19 December 2018

Lend Lease
Level 14, Tower Three, International Towers Sydney
Exchange Place, 300 Barangaroo Avenue
BARANGAROO NSW 2000

Attention: Numa Miller
Email: numa.miller@lendlease.com

Dear Numa,

RE: MORPETH AGED CARE
BCA & ACCESSIBILITY 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 against the Building Code of Australia 2016 Amendment 1 (BCA), Accessibility Provisions, and DDA in support of the Development Application to Maitland City Council.

1.0 PROPOSED DEVELOPMENT

The proposed development comprises the construction of a two storey residential aged care facility and adaptive re-use of an existing heritage building for uses which are ancillary to the proposed aged care facility.

2.0 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) Confirm that the proposed new building works can readily achieve compliance with the accessibility provisions of the BCA and the objectives of the Disability Discrimination Act 1992 (DDA).

d) 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*.

3.0 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 Amendment 1. For the purpose of this compliance statement, it is assumed that the Construction Certificate Application will be lodged before 1 May 2019, if it is lodged after this date BCA 2019 will apply.

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4.0 REFERENCED DOCUMENTATION

This report has been prepared based on a review of the final DA architectural plans prepared by Jackson Teece:

Drawing Number	Rev	Date	Drawing Number	Rev	Date
000-00	1	13.12.2018	000-01	1	13.12.2018
000-02	1	13.12.2018	000-03	1	13.12.2018
100-00	1	13.12.2018	100-01	1	13.12.2018
200-00	1	13.12.2018	201-00	1	13.12.2018
301-00	1	13.12.2018	303-00	1	13.12.2018
400-00	1	13.12.2018	400-01	1	13.12.2018
500-00	1	13.12.2018	900-01	1	13.12.2018
900-01	1	13.12.2018	900-27	1	13.12.2018
900-28	1	13.12.2018	900-31	1	13.12.2018
900-51	1	13.12.2018			

5.0 BUILDING CLASSIFICATION

The new building works have been classified as follows:

+ **BCA Classification:**	Class 9c (Aged Care Building)
+ **Storeys Contained:**	Three (3)
+ **Rise in Storeys:**	Two (2)[1]
+ **Type of Construction:**	Type C [2]
+ **Effective Height:**	Less than 12m
+ **Max. Fire Compartment Size:**	2524m^2 (TBC)
+ **Max Floor Area:**	3,000m² (Type C) 9c aged care buildings.
+ **Maximum Volume:**	18,000m³ (Type C 9c aged care buildings.
+ **Sprinkler protected throughout:**	Yes
+ **Climate Zone:**	Zone 5

*** Note 1 –** Having regards to C1.2 of the BCA it is noted that the building has a maximum rise in storeys of two (2) at any point of the external wall of the building at ground level. This will need to be confirmed as the design progresses through the submission of detailed sections and elevations, however it is noted that the current architectural documentation the building comprises a RIS of two (2).

*** Note 2 –** Building is of TYPE C construction as a result of the application of C1.5 of the BCA. Compartmentation limitations set out for a building of TYPE C construction under C2.2 will need to be complied with.

6.0 BCA ASSESSMENT – KEY ISSUES

The following comprises a summary of the key compliance issues that will need to be addressed prior to issue of the Construction Certificate:

1) Clause C1.1 – Type of Construction Required: The minimum type of fire-resisting construction of a building must be that specified in Table 5 of Specification C1.1 for Type C Construction.

The lightweight separating floor to the heritage building will be addressed in the fire engineering strategy

2) Clause C1.2 – Calculation of the rise in Storeys: It is noted that the building comprises a maximum number of storeys at the external wall above finished ground level of two (2). Where a change is made as part of the design development the TYPE of construction will need to be re-assessed accordingly.

3) Clause C1.5 – Two storey Class 2, 3 and 9c buildings: Two storey 2,3 and 9c buildings may be of type C construction where they achieve the criteria set out within this clause.

   Further to the comments under C1.2 above the building currently has a Rise in Storeys of two (2) therefore is to be of TYPE C construction.

4) Clause C2.2 - General Floor area and volume limitations: The maximum floor area and volume limitations must not exceed the limitations set out within this clause for TYPE C construction.

   Architect to note and provide compartmentation plan demonstrating compliance with the requirements of this clause review and comment as the design progresses and prior to the issuing of a Construction Certificate.

5) Clause C2.5 – Class 9c Building Compartmentation: A Class 9c building is required to be divided into areas of not more than 500m2 by smoke-proof walls and comply with the provisions of sub-clause (b). Ancillary use areas, containing equipment or materials that are a high potential fire hazard, must be separated for the sole-occupancy units by smoke-proof walls.

6) Clause C3.2 – Protection of Openings in External Walls: All openings in external walls are proposed to be greater than 3m of a side or rear property boundary. It is noted that all external walls are not less than 3m from the allotment boundary's

7) Clause C3.3 – Separation of external walls and associated openings in different fire compartments: Any openings in adjacent fire compartments are required to be protected in accordance with Table C3.3 and Clause C3.4. Any departures will be required to be addressed as a fire engineered alternative solution.

8) Clause C3.15 – Openings for service installations: Where service installations penetrate the walls or floors required to have an FRL with respect to integrity and insulation they are to be protected by fire seals having an FRL of the building element concerned. Fire seals are required to comply with Specification C3.15

9) Clause D1.2 – Exit Travel Distance: Two or more exits are provided from each storey.

10) Clause D1.3 – Fire Isolated Stairway's and ramps: The non-fire isolated stairway serving the existing heritage building is to be rationalised under the fire engineered strategy, all remaining required stairways are documented as fire isolated stairways and/or external stairways as applicable

11) Clause D1.4 – Exit Travel Distance: Exit travel distances within the building are required to be not more than 20m to a single exit, or a point of choice of two exits. Where there is a point of choice of two exits, all points on the floor are required to be within 40m to one of the exits.

    The distance to an exit from the southern external balcony is up to 45m to the nearest exit. This issue will need to be justified by a fire engineered performance solution.

    A door will need to be provided to the lounge room bounding Household D courtyard in order to achieve acceptable travel distances.

12) Clause D1.5 – Distance between alternative exits: The distance between alternative exits is up to 65m worst case to the ground and first floors. Distance between alternative exits will need to be justified through a fire engineered performance solution. Distances between exits on all other storeys is up to 60m.

    A door will need to be provided to the lounge room bounding Household D courtyard in order to achieve acceptable travel distances.

13) Clause D1.6 – Dimensions of paths of travel to an exit: The minimum clear height through all egress paths is required to be no less than 2m.

    The minimum width of paths of travel must be not less than 1m wide generally (this width dimension is measured clear of any obstructions such as handrails and joinery), 1.5m for all public corridors and 1.8m in front of doorways to resident rooms and communal bathrooms.

In a required exit or path of travel to an exit there is concession for the unobstructed width of a doorway to be reduced to 850mm min in lieu of 1m, and the unobstructed height for an exit doorway can be reduced to 1,980mm min.

Doorways to resident rooms are to be not less than 1070mm and all other resident use areas must be not less than 870mm.

It is noted that there are reduced heights, doorways and corridor widths within the existing heritage part which will be subject to rationalisation under the fire engineering and access reports.

14) Clause D1.7 – Discharge from Fire Isolated Exits: The discharge of fire isolated exits (lower ground, ground floor) will necessitate protection to the various openings along the ground floor level to the degree necessary in order to facilitate external egress travel to the roadway.

    Egress path will need to be protected in accordance with the requirements of this clause.

    Note: There is the opportunity to address exposure of the egress path under the fire engineered strategy where there are alternative egress routes available.

15) Clause D1.8 – External stairways or ramps in lieu of fire-isolated stairways: It is noted that all of the proposed stairways are to be fire isolated stairways.

16) Clause D1.10 – Discharge from Exits: The discharge of exits adjacent to any carpark and driveways will be protected to mitigate risk of impediment of the egress paths.

    External courtyards are generally provided with security gates which will be fitted with fail safe devices where required to be secured for the purpose of achieving compliant travel distances.

    Notwithstanding the above, it is clear the courtyard to household A will need to be provided with a security gate in order to achieve compliant travel distances.

17) Clause D1.11 – Horizontal exits: It is noted that no horizontal exits are proposed to be relied upon for egress purposes.

18) Clause D1.12 - Non-required stairways, ramps or escalators: A non-required stairway must not be used between storeys in a resident use area in a class 9c building. The non-fire isolated non-required stairway within the subject building will be subject to a fire engineered performance solution.

19) Clause D2.7 – Installations in Exits and Paths of Travel: Electricity and communications cupboards located within a nominated egress paths within the proposed building will be required to be suitably smoke sealed and enclosed in non-combustible construction in accordance with D2.7(d).

20) Clause D2.13 – Goings and Risers: Stairways are required to have risers and goings in accordance with Table D2.14 and must have no winders in the required egress stairways.

    The winders within the existing stairway within the heritage building which will be relied upon for egress will be subject to a fire engineering performance solution.

21) Clause D2.16 – Balustrades or other barriers: Balustrades are required where the fall to the level below is more than 1m in height. The minimum height of a balustrade is 1m above the floor of the landing, walkway or the like; and 865mm above the floor of a stairway or a ramp. Balustrades must be constructed so as to not permit a sphere of 125mm diameter to pass through.

    Important Note: The height of the existing balustrade within the heritage part will need to be confirmed by the projects architect. Where less than 1m in height, the height is to be increased in consultation with the heritage consultant to ensure compliance with the requirements of this clause is achieved.

    It is recommended that consideration be given to the increase in balustrade heights for aged care levels 1.1m and 1.5-1.8m in dementia levels/ It should also be noted that the respective provider will have specific requirements for the construction of balustrades and in this regard further consideration is recommended accordingly.

22) Clause D2.17 – Handrails: Handrails must be provided along both sides of every passageway or corridor used by resident and where practical, continuous for the full length. It should be noted that there is scope under a Performance Solution for the provision of handrails to be rationalised based on rest stops being provided in corridors.

23) Clause D2.20 – Swinging Doors: All swinging doorways in a required exit (final exit door from the building) are required to swing in the direction of egress.

Smoke doors are generally proposed to swing in one direction only so will not swing in the direction of egress in some instances. This will need to be justified as a fire engineered performance solution.

In addition to the above, the swing of the existing door to the heritage building which swings against the direction of egress will be addressed under the fire engineered strategy

24) Part D3 – Access for People with a Disability: The extent of access required depends on the classification of the building. Buildings and parts of buildings must be accessible as set out in Table D3.1 unless exempted by Clause D3.4. The building is required to comply with AS1428.1-2009.

The proposed development will achieve compliance through a mixture of a DTS and performance based strategy. The accessibility solutions will be prepared in relation to the Construction Certificate documentation for the assessment and approval of the Certifying Authority.

25) Clause E1.3 – Fire Hydrants: Fire hydrants are required to serve the building and comply with AS2419.1-2005. The booster assembly location will need to be confirmed, where not in strict compliance with the requirements of this clause will need to be rationalised under the fire engineering report.

26) Clause E1.5 – Sprinklers: Sprinklers are required to be provided throughout the building to comply with AS2118.4-2012.

27) Clause E1.6 – Portable Fire Extinguishers: Portable fire extinguishers are required to serve the building and comply with AS2444-2001.

28) Part E2 – Smoke Hazard Management: A smoke detection system is required to be provided in accordance with Specification E2.2a and AS1670.1-2015.

29) Part E3 Lift Installations: The building is required to have lifts capable of being used as a stretcher facility in accordance with Clause E3.2, have dimensions comply with E3.6 and comply with AS 1428.1-2009, and be provided with fire service controls.

30) Part E4 – Emergency lighting, exit signs and warning systems: Emergency lighting and exits signs are required to be provided in accordance with AS2293.1-2005 and Part E4.

31) Clause F2.1 – Facilities in residential buildings: Sanitary facilities, such as closet pans, showers, and baths are required to be provided in accordance with Table F2.1.

32) Part F3 – Room Sizes: The floor to ceiling heights in the Class 9c building must not be less than 2.4 metres in habitable rooms, corridors and passageways, and 2.1 metres in kitchens, laundries, and bathrooms. In addition, the floor to ceiling heights car parking areas must be not less than 2.1 metres.

33) Part F4 – Light and Ventilation: Any installations or modifications to the existing artificial lighting system are required to comply with Clause F4.4 and AS 1680. All mechanical or air-conditioning installations or modifications within the tenancy must be undertaken in accordance with Clauses F4.5(b) and AS 1668.2.-2012.

Window sill heights must not be greater than 1m high in all windows in resident rooms. Resident room windows must also be >3m from any adjacent wall or side boundary.

34) Part F5 – Sound Transmission and Insulation: The walls within the Class 9c Residential part of the building that are required to have an impact sound insulation rating must be identical with a prototype that is no less resistant to the transmission of sound when testing in accordance with Specification F5.5. The floors are also required to be provided with airbourne and impact sound insulation.

35) Section J – Energy Efficiency: The building is subject to compliance with the Energy Efficiency Provisions of BCA Section J relating to:

- J1: Building Fabric
- J2: External Glazing
- J3: Building Sealing
- J5: Air-conditioning and ventilation systems
- J6: Artificial lighting and power

- J7: Hot water supply
- J8: Access for maintenance

7.0 FIRE ENGINEERED PERFORMANCE SOLUTIONS

In accordance with the above, BM+G verify that the proposed building design will entail a combination of compliance with the DTS provisions and Performance Requirements of the BCA, by the development and justification of Performance Based Alternative Solutions prepared by suitably Accredited Consultants.

The fire engineered solutions will be prepared in relation to the Construction Certificate documentation for the assessment and approval of the Certifying Authority.

8.0 FIRE SAFETY SCHEDULE

The following table is a list of the required fire safety measures within the building. These measures may be subject to further change pending the outcomes of the final Fire Safety Engineering Review to confirm the works are permissible.

Statutory Fire Safety Measure	**Design / Installation Standard**
Alarm Signalling Equipment	AS 1670.3 – 2015
Automatic Fail Safe Devices	BCA Clause D2.21
Automatic Fire Detection & Alarm System	BCA Spec. E2.2a & AS 1670.1 – 2015
Building Occupant Warning System activated by the Sprinkler System	BCA Spec. E1.5, Clause 8 and Clause 3.22 of 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, C3.2, C3.4, C3.5, C3.8; and AS 1905.1 – 2015 and manufacturer's specification
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	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)
Residential Automatic Sprinkler System	AS 2118.4 – 2012
Smoke Dampers	AS/NZS 1668.1 – 2015
Smoke Doors	BCA Spec C3.4 & C2.5
Wall-Wetting Sprinklers	BCA Clause C3.4 & AS 2118.2 – 2012
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
Fire Engineered Alternative Solution	TBC

9.0 CONCLUSION

This report contains an assessment of the referenced architectural documentation for the proposed development located at Lot Part 3 on DP272740 Morpeth, against the Deemed-to-Satisfy provisions and Performance Requirements of the National Construction Code Series (Volume 1) Building Code of Australia 2016 Amendment 1, Accessibility Provisions of the BCA, and DDA.

In view of the above assessment we can confirm that subject to the above measures being appropriately addressed by the project design team, compliance with the provisions of the BCA is readily achievable.

In addition, it is considered that such matters can adequately be addressed in the preparation of the Construction Certificate documentation without giving rise to any inconsistencies with the Development Approval.

If you have any questions or require further information, please do not hesitate to contact me on 0457 777 582.

Regards

Jake Hofner
Building Surveyor
Blackett Maguire + Goldsmith