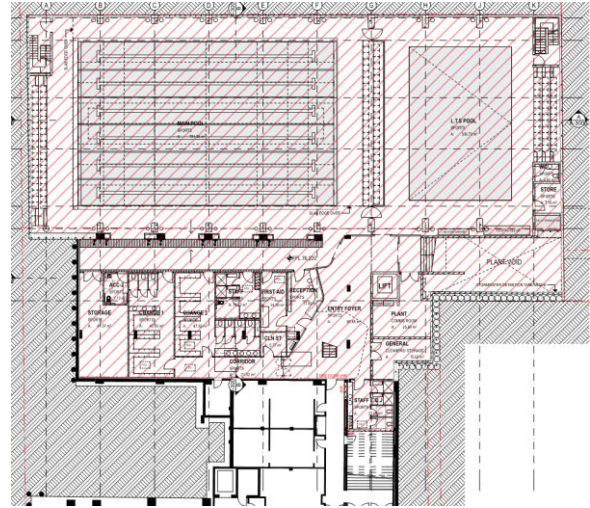
Each storey of the new building will be served by at least two exits, without the need to egress through the existing building, thereby not adversely affecting the capacity of the exits within the existing building. Egress from within the existing building will not be adversely affected by the new addition.

The proposed new building will be sprinkler protected throughout. As such, fire rated spandrels are not required to the external walls. Furthermore, the sprinkler protection will facilitate the proposed fire engineered Alternative Solutions (identified below) particularly with respect to the proposed atrium and open stairways that will connect more than three (3) storeys.

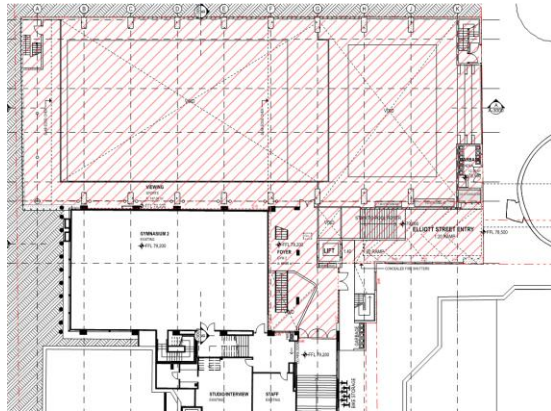
The extent of required sprinkler protection and also indicative location of fire separation/compartmentation between buildings is provided below.



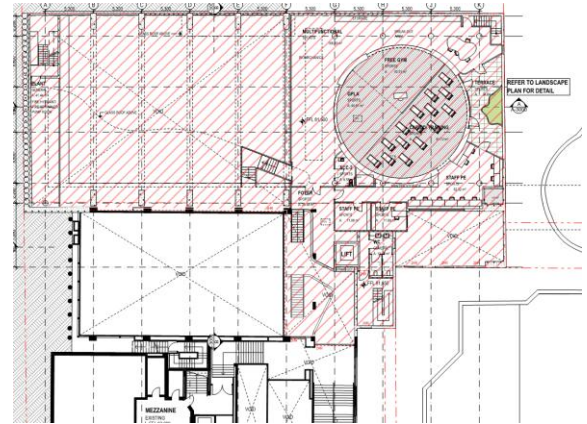
Lower Ground 3 (Basement level)



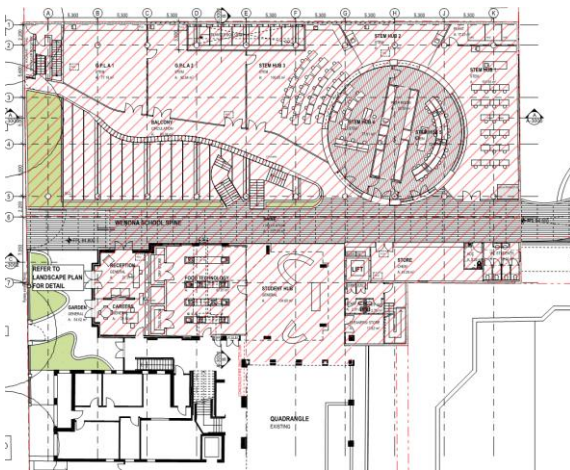
Lower Ground 2



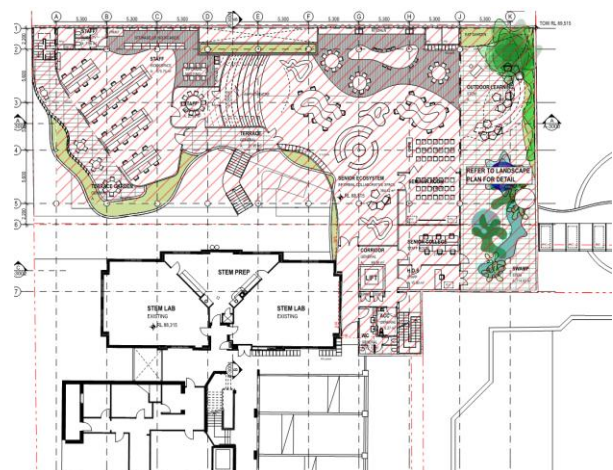
Lower Ground 2 Mezz



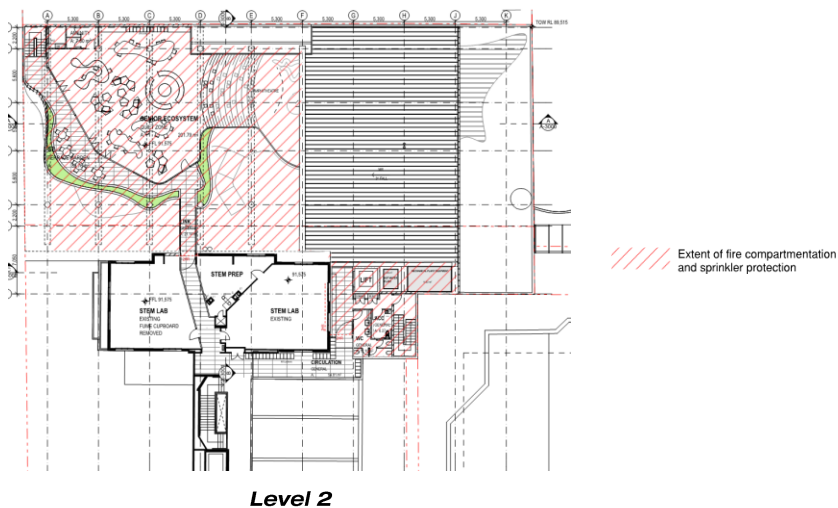
Lower Ground 1



Ground Floor



Level 1



Indicative fire separation and extent sprinkler protection

SUMMARY OF MATTERS REQUIRING FIRE ENGINEERED ALTERNATIVE SOLUTIONS

Arising from our review, the following comprises a summary of the matters that will require fire engineered Alternative Solutions. The fire safety engineering report is to be documented at Construction Certificate stage.

+ MATTERS REQUIRING FIRE SAFETY ENGINEERED ALTERNATIVE SOLUTIONS

1. BCA cl. C2.7 & C3.5: As stated above, a 2hr fire wall is proposed between the proposed new building and existing building. It is anticipated that the fire rated construction will incorporate drencher protected glazed partitions, fire curtains, and other alternative methods of achieving the required fire rating in lieu of the methods prescribed in the DTS provisions of the BCA.
2. BCA cl. C3.3: Openings in external walls of different fire compartments require protection where situated
3. BCA cl. D1.4: Exit travel distance to a point of choice of up to 25m is proposed in lieu of BCA DTS prescribed maximum of 20m at Ground Floor level.
4. BCA cl. D1.5: Distance between alternative exits at Lower Ground 3 (Basement) level is 73m in lieu of BCA DTS prescribed maximum of 60m.
5. BCA cl. D1.3 & D1.7: The required fire isolated exit at Gridline H7 does not discharge to a road or open space, nor to a covered area complying with D1.7(b)(iii).
6. BCA cl. D1.12: The central open 'non-required' stairway connects (indirectly) five storeys and is not proposed to be enclosed in construction complying with BCA Spec. D1.12.
7. BCA cl. E1.3 & AS 2419.1-2005: Subject to advice from the fire services design consultant, an Alternative Solution may be required with respect to the fire hydrant booster location, particularly the construction adjacent to the booster assembly.



8. BCA Part G3: The building will contain a central atrium connecting (indirectly) six (6) levels. As such, fire safety Alternative Solutions will be required to the following BCA provisions relating to atriums:
- + G3.2: Dimensions of atrium well.
 - + G3.3: Separation of atrium by bounding walls.
 - + G3.4: Construction of bounding walls.
 - + G3.8 & Spec. G3.8: Fire & Smoke control systems (particularly smoke control system).

Please note that the above matters have been identified arising from a review of the DA architectural plans. A further detailed assessment of the architectural plans will be undertaken as part of the preparation of the detailed design documentation.

PRELIMINARY FIRE SAFETY SCHEDULE

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

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 – 2004
Automatic Fire Suppression Systems	BCA Spec. E1.5 & AS 2118.1 – 1999
Building Occupant Warning System activated by the Sprinkler System	BCA Spec. E1.5, Clause 8 and / or Clause 3.22 of AS 1670.1 – 2004
Emergency Lifts	BCA Clause E3.4 & AS 1735.2 – 2001
Emergency Lighting	BCA Clause E4.4 & AS 2293.1 – 2005
Exit Signs	BCA Clauses E4.5, E4.6 & E4.8; and AS 2293.1 – 2005
Fire Dampers	BCA Clause C3.15, AS 1668.1 – 1998 & AS 1682.1 & 2 – 1990 and manufacturer's specification
Fire Doors	BCA Clause C2.12, C2.13, C3.2, C3.4, 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
Fire Shutters	BCA Spec C3.4 & AS 1905.2 – 2005
Fire Windows	BCA Spec C3.4
Lightweight Construction	BCA Clause C1.8 & AS 1530.3 – 1999 and manufacturer's specification
Mechanical Air Handling Systems	BCA Clause E2.2, AS/NZS 1668.1 – 1998 & AS 1668.2 – 1991
Paths of Travel	EP&A Regulation Clause 186
Portable Fire Extinguishers	BCA Clause E1.6 & AS 2444 – 2001
Pressurising Systems	BCA Clause E2.2 & AS/NZS 1668.1 – 1998
Smoke and Heat Vents	BCA Spec E2.2c & AS 2665 – 2001
Smoke Hazard Management Systems	BCA Part E2 & AS/NZS 1668.1 – 1998 and Alternative Solution
Sound System & Intercom Systems for Emergency Purposes (SSISEP)	BCA E4.9, Clause 5 of BCA Spec G3.8 and AS1670.4-2004



Statutory Fire Safety Measure	Design / Installation Standard
Stand-by Power Systems	BCA Clause E1.3, E3.4, E4.2 & E4.5; and AS 3000 – 1991
Wall-Wetting Sprinklers	BCA Clause C3.4 & AS 2118.2 – 1995
Warning & Operational Signs	Section 183 of the EP&A Regulation 2000, AS 1905.1 – 2005, BCA Clause C3.6, D2.23, D3.6 & E3.3

Please note that the above schedule will need to be revised prior to issue of the Construction Certificate to reference the proposed Fire Safety Engineering Report and incorporate any additional measures required by the proposed Alternative Solutions.

CONCLUSION

This report confirms that BM+G have undertaken a review of the DA architectural plans for the proposed Project Archimedes against the deemed-to-satisfy provisions of the Building Code of Australia.

It is our experience that matters identified 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.

While further detailed documentation will be required for assessment at Construction Certificate stage, it is considered that the proposed development can readily achieve compliance with the relevant provisions of the BCA.

Yours Sincerely,

Tony Heaslip
Director
Blackett Maguire + Goldsmith Pty Ltd