

BCA CAPABILITY REPORT

FOR

Mosca Pserras Architects

PREMISES

7-13 Norfolk Street

Liverpool

Date: 22 January 2016

Our Re: J150540

BCA FIRE LEGAL

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BCA FIRE LEGAL

1.0 Executive Summary

This report has been prepared to identify the extent of compliance achieved by the architectural documentation against the relevant provisions of the Building Code of Australia (BCA) 2015 and adopted standards.

The proposed building subject of this report is located at 7-13 Norfolk Street, Liverpool and comprises of twenty five (25) storey mixed use development with a four (4) storey basement carpark.

This report will provide a BCA analysis to assist in the process of design development and to assist the consent authority in the determination of the Development Application relating to the works.

2.0 Report Summary

2.1 - Location

The subject building works is to be located on the site at 7-13 Norfolk Street, Liverpool. The site is bounded by Norfolk Street to the south east, Castlereagh St to the west and is bounding by residential buildings on the North.

2.2 - Description of works

The construction of a mixed use residential apartment building containing the following uses:

- Four storey basement car park
- Twenty three storeys of residential apartments
- Ground floor commercial

2.3 – Report purpose

This report has been prepared to identify aspects of the proposed design that require further consideration and to identify aspects of the design that may be altered subsequent to the issue of a Development Consent.

This report has been prepared on the basis of an assessment of compliance only and should not be construed as being design advice.

2.4 – Building Description

Use/Classification	Class 7a - Car parking Class 2 - Residential Class 5 – Commercial Class 7b – Storage Class 10b – Swimming pool
Rise in Storeys	The development will have a rise of twenty four (24) storeys
Floor Area	The maximum floor area provisions for <i>fire compartments</i> are not applicable to the Class 2 part Class 5 & 7a - Max floor area – 5,000m² Class 5 & 7a portions do not exceed the maximum size of fire compartments in part C2.2 of the BCA 2015.
Volume	The maximum volume provisions for fire compartments are not applicable to the Class 2 part. Class 5 & 7a - Max floor volume 30,000m³ Class 5 & 7a portions do not exceed the maximum size of fire compartments in part C2.2 of the BCA 2015.
Effective Height	The building will have an effective height of greater than 50m. (RL 98.1000 – 22.000 = 76.100m)
Type of Construction (BCA)	The building requires Type A construction throughout.
Climate zone	For the purpose of Section J the climate zone is 6.

3.0 – Building Code of Australia Assessment

3.1 – Fire Resistance and Stability (Section C, BCA)

Item	Comment										
<i>Fire Resistance</i>	The building is to comply with Clause C1.1 and Clause 2 & 3 of Specification C1.1, for a building required to have Type A construction. Refer to Table 3 of Specification C1.1 for the specific Fire Resistance Levels [FRL's]. Structural: the ability to maintain stability and adequate load-bearing capacity as determined by AS 1530.4. Integrity: the ability to resist the passage of flames and hot gases specified in AS 1530.4. Insulation: The ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in AS 1530.4. FRL's are generally as follows. <table border="1"> <thead> <tr> <th>Class</th><th>FRL</th></tr> </thead> <tbody> <tr> <td>Class 2:</td><td>90/90/90</td></tr> <tr> <td>Class 7a:</td><td>120/120/120</td></tr> <tr> <td>Class 5:</td><td>180/180/180</td></tr> <tr> <td>Class 7b:</td><td>240/240/240</td></tr> </tbody> </table> Where lightweight fire rated construction is proposed for walls, the system must comply with Specification C1.8 of BCA and the manufactures tested specification. Furthermore, the system proposed must be consistent with sound and energy efficiency requirements with Part F5 and Part J of BCA. Columns protected with lightweight fire rated construction that are subject to mechanical damage must be protected and/or internally filled in accordance with Clause C1.8(b) of BCA. The fire hazard properties of floor, wall and ceiling linings are to comply with Part C1.10, and Specification C1.10 of BCA. FRL's to the parking levels may be reduced where compliance with Clause 3.9 of Specification C1.1 is proposed	Class	FRL	Class 2:	90/90/90	Class 7a:	120/120/120	Class 5:	180/180/180	Class 7b:	240/240/240
Class	FRL										
Class 2:	90/90/90										
Class 7a:	120/120/120										
Class 5:	180/180/180										
Class 7b:	240/240/240										

<i>Compartmentation</i>	The key areas for consideration with regards to compartmentation and separation are as follows: • Each sole occupancy unit within the building, being each individual room or suite of rooms, must be separated by construction achieving an FRL of not less than 90/90/90 for load bearing or -/60/60 for non load bearing. • The car parking areas must be separated from the remainder of the building by construction having an FRL not less than 120/120/120. • The lift shaft must be constructed with an FRL not less than 120/120/120 to the basement carpark level and 90/90/90 to residential levels. • The commercial units must be separated from the remainder of the building by construction having an FRL not less than 180/180/180. • The storage units on level 2 must be separated from the remainder of the building by construction having an FRL not less than 240/240/240. Parts of the building with different classifications on the same storey must be fire separated by a fire wall of the higher FRL specified under Specification C1.1 for the classifications concerned or the entire storey is to be constructed of the higher FRL. Construction of firewalls and openings must comply with Part C2.7, C2.8 and Specification C1.1 of BCA. Please note that intervening floors between different classes are required to have a potential increase in FRL, the greater FRL of the two is required in compliance with Clause C2.9 of BCA. The proposed development is capable of achieving the required FRL's, and are to be confirmed by the structural engineer at the construction certificate phase.
<i>Protection of Openings</i>	All openings that require protection will be addressed via the deemed to satisfy provisions contained within Part C3 of the BCA. Bounding construction between residential sole occupant units (SOU), doorway, openings and external walls along the path of travel to an exit, from all levels is to comply with the provisions of Specification C1.1, and Clause C3.11 of BCA 2015. All entry doors to residential units must be protected by self-closing -/60/30 fire doors. Lift landing doors must achieve an FRL not less than -/60/- in accordance with AS 1735.11.

<i>Fire hazard properties</i>	The wall and floor linings must achieve the fire hazard properties stipulated in BCA Specifications C1.10 of the BCA 2015.
<i>Fire sealing of penetrations</i>	All service penetrations must be sealed to the requirements of Clause C3.12 and C3.15 of BCA 2015. Garbage room and garbage service shafts, (including walls, floors, ceilings, doors and shutters) must be protected in accordance with C3.12, C3.13 of BCA 2015.
<i>Class 2 corridor length</i>	Corridor lengths comply with Part C2.14 of the BCA
<i>Protection of equipment.</i>	The following equipment is to be fire separated with construction complying with Clause C2.12(d) of BCA. (i) lift motors and lift control panels; or (ii) emergency generators used to sustain emergency equipment operating in the emergency mode; or (iii) central smoke control plant; or (iv) boilers; or (v) a battery or batteries installed in the building that have a voltage exceeding 24 volts and a capacity exceeding 10 ampere hours. Separation of on-site fire pumps must comply with the requirements of AS 2419.1-2005.
<i>Electricity supply</i>	Electrical equipment is to be separated from the building in accordance with Clause C2.13 of BCA. The substation that are to be constructed is to achieve a fire resistance level of 120/120/120 with the door being -/120/30 fire rated, unless higher FRL's required by electrical providers. The main switchboard that sustains emergency equipment such as emergency lifts, hydrant booster pumps, EWIS to be isolated within equivalent construction. Construction details are to confirm compliance.

3.2 – Access & Egress (Section D, BCA)

Item	Comment
<i>Number of exits required</i>	The number of exits required is considered to comply with D1.2 of BCA 2015 for all levels except the roof.
<i>Exit travel distances.</i>	Exit travel distances to a required exit or a point of choice between exits generally comply with BCA Clauses D1.4, except for the following: • Travel distance from units 204 through to 904 is 8m to a point of choice/exit (6m permitted). • Travel distance from units 201 through to 501 is 9m to a point of choice (6m permitted) and 13m to an exit. • Travel distance from units 601 through to 901 is 8m to a point of choice and 11m to an exit. • Travel distance from units 1001 through to 2101 is 8m to a point of choice and 12.5m to an exit. The non-compliance with the Deemed To Satisfy provisions will be subject to an alternate solution to address the relevant Performance Requirements of the BCA, as advised by the Client.
<i>Distance between alternative exits</i>	The distance between alternative exits generally comply with clause D1.5 of BCA.
<i>Travel via fire isolated exits</i>	The point of discharge and the path of travel of the proposed fire isolated exits comply with part D1.7 of the BCA.
<i>Electrical distribution boards</i>	Electrical distribution boards located in the path of travel to an exit must be enclosed in a non-combustible enclosure and sealed to prevent the escape of smoke.
<i>Dimensions of exits.</i>	Exits and paths of travel to exits are to comply with D1.6 of BCA. Generally exits widths are 1m in width clear of any obstruction including hand rails or other fixtures. Reductions in width are available at doorways to not less than 750mm clear. The unobstructed width of a required exit must not diminish in the direction of travel to a road or open space.
<u><i>Construction of Stairways.</i></u>	
<i>Goings and Risers</i>	Goings and risers are to be designed to comply with the provisions of Clause D2.13 of BCA.

<i>Landings</i>	Landings are to be designed to comply with the provisions of Clause D2.14 of BCA.
<i>Thresholds</i>	Thresholds are to be designed to comply with the provisions of Clause D2.15 of BCA. Please note D2.15(c) which requires a threshold ramp complying with AS 1428.1-2009.
<i>Egress Doors.</i>	All required exit doorways are either swinging or automatic doors complying with the provisions of BCA Clause D2.19. All doors acting as exits are required to swing in the direction of egress and are required to be provided with the appropriate hardware in accordance with Clauses D2.20 & D2.21 of the BCA.
<i>Balustrades</i>	Balustrades must be provided for all areas where it is possible to fall more than 1m. Balustrades are to be designed in accordance with Clauses D2.16 of the BCA. Balustrades protecting a difference in levels of over 4m must not have horizontal elements between 150mm and 760mm of the floor that facilitate climbing.
<i>Signage</i>	Signage must be provided to all fire safety doors (except those doorways providing access to sole occupancy units) and to doors leading from enclosed stairways as required Clause D2.23 and D3.6 of the BCA.
<i>Protection of openable windows</i>	Windows in bedrooms where the floor is more than 2 m above the surface beneath require restricted openings or protection in accordance with D2.24 of BCA. Where the window opening is restricted calculations are to be provided at Construction Certificate stage that sufficient natural ventilation is provided by Part F4.5. All other parts of the buildings that are not part of the Class 2 portion of the building must also be protected with D2.24 of BCA.
<i>Handrails</i>	Handrails are to be provided to stairways as required by Clause D2.17 of the BCA, including internal stairs within a residential sole occupancy unit.
<i>Access for people with disabilities.</i>	The building will be capable of providing disabled access compliant with Part D3 of the BCA and Access to Premises Standards.

The proposed building is required to comply with the following:

- The *Disability Discrimination Act 1992 (Commonwealth)*;
- The Disability (Access to Premises — Buildings), Standards 2010;
- Part D3 of BCA 2013;
- Australian Standard AS 1428.1-2009.

Buildings and parts of buildings must be accessible as required by Table D3.1, unless exempted by D3.4, which requires access as follows:

Class 2 – Common areas.

From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level.

To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, individual shop, eating area, or the like.

Where a ramp complying with AS 1428.1 or a passenger lift is installed—

- (a) to the entrance doorway of each sole-occupancy unit; and
- (b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp

Class 7a – Carpark

To and within any level containing accessible car-parking spaces.

The following areas are required to be reviewed:

- Accessible ramps and stairs to comply with AS 1428.1-2009. This is to include all non-fire isolated stairs.

Class 5 – Commercial

To and within all areas normally used by the occupants.

Class 7b – Storage

To and within all areas normally used by the occupants.

Class 10b – Swimming pool

To and into swimming pools with a total perimeter greater than 40m, associated with a Class 1b, 2, 3, 5, 6, 7, 8 or 9 building that is required to be accessible, but not swimming pools for the exclusive use of occupants of a Class 1b building or a sole-occupancy unit in a Class 2 or Class 3 building.

It is recommended that a separate report from a suitable qualified access consultant would be suggested to demonstrate compliance with all mentioned applicable provisions.

3.3 – Services and Equipment (Section E, BCA)

Item	Comment
Hydrant Systems.	The building will be provided with a hydrant system in accordance with the provisions of Clause E1.3 of the BCA and AS 2419.1-2005. The design of the service will be subject to review by a hydraulic consultant. Consideration should be also given to the location of the hydrant booster valve at the construction certificate stage. The pumprooms located within the building shall have a door opening to a road or open space, or a door opening to fire-isolated passage or stair which leads to a road or open space.
<i>Hose Reel Systems.</i>	The car parking basement level will be provided with a fire hose reel system in accordance with the provisions of Clause E1.4 of the BCA and AS 2441-2005. Locations of fire hose reels are required to be located 4m from an exit. The design of the service will be subject to review by the hydraulic services consultant.
<i>Sprinkler System</i>	Sprinklers are required to be installed throughout the building in accordance with Clause E1.5 of the BCA 2014 & AS 2118 - 1999. The basement car park is required to be sprinkled. The sprinkler system to other floors above ground is to be separate to the car park sprinkler system.
<i>Portable Fire Extinguishers.</i>	Portable fire extinguishers are required to protect the development in accordance with Clause E1.6 of BCA 2014 and AS 2444 - 2001.
<i>Fire Control Centres</i>	A fire control facility must be provided for a building with an effective height of more than 25m and for Class 6,7,8 or 9 with a total floor area of more than 18,000 m² A fire control centre in a building more than 50 m in effective height must be in a separate room. The location of the Fire control room does not comply with E1.8 of BCA 2015. Access to the fire control room is required from the main entrance.

	of the building and is to comply with Clause E1.8 and Specification E1.8 of BCA 2015.
<i>Smoke Hazard Management.</i>	The building will be provided with a smoke management system in accordance with the provisions of Table E2.2a and Specification E2.2a of the BCA. The building will require: ▪ Automatic air pressurisation of fire isolated stairways and passageways; ▪ Automatic smoke detection and alarm system to Specification E2.2a; ▪ Zone smoke control system to AS1668.1-1998 ▪ Automatic shutdown of non-essential AC system not forming part of the zone control system. ▪ Class 7a basement carpark requires mechanical ventilation system in accordance with AS 1668.2 and Clause 5.5 of AS/NZS 1668.1. The design of the service will be subject to review by a fire services consultant. Evidence with compliance with E2.2 of BCA is required prior to the issue of the Construction Certificate.
<i>Emergency Lighting.</i>	Emergency lighting will be provided throughout the building in accordance with Clauses E4.2 & E4.4 of the BCA and AS2293.1 - 2005. The design of the service will be subject to review by the electrical services consultant.
<i>Exit Signs.</i>	Exit signs will be provided throughout the building in accordance with Clauses E4.5, E4.6 & E4.8 of the BCA and AS2293.1- 2005 The design of the service will be subject to review by the electrical services consultant.
<i>Lifts</i>	<u>Stretcher facility in lifts</u> At least one (1) lift which serves all storeys is to be of sufficient dimension to accommodate the passage of a raised stretcher with a patient lying on it horizontally providing a clear space 600mm wide x 2000mm long x 1400mm high. <u>Warning against the use of the lift</u> Adjacent to the call buttons of all passenger and goods lifts signage 10mm high stating 'DO NOT USE LIFTS IF THERE IS A FIRE' is to be provided.

	<u>Emergency lift</u> Buildings over 25m in effective height and class 9a with patient care areas not provided with direct egress to a road or open space are to have emergency lifts <u>Landings</u> Access and egress to and from lift well landings must comply with the Deemed-to-Satisfy Provisions of Section D. <u>Facilities for people with disabilities</u> Every passenger lift is to be provided with handrails, minimum internal floor dimensions, clear door opening dimensions and car control buttons in accordance with AS1735.12 and be fitted with a series of sensory devices per clause E3.6 of the BCA. <u>Fire Service Controls</u> All passenger lifts designed in accordance with AS1735 Part 1 or 2 are to be fitted with fire service controls (as building > 12.0m in effective height). <u>Fire service recall operation switch</u> Each group of lifts must be provided with one fire service recall control switch required by E3.7 that activates the fire service recall operation
Sound systems and intercom systems for emergency purposes	A system for occupant evacuation and co-ordination is required for buildings exceeding 25m in effective height compliant with AS 1670.4 The design of the service will be subject to review from the relevant services consultant.

3.4 – Health and Amenity (Section F, BCA)

Item	Comment
Damp & Weatherproofing.	Adequate measures will be employed to ensure compliance Part F1 of the BCA is achieved in terms of damp and weatherproofing.
Sanitary & Other Facilities.	Facilities will be provided in accordance with the provisions of Clause/Table F2.3 of the BCA. Closet pan and basin in a compartment or room is required at or near the ground floor level and is to be accessible to employees without entering a sole-occupancy unit as per F2.2 of BCA. All sanitary compartments that have proposed in-swinging doors are required to be 1.2m from the WC pan, or lift off hinges are provided as per F2.5 of BCA. Further details are required to be provided at the Construction Certificate stage.
<i>Ceiling height</i>	The following minimum building ceiling heights must be maintained. • Common kitchen, laundry or the like – 2.1m • Corridor, passageway or the like – 2.1m • Bathroom, shower, sanitary compartment or the like – 2.1m • Habitable rooms including common areas – 2.4m • Stairways – 2.0m • Car parking areas – 2.2m • Disabled car parks – 2.5m including a 2.3m path of travel height
Ventilation.	The building is required to be provided with ventilation in accordance with the provisions of Clause F4.5 of the BCA. Ventilation may be provided by natural means or a mechanical system complying with AS 1668.2- 1991.

<i>Lighting.</i>	Natural lighting to sole occupancy units and artificial lighting must be provided throughout the building in accordance with F4.2 and F4.4 of the BCA and AS/NZS1680.0-1998. Study room to all levels must comply with part F4.3 of BCA 2015. All detail drawings and specifications are to ensure compliance with this part. Artificial lighting may be provided throughout the remainder of the building in accordance with the provisions of Clause F4.4 of the BCA and AS1680.1.
<i>Sound insulation</i>	The floor separating the residential units and separating the sole occupancy units from public areas must achieve a sound insulation rating of R_w+C_{tr} (airborne) of not less than 50 and an $L_n, w+C_i$ (impact) not more than 62. Walls separating units must achieve a sound insulation rating of R_w+C_{tr} (airborne) of not less than 50. Walls separating units from plant rooms, lift shafts, stairways corridors or other public areas must have an insulation rating of R_w (airborne) not less than 50. Walls separating a bathroom, sanitary compartment, laundry or kitchen in one sole occupancy unit from a habitable room in another or separating a unit from a lift shaft must be of discontinuous construction. The doorway separating to sole occupancy unit from the public area must have an R_w not less than 30 Soil, waste & stormwater services must be separated by construction having an R_w+C_{tr} (airborne) not less than • 40 if the room is a habitable room • 25 if the room is a non-habitable room

3.5 – Ancillary provisions (Section G, BCA)

Item	Comment
<i>Cleaning of windows</i>	As per NSW Clause G1.101 a building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level. This is satisfied where— (i) the windows can be cleaned wholly from within the building; or (ii) provision is made for the cleaning of the windows by a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.

3.6 – Energy Efficiency Construction (Section J, BCA)

Note 1: The residential Class 2 part of the building is to be designed to comply with the requirements of two MANDATORY points for energy efficiency. They are:

- A, BASIX assessment and a BASIX certificate will be required to be lodged with the development application.
- In addition to the BASIX certificate compliance with NSW J (A) is required for the Class 2 part. The relevant/applicable sections of NSW J (A) are to be complied with. The clauses within Section J (A) are listed below.

- NSW J(A)1.0 – Building Fabric,
- NSW J(A) 2.0 – Building Sealing
- NSW J(A) 3.0 – Air Conditioning and ventilating systems
- NSW J(A) 4.0 – Hot Water Supply
- NSW J(A) 5.0 – Access For Maintenance

NB: The following BCA Section J National provisions will be applicable to the car parking levels and residential areas as applicable under NSW J(A).

Item	Comment
Building Fabric	Parts of the building forming an envelope to a conditioned space are to achieve the minimum construction requirements for insulation R-Values required by BCA Part J1
Glazing	The energy efficiency of the selected glazing must comply with Part J2 of the BCA as appropriate to Climate Zone 6 and the orientation, exposure and shading of the window.
Building Sealing	Openings in the building such as doors, windows, exhaust fans and ventilation systems must be sealed to the requirements of Part J3 of the BCA as appropriate to Climate Zone 6. In that regard, all external doorways must be fitted with a draft seal. This requirement does not apply to fire doors fitted between the fire-isolated stairways and the conditioned areas of the building.
Air-Conditioning and Ventilation System	The design of all mechanical air-conditioning and ventilation systems must achieve compliance with Part J5 of the BCA with regard to input power and efficiency features.

Artificial Lighting and Power	The building is to maintain maximum lighting power levels and control systems as applicable. The design of lighting systems must comply with BCA Part J6. The following maximum lighting power loads (W/m²) are applicable to the building • Car park - 6 • Car park entry zone (20m) - 25 • Common rooms, corridors - 8 • Control room, switch room - 9 • Plant room - 5 • Service areas & store rooms – 5 These rates are able to be adjusted as detailed in BCA Clause Table J6.2 where daylight or motion sensors or dimming systems are provided or in particularly small rooms. BASIX will also impose efficiency measures to the building
Hot Water Supply	Hot water supply systems will be installed in accordance with Part J7 of the BCA and AS/NZS 3500.4.
Access for Maintenance and Energy Monitoring	The building is to have facilities for maintenance and energy monitoring in compliance with BCA Part J8 and the NSW variations.

4.0 Fire safety and other measures

4.1 – Proposed Fire Safety Measures

In terms of the proposed works the following fire safety measures are proposed to be installed: -

Fire Safety Measure	Standard of performance
Automatic fail safe devices	BCA Clause C3.4, D2.21, AS 1670.1-2004
Automatic fire detection and alarm system	BCA Spec E2.2a, AS 1670.1-2004 , AS 3786-1993
Automatic fire suppression system (sprinkler)	BCA Clause E1.5, AS 2118.1-1999
Automatic fire suppression system (carpark)	BCA Clause E1.5, AS 2118.1-1999
Emergency lighting	BCA Clause E4.2 & E4.4, AS 2293.1-2005
Emergency lifts	BCA Clause E3.4, AS 1735.2-2001
Exit signs	BCA Clause E4.5 & E4.8, AS 2293.1-2005
Fire control centres	BCA Clause E1.8, BCA Spec E1.8
Fire dampers	AS 1668.1-1999
Fire doors	BCA Spec C3.4, AS 1905.1-2005
Fire Safety Engineering	To be confirmed
Fire hose reel systems	BCA Clause E1.4, AS 2441-2005
Fire hydrant systems	BCA Clause E1.3, AS 2419.1-2005
Fire seals (protecting openings in fire resisting components of the building)	BCA Clause C3.15
Lightweight fire rated construction	BCA Clause C1.8, BCA Spec C1.8
Mechanical air handling system	BCA AS 1668.1-1999, AS 1668.2-1991
Stand-by power system	BCA Spec G3.8
Smoke doors	BCA Spec. C2.5
Sound system and intercommunication system for emergency purposes	BCA Clause E4.9 AS 1670.4-2004
Portable fire extinguishers	BCA Clause E1.6, AS 2444-2001
Pressurising system	BCA Clause E2.3, AS 1668.1-1999
Warning and operational signage (e.g. stairway notices)	BCA Clause D2.23 & E3.3, Clause 183 EP& A Reg 2000

5.0 Recommendations and Conclusion

5.1 - Recommendations

Subsequent to our assessment of the proposed development, it is recommended that the following matters are to be addressed to comply with the BCA utilising either the 'deemed to satisfy' or via an alternate solution under the performance requirements (as advised by the client):

- Exit travel distances to a required exit or a point of choice between exits generally comply with BCA Clauses D1.4, except for the following:
 1. Travel distance from units 204 through to 904 is 8m to a point of choice/exit (6m permitted).
 2. Travel distance from units 201 through to 501 is 9m to a point of choice (6m permitted) and 13m to an exit.
 3. Travel distance from units 601 through to 901 is 8m to a point of choice and 11m to an exit.
 4. Travel distance from units 1001 through to 2101 is 8m to a point of choice and 12.5m to an exit.
- It is recommended that a separate report from a suitable qualified access consultant would be suggested to demonstrate compliance with all mentioned applicable provisions.
- Consideration should be also given to the location of the hydrant booster valve at the construction certificate stage

5.2 – Conclusion

It is the opinion of this office that, on satisfaction of the above recommendation, the proposed building is capable of achieving compliance with the requirements of the Building Code of Australia (BCA) 2015 Volume 1, and relevant adopted standards without undue modification to the design or appearance of the building.

Whilst the above recommendation have been made as a means of achieving compliance with the various provisions of BCA Performance Requirements their acceptability has not been verified at this time. It will be necessary for the design to be reviewed by an appropriately qualified person prior to the issue of a Construction Certificate for the works.

Except as mentioned in the report, the following matters were not addressed-

- (1) Structural adequacy;
- (2) Fire resistance of primary structural elements;
- (3) Design basis or operating capability of the installed electrical, fire, hydraulic or mechanical services;
- (4) Compliance with the *Disability Discrimination Act 1992*;

Prepared by:



Neil Truong
Vic Lilli and Partners Consulting Pty Ltd

Date: 22 January 2016

6.0 - References

This BCA Capability report has been prepared on the basis of the following:-

1. Architectural Plans as prepared Mosca Pserras Architects
Project Number 15011
2. Building Code of Australia (BCA) 2015, Volume 1;
3. Environmental Planning and Assessment Act, 1979, and Regulations.

Drawing No.	Title	Revision	Date
AP01	Cover sheet	A	05/11/2015
AP02	Data	A	05/11/2015
AP03	Site and context plan	A	05/11/2015
AP04	Basement 4 and 3	A	05/11/2015
AP05	Basement 2 and 1	A	05/11/2015
AP06	Ground Floor and Level 1	A	05/11/2015
AP07	Level 2 and 3	A	05/11/2015
AP08	Level 4 and 5	A	05/11/2015
AP09	Levels 6 and 10	A	05/11/2015
AP10	Levels 11 and 12	A	05/11/2015
AP11	Levels 23 and 24	A	05/11/2015
AP12	Plant room and roof plan	A	05/11/2015
AP13	Elevation	A	05/11/2015
AP14	Elevation	A	05/11/2015
AP15	Sections	A	05/11/2015

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