

BCA CAPABILITY STATEMENT – DA SUBMISSION

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|-------------------|--|------------------|--------------|
| TO: | Marathon Holdings | PROJECT # | 180278 |
| ATTENTION: | Will Reynolds | DATE: | 30 July 2018 |
| EMAIL: | willy_reynolds888@hotmail.com | PAGES: | 8 |
| FROM: | Adam Durnford | | |
| SUBJECT: | Levels 1 – 3, 128 Marsden Street, Parramatta | | |

1.0 INTRODUCTION

Blackett Maguire + Goldsmith Pty Ltd (BM+G) have been engaged by Marathon Holdings to provide a National Construction Code - Building Code of Australia (BCA) 2016 Capability Statement of the proposed Architectural Drawings prepared for the Development Application to be submitted to Parramatta Council for the proposed alterations and additions to Levels 1 -3 of 128 Marsden Street, Parramatta.

The proposed development subject of the Development Application consists of the following:

- + Level 1 – Retention of 27 car spaces together with the introduction of car stackers.
- + Level 2 – 27 car parking spaces deleted with area converted to commercial office space.
- + Level 3 – 31 car parking spaces deleted with the area converted to commercial office space.

The purpose of this BCA Capability Statement is to satisfy the Consent Authority in their review of the Development Application that the proposed design has been reviewed by an appropriately qualified Accredited Certifier and that the proposed development is capable of complying with the requirements of the National Construction Code.

2.0 DOCUMENTATION RELIED UPON

The following documentation has been reviewed, referenced and/or relied upon in the preparation of this report:

- + National Construction Code – Building Code of Australia 2016 Amendment 1 (BCA) – Volume 1.
- + Guide to the NCC – Building Code of Australia 2016 (BCA) – Volume 1
- + Architectural Drawing Nos. 217116 DA001, DA010, DA011, DA020 & DA021 dated 24 July 2018 prepared by Gray Pucksand.
- + Associated Australian Standards

3.0 BCA CLASSIFICATION

The building is classified as follows:

| | |
|------------------------------|---|
| + BCA CLASSIFICATION: | Class 6 (Ground Floor Retail) Class 5 (Commercial Office Space throughout the building) Class 7a (Car Park on Levels 1 & 2) |
| + RISE IN STOREYS: | Nine (9) |
| + STOREYS CONTAINED: | Ten (10) |
| + EFFECTIVE HEIGHT: | >25m i.e. 27.7m |



| | |
|--------------------------------------|---|
| + TYPE OF CONSTRUCTION: | Type A Construction |
| + SPRINKLERS: | Sprinklers are currently provided within the Ground Floor & Levels 1 – 3. |
| + MAX. FIRE COMPARTMENT SIZE: | Class 5 -8,000m ² & 48,000m ³ Class 6 - 5,000m ² & 30,000m ³ |
| + CLIMATE ZONE: | Zone 6 |
| + IMPORTANCE LEVEL: | Importance Level 2 |

4.0 BCA ASSESSMENT – KEY ISSUES

4.1 SECTION C – FIRE RESISTANCE

1. Clause C1.1 – Type of Construction Required

Based on the rise in storeys of the building, the construction elements are required to be constructed in accordance with Type A Construction.

Refer to comments provided under Specification C1.1 for the FRL's that will be applicable to the building elements.

2. Clause C1.9 – Non-combustible Building Elements

Any new component of the external walls of the building including any elements incorporated in them including the façade covering, framing and insulation are required to be constructed of non-combustible materials.

Evidence of compliance with Clause C1.9 will be required to be demonstrated prior to the issue of the Construction Certificate.

3. Clause C2.2 – General Floor Area and Volume Limitations

The size of the respective fire compartments for each individual building classification throughout the building complies with the requirements of Clause C2.2 in terms of the maximum fire compartment size.

4. Clause C2.6 – Vertical separation of openings in external walls

Due to the fact that the storeys in which the proposed works are to be undertaken are provided within an Automatic Fire Suppression System, it is considered that having regard to the nature of the proposed works, that compliant spandrel separation is not required between openings within the subject storeys.

5. Clause C2.8 – Separation of Classifications in the Same Storey

Based on the fact that the car parking area on Level 1 and adjoining office area are required to be constructed of the same FRL in accordance with Table 4 of Specification C1.1, there is no requirement for a fire wall to be constructed between the two classifications.

The proposed design complies.

6. Clause C2.9 – Separation of Classifications in Different Storeys

The new concrete infill slab will be required to have a FRL of 120/120/120.

Verification will be required to be submitted prior to the issue of the Construction Certificate that the concrete slabs between the subject storeys achieves a minimum FRL of 120/120/120.

7. Clause C3.2 - Protection of openings in external walls

Based on the Development Application Drawings reviewed, it does not appear that any new openings within the external walls of the building are situated within 3m of a side or rear boundary allotment line.

Further details will be required to be submitted prior to the issue of the Construction Certificate.



8. Spec C1.1 – Fire Resistance of building elements

The new building elements will be required to be constructed in accordance with the FRL's detailed in Table 3 of Specification C1.1 for Type A Construction (refer below).

| | TYPE A CONSTRUCTION |
|---|---|
| BUILDING ELEMENT | Class 5 & 7a |
| EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is – <i>For load bearing parts-</i> less than 1.5m 1.5m to less than 3m 3m or more <i>For non-load bearing parts-</i> less than 1.5m 1.5m to less than 3m 3m or more | 120/120/120 120/90/90 120/60/30 -/120/120 -/90/90 -/-/- |
| EXTERNAL COLUMN not incorporated in an external wall, where the distance from any fire source feature to which it is exposed is – Less than 3m 3m or more | 120/-/- -/-/- |
| COMMON WALLS & FIRE WALLS | 120/120/120 |
| INTERNAL WALLS Fire Resisting lift and stair shafts – Loadbearing Non-loadbearing Bounding public corridors, public lobbies or the like – <i>Loadbearing</i> <i>Non-loadbearing</i> Between or bounding sole occupancy units <i>Loadbearing</i> <i>Non-loadbearing</i> Ventilating, pipe, garbage, and the like shafts not used for discharge of hot products of combustion – <i>Loadbearing</i> <i>Non-loadbearing</i> | 120/120/120 -/120/120 120/-/- -/-/- 120/-/- -/-/- 120/90/90 |



| | TYPE A CONSTRUCTION |
|--|---------------------|
| BUILDING ELEMENT | Class 5 & 7a |
| | -/90/90 |
| OTHER LOADBEARING INTERNAL WALLS & COLUMNS | 120/-/- |
| FLOORS | 120/120/120 |
| ROOF | 120/60/30 |

4.2 SECTION D – ACCESS & EGRESS

9. Clause D1.2 – Number of Exits Required

The minimum number of exits has been provided from each of the subject storeys of the building.

On Level 2 of the building, access will need to be provided from the five (5) car parking spaces to the two (2) fire isolated stairways on Level 2 via common area of the building. Access cannot be provided via or through any sole occupancy unit.

10. Clause D1.3 – When Fire-Isolated Stairways and Ramps are Required

It is noted that the Architectural Drawings indicate that all egress stairways serving the building are contained within fire isolated shafts.

11. Clause D1.4 – Exit Travel Distances:

Travel distance is required to be provided in accordance with the following throughout the building:

| Building Class | Distance to a Point of Choice | Distance to an Alternative Exit | Distance between Alternative Exits |
|----------------|-------------------------------|---------------------------------|------------------------------------|
| Class 5 | 20m | 40m | 60m |
| Class 7a | 20m | 40m | 60m |

The Development Application Drawings indicate that compliance is achievable with the DtS Provisions of the BCA throughout Levels 1 - 3.

12. Clause D1.5 – Distance Between Alternative Exits

Refer to table above in relation to maximum permitted distance between alternative exits.

The Development Application Drawings indicate that compliance is achievable with the DtS Provisions of the BCA throughout Levels 1 - 3.

13. Clause D1.7 – Travel via Fire-Isolated Exits

Travel via the fire isolated stairways complies with each of the stairways discharging via their own fire isolated shafts to open space on the Ground Floor.

14. Part D3 – Access for a Person with a Disability

The Development Application Architectural Drawings indicate that access for a person with a disability can be provided throughout the subject levels from the Principal Public Entrance on the Ground Floor via the affected part in accordance with the Access to Premises Standards.

This will in essence ensure the design satisfies the requirements of the DDA.



Access need not be provided to:

- + An area where access would be inappropriate because of the particular purpose for which the area is used.
- + An area that would pose a health or safety risk for people with a disability.
- + Any path of travel providing access only to an area exempted by (a) or (b).

It is noted that there is adequate provision in terms of the number of existing accessible car parking spaces based on the total number of car parking spaces provided.

4.3 SECTION E – SERVICES & EQUIPMENT

15. Part E1 – E4- Essential Fire Safety Measures

The following table identifies the essential fire safety measures that are currently installed within the building along with their standard of performance.

| Essential Fire and Other Safety Measures | Standard of Performance |
|---|--|
| Automatic Fire Detection & Alarm System | BCA Spec. E2.2a – Clause 4 AS 1670.1 – 2015. |
| Automatic Fire Suppression System | AS2118.1 – 1978 |
| Emergency Lighting | BCA Clause E4.2, E4.4 AS 2293.1 – 2005 |
| Emergency Lifts | Ordinance 70 (Clause 55.9) AS 1735 |
| Emergency Evacuation Plan | AS 3745 – 2002 |
| Emergency Warning & Intercommunication System | BCA Clause E4.0 AS 22 |
| Exit Signs | BCA Clauses E4.5, E4.6 & E4.8 AS 2293.1 – 2005 |
| Fire Dampers | Ordinance 70 (Clause 22.13) AS/NZS 1668.1 – 1998 |
| Fire Doors | Ordinance 70 (Part 21) AS/NZS 1905.1 – 1997 |
| Fire Hose Reels | Ordinance 70 (Clause 27.3) Ministerial Specification 10 |
| Fire Hydrant Systems | Ordinance 70 (Clause 27.4) Ministerial Specification 10 |



| Essential Fire and Other Safety Measures | Standard of Performance |
|--|---|
| Mechanical Air Handling Systems (A/C Shutdown) | BCA Clause E2.2 AS/NZS 1668.1 - 2015 & AS 1668.2 - 1991 |
| Paths of Travel | EP & A Regulation Clause 186 |
| Portable Fire Extinguishers | BCA Clause E1.6 AS 2444 - 1995 |
| Wall Wetting Sprinklers | BCA Clause C3.4 |
| Warning & Operational signs | Section 183 of the EP & A Regulations 2000, BCA Clause D2.23. BCA Clause E3.3 |

16. Clause E1.3 – Fire Hydrants

Fire Hydrant coverage will be required to each of the refurbished areas.

Design Verification of the existing fire hydrant coverage, pressure and flow will be required to be submitted prior to the issue of the Construction Certificate.

17. Clause E1.4 – Fire Hose Reels

Fire Hose Reel coverage will be required to each of the refurbished areas.

Design Verification of the existing fire hydrant coverage, pressure and flow will be required to be submitted prior to the issue of the Construction Certificate.

18. Clause E1.5 – Sprinklers

Based on the fact that the existing building has an effective height in excess of 25m (effective height is 27.7m which equates to one (1) storey over), having regard to the current day requirements of the BCA, an Automatic Fire Suppression System would be required to be installed throughout the entire building.

It is noted that an Automatic Fire Suppression System is currently installed within the Ground Floor Level along with Levels 1 – 3 in which the proposed alterations are proposed to be undertaken. In this instance the existing Automatic Fire Suppression System which was previously installed having regard to the existing car park use on Levels 1 – 3 will be retained including on Levels 2 & 3 where a change of use to office is proposed.

Having regard to the fact that the area of the building in which the works are proposed to be undertaken are provided with an Automatic Fire Suppression System, irrespective of the fact that the entire building is not, it is considered that the provisions of Clause 143 of the Environmental Planning & Assessment Regulation are met in terms of fire protection especially having regard to the fact that the remainder of the building being Levels 4 – 8 is consistent with the proposed new use on Levels 2 & 3 i.e. commercial office space.

All new elements of the Automatic Fire Suppression System will be required to comply with the requirements of AS 2118.1 – 1999 or 2017.

19. Clause E2.2 – Smoke Hazard Management

Based on the fact that the existing building has an effective height in excess of 25m (effective height is 27.7m which equates to one (1) storey over), having regard to the current day requirements of the BCA, a Zone Smoke Control System would be required to be installed throughout the entire building.



Having regard that the areas of the proposed works on Levels 1 – 3 are contained within a portion of the building that is significantly below an effective height of 25m together with the fact that Levels 2 & 3 are proposed to be provided with an Automatic Fire Detection & Alarm System in accordance with AS 1670.1 – 2015 which is installed throughout the entire building which is over and above the DtS Provisions of the BCA in addition to the fact that the subject areas will be sprinkler protected, it is considered reasonable for the subject areas to not be provided with a zone smoke control system on the basis that the existing building is not provided with such a system.

As detailed above, an Automatic Fire Detection & Alarm System is required to be installed throughout Levels 2 & 3 in accordance with Clause 4 of BCA Specification E2.2a and AS 1670.1 – 2015.

4.4 SECTION F – HEALTH & AMENITY

20. Clause F2.3 sanitary facilities

Sanitary facilities are required to be provided for occupants in accordance with the requirement of Table F2.1 on Levels 2 & 3.

The Development Application Architectural Drawings indicate the adequate provision of sanitary facilities for both males and females on Levels 2 & 3 of the building.

21. Clause F2.4 Accessible Sanitary Facilities

Facilities for a person with a disability must be provided in accordance with the following:

An accessible sanitary facility for use by a person with a disability is required to be provided adjacent to a bank of male and female sanitary facilities.

It is noted that the current Development Application Architectural Drawings indicate that compliance is achieved in this instance with a unisex accessible sanitary facility provided on Levels 2 & 3.

Within the bank of male and female sanitary facilities, an ambulant sanitary compartment must be provided for each sex for use by a person with an ambulant disability.

It is noted that the current Development Application Architectural Drawings indicate that compliance is achieved in this instance with male and female ambulant sanitary compartments provided on Levels 2 & 3.

The accessible sanitary facilities will be required to be a mixture of LH & RH orientation. The current drawings indicate that compliance is achieved in this instance.

4.5 SECTION J – ENERGY EFFICIENCY

22. Parts J1 – J8

The energy efficiency provisions of Section J are applicable to the new building works.

In this regard Parts J1 – Building Fabric, J2 – External Glazing, J3 – Building Sealing, J5 – Air Conditioning and Mechanical Ventilation, Part J6 – Artificial Lighting and Power, and Part J7 – Hot water supply & Part J8 – Access for Maintenance will be required to be complied with.

Verification of compliance with the provisions of Section J will be required to be submitted prior to the issue of the Construction Certificate.

5.0 CONCLUSION

This Report contains a high level NCC-BCA2016 and Access to Premises Standards 2010 assessment of the referenced Development Application Architectural Documentation for the proposed alterations to Levels 1 – 3 of the existing building located at 128 Marsden Street, Parramatta.

Arising from our assessment we are satisfied that the proposed works on Levels 1 – 3 can satisfy the requirements of the NCC-BCA2016 and the Access to Premises Standards 2010 as applicable to the subject parts of the building if the works are designed and constructed in accordance with the requirements of the BCA.



Yours Sincerely,

Adam Durnford
Associate Director
A1 Accredited Certifier (NSW) – BPB No. 1821
Blackett Maguire + Goldsmith