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# BUILDING CODE OF AUSTRALIA STATEMENT

For

Macquarie Park Village – Stage 1 Development (Section 75W Modification (MOD 4) Application)

Αt

110-114 Herring Road, Macquarie Park

Client: Stamford Property Services Pty Ltd

File Ref: CF10606-MD290714-Final

Date: 6 August 2014

### **BCA STATEMENT**

# Macquarie Park Village Residential Development, North Ryde Section 75W Modification (MOD 4) to Stage 1 Development

# 1.0 DESCRIPTION OF PROPOSAL

# 1.1 Description of development

The Stage 1 development comprises the erection of the 3 basement levels of common car park and the construction of four residential towers, namely, Adelaide Building (formerly Hunter Apartment), Darwin Building (formerly Young Apartment), Perth Building (formerly Woodward Apartment) and Brisbane Building (formerly Cutler Apartment) located to the western part of the site.

The remaining buildings, Hobart, Melbourne and Sydney Buildings will be constructed under Stage 2 development and will be assessed separately.

The podium will be open to the sky and leads to Herring Road. Vehicular access will be provided from Herring Road

# 1.2 Scope of BCA Statement

The following approvals were granted by the Planning Assessment Commission (PAC) for Stage 1 development:

- Stage 1 Project Approval (Application no. MP10\_0113) on 26 September 2012.
- Section 75W Modification (Application no. MP10\_0113 MOD 1) on 3 June 2013.

This BCA Statement is prepared in support of a section 75W modification application (MOD 4) for the following proposed modifications to the Stage 1 development:

- a) Revised podium layout and basement carpark access, relocation of Resident's Function Room,
- b) Revised landscape design principles,
- c) Addition of three apartments in the Brisbane Building,
- d) Revised detailed elevation treatments,
- e) Revised egress stair configuration in the Darwin Building,
- f) Minor amendments to the general arrangement plans due to the rationalisation of common areas, corridor widths and services requirements.

# 1.3 Referenced Documents

DRAWING NO.	REVISION	NAME OF PLAN	DATE
DA0000	1	Cover Sheet	31/07/2014
DA2100	G	Level 00 Plan	31/07/2014
DA2101	G	Level 01 Plan	31/07/2014
DA2102	G	Level 02 Plan	31/07/2014
DA2103	Н	Level 03 Plan	31/07/2014
DA2105	Н	Level 05 Plan	31/07/2014
DA2106	E	Level 06 Plan	31/07/2014
DA2107	E	Level 07 Plan	31/07/2014
DA2108	E	Level 08 Plan	31/07/2014
DA2109	E	Level 09 Plan	31/07/2014
DA2110	Н	Level 10 Plan	31/07/2014
DA2111	F	Level 11 Plan	31/07/2014
DA2112	E	Level 12 Plan	31/07/2014
DA2113	F	Level 13 Plan	31/07/2014
DA2115	E	Level 15 Plan	31/07/2014
DA2116	E	Level 16 Plan	31/07/2014
DA3100	G	South Elevation Epping Rd	31/07/2014
DA3101	G	North Elevation	31/07/2014
DA3102	G	East Elevation Herring Road and West Elevation	31/07/2014
DA3110	G	Section 01	31/07/2014

DRAWING NO.	REVISION	NAME OF PLAN	DATE
DA3111	G	Section 02	31/07/2014
DA3112	G	Section 03 and Section 04	31/07/2014
DA3113	F	Section 05	31/07/2014

# 2.0 DESCRIPTION OF BUILDING UNDER BUILDING CODE OF AUSTRALIA (BCA)

### 2.1 Classification

The proposed residential development attracts the following BCA classifications:

It is noted that the Hobart, Melbourne and Sydney Buildings do not form part of the Stage 1 Project Approval s75W submission and are not included in the following description.

Common parts of building	Use	Classification
Level B3 to B1	Carpark	7a

Adelaide Building	Use	Classification
Levels GL to L8	Apartments	Class 2
Level 9 (open roof – not a storey)	Plant room	Class 2

Darwin Building	Use	Classification
Levels GL to L8	Apartments	Class 2
Level 9	Plant room	Class 2

Brisbane Building	Use	Classification
Level GL	Apartments & stores	Class 2 & Class 7b
Level 1	Apartments & plant room	Class 2
Levels 2 to 13	Apartments	Class 2
Level 15 (open roof – not a storey)	Plant room	Class 2

Perth Building	Use	Classification
Level GL	Apartment	Class 2
	Plant Room	Class 2
	Residents' Function Room	Class 9b
Level 1	Apartments & plant room	Class 2
Levels 2 to 10	Apartments	Class2
Level 11	Plant room	Class 2

Note: There is no Level 4 or Level 14 designated in the above buildings.

# 2.2 Rise in Storeys

The rise in storeys calculated in accordance with clause C1.2 requires a Type A construction.

# 2.3 Effective Height

For the purpose of determining the required services and equipment, the effective height of the Stage 1 development exceeds 25m but less than 50m.

# 2.4 Type of Construction

In accordance with the provisions of C1.1 the building is required to be of Type A Construction.

# 3.0 BCA COMPLIANCE

The BCA statement relates to the proposed development as shown on the drawings referenced in Section 1.3 above.

The proposed residential development will be designed to comply generally with the Deemed-To-Satisfy (DTS) provisions of the Building Code of Australia (BCA) 2014. Where required, "Alternative Solutions" complying with the performance objectives and requirements in accordance with the BCA will be employed to address proposed deviations from DTS provisions.

Where "Alternative Solutions" are employed, assessment and verification will generally be in accordance with the assessment methodology stipulated under Section A0.9 of the BCA or via "Fire Safety Engineering" analysis in accordance with the "International Fire Safety Engineering Guidelines".

It is anticipated that "Alternative Solutions" will be explored with regard to a number of issues, including, but not limited to the following items:

- 1. Only one exit provided on Levels 1 to 8 in Darwin Building in lieu of two required (BCA Clause D1.2)
- Excessive travel distance in the car park. (BCA Clauses D1.4 and D1.5). Recommended engineered travel distances are 25/70/130.
- 3. <u>Darwin Building</u> Worst case travel distance is approximately <del>7m</del> 10m to a point of choice in lieu of 6m. This is typical on L1 to L8 (BCA Clause D1.4).
  - On Ground Floor, the distance to a point of choice from Unit DG09 is 8m in lieu of 6m (BCA Clause D1.4).
- 4. <u>Brisbane Building</u> Travel distance from Unit B206 on L2 is 8m to a point of choice in lieu of 6m. This is typical from L2 to L13 (BCA Clause D1.4).
- 5. <u>Adelaide Building</u> Travel distance to the nearest exit or a point of two alternative exits exceeds 6m (BCA Clause D1.4):
  - On Ground Floor, the distance to fire stair A3 from Unit AG03 is 7m in lieu of 6m.
  - On L1 & L2, the distance to fire stair A3 from Units A103 & A203 is 7m in lieu of 6m.
  - On L3, the distance to fire stair A3 from Unit A303 is 9.2m in lieu of 6m.
- 6. Minimum distance between exits on L2 to L13 of <u>Brisbane Building</u> is approximately 7.7m in lieu of 9m (BCA Clause D1.5).
- 7. Adelaide and Darwin Buildings are not proposed to be provided with a hydrant ring main (BCA Clause E1.3).
- 8. The fire control room is not located at the front entrance of the building (BCA Clause E1.8).
- 9. Some fire isolated stairs discharge into a covered area. The perimeter of the covered area appears to be less than 1/3 open which does not comply with Clause D1.7(b)(iii) of the BCA.
- 10. Stair pressurisation will not be provided in Adelaide, Darwin & Hobart Buildings (BCA Clause E2.2).

It should be noted that as the design of the proposed buildings developed, there may be other areas that will utilise the "Alternative Solution" approach to comply with the BCA.

Prepared by:

Harry Cheuk

Advance Building Approvals Pty Ltd

6 August 2014