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Macquarie Centre Redevelopment

– Stage 1 Concept DA

BCA Assessment Report to accompany DA Submission



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Revision History

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1.0	20/11/15	Initial Report for DA submission	Luke Denny	Steve Watson
1.1	03/12/15	Initial Report for DA submission	Luke Denny	Steve Watson
1.2	10/12/15	Initial Report for DA submission	Luke Denny	Steve Watson

BACKGROUND

This report has been prepared on behalf of AMP Capital (AMPC) in support of a Stage 1 Development Application (DA) for the mixed use redevelopment of Macquarie Shopping Centre (Macquarie Centre). The Stage 1 DA seeks concept approval for the redevelopment of Macquarie Centre by establishing:

- Building envelopes and design parameters for future development on the site, including the proposed uses within the podium and tower components.
- The distribution of floor space across the site.
- Future pedestrian and vehicle connections to and within the site.

This report supports the proposed future redevelopment of the Macquarie Centre in relation to BCA compliance.

SITE DESCRIPTION

Macquarie Centre is approximately 11.25 hectares in area and is located at the corner of Waterloo Road, Herring Road and Talavera Road, Macquarie Park. The site is legally described as Lot 100 in DP 1190494.

The site is bound by Herring Road to the north west, Talavera Road to the north east, commercial uses to the south east and Waterloo Road to the south west. Located within the Macquarie Park Corridor, the site has excellent access to public transport, situated immediately adjacent the Macquarie University Railway Station and the Herring Road Bus Station. Located between the M2 Hills Motorway and Epping Road, the site also enjoys excellent vehicle connectivity.

Macquarie Centre was originally constructed in 1981. The centre has undergone various stages of redevelopment and extensions. A major refurbishment occurred in 2000, 2003 and most recently in 2014, creating a fresh food court, David Jones expansion, addition of second full line supermarket (Coles), a value supermarket (Aldi), with new speciality food and convenience stores. Today Macquarie Centre is the largest shopping centre in NSW and the 8th largest shopping centre in Australia and includes a wide range of retail, entertainment and service offerings.

The shopping centre currently spans five levels accommodating 368 stores, including major retailers such as David Jones, Myer, Target, Big W, Aldi, Coles and Woolworths. The centre also houses a large number of mini major international retails stores including H&M, Zara, Uniqlo, Forever 21, GAP and Sephora. A number of entertainment offerings exist in the centre including a cinema complex and ice skating rink. The site currently has a gross floor area of 170,850m² and accommodates 4,755 car spaces.

DEVELOPMENT PROPOSAL

The Stage 1 DA seeks concept approval for the mixed use redevelopment of Macquarie Centre under s.83B of the Environmental Planning & Assessment Act 1979. The first stage will seek concept approval only for:

- Mixed use development to enable a range of land uses. The final mix of land uses will be subject to and determined under the relevant Stage 2 detailed DAs.
- Building envelopes for the proposed basement, expanded podium and tower forms.

- The four tower envelopes fronting Herring Road will have maximum heights ranging from 90m and 120m above existing ground level. The building envelope for Tower 1 is of sufficient dimensions to accommodate alternate tower forms.
- Maximum additional gross floor area (GFA) of 148,000sqm.
- The new retail podium along Herring Road will replace the existing structure. This will provide an active frontage with separate pedestrian entries to Herring Road and the creation of a vibrant atrium space.
- The creation of 'Station Plaza' between the train station and shopping centre, framed by active uses and a landmark building known as the "Shard".
- The building envelopes for the proposed basement and upper levels of the expanded podium will accommodate a maximum of 2,175 additional car spaces.
- New vehicle and pedestrian access points.

The Stage 1 DA does not seek approval for

- Any works, including demolition, excavation, construction and public domain improvements.
- The final arrangement of land uses.
- Layout, mix and number of residential units.
- A specific number of car spaces (as this will be determined having regard to the final mix of land uses).
- The design of the building exteriors including facades and roofs.
- Public domain and landscape design.

Such approvals will be sought via subsequent development applications following receipt of development consent for the Stage 1 DA.

The overview of the indicative mix of land uses within the proposed building envelopes is identified in Table 1 below.

Table 1 – Overview of Indicative mix of land uses

Component	Proposed
Basement	Loading docks, car parking and associated vehicle circulation, waste rooms, utilities, future connection to existing train station (subject to consent from RailCorp) and retail premises.
Podium	Retail premises, commercial premises, food and drink premises, entertainment facilities, recreation facilities (indoor), recreation area, car parking and associated vehicle circulation, community uses (subject to further discussions with Council) and communal open space associated with the towers.
Tower 1	Mixed use development comprising commercial premises and/or residential accommodation and/or serviced apartments above a retail podium.
Towers 2, 3 and 4	Mixed use development comprising residential accommodation and/or serviced apartments above a retail podium.

ASSESSMENT

A preliminary review of the proposed design that will form part of the Development Application to Ryde Council has been undertaken. We confirm the design as shown on the drawings referenced in Appendix A is capable of achieving compliance with the BCA subject to further detail at the design development stage. Some aspects of the design are proposed to be addressed by way of a fire engineered Alternative Solution to meet the relevant Performance Requirements of the BCA.

These aspects include but are not limited to the items specified in Table 2. These items will need to be addressed by an Accredited C10 Fire Engineer and verified by the PCA prior to the issue of a Construction Certificate.

Table 2 - Summary of Items which require Alternative Solutions

- Fire Resistance levels
- Large isolated building requirements for open spaces and vehicular access
- Horizontal exits
- Exit travel distances
- Dimensions of exits
- Travel via fire-isolated exits
- Horizontal exits
- Swinging Doors
- Fire Hose Reels
- Fire Hydrants
- Fire Control Room
- Smoke Exhaust
- Fire and smoke control systems
- Atrium provisions

BCA Classifications

The significant spaces in the proposed design have been classified in accordance with the requirements of Clause A3.2 of the BCA and are summarised in the table below:

Part	Classification
Commercial/retail podium and carpark	Class 7a – Carpark Class 5 – Commercial office Class 6 – Retail
Tower 1	Class 5 – Commercial office Or Class 2 – Residential
Towers 2, 3 & 4	Class 2 – Residential And/or Class 3 – Serviced Apartments And/or Class 3 – Student Housing

We note that compliance is readily achievable across all BCA classifications.

CONCLUSION

This statement has been provided to accompany the Development Application submission following a preliminary assessment of the proposed design. The preliminary assessment undertaken has identified a number of provisions which are proposed to be addressed by a Fire Engineered Alternative Solution.

Notwithstanding, the development adequately satisfies the intent of being able to comply with the requirements of the BCA for the purpose of DA submission, and the above mentioned non-compliances are unlikely to require substantial or notable changes to the DA proposed plans.

Appendix A – Referenced Documentation

The following documentation was used in the preparation of this report:

Drawing No.	Title	Rev	Drawn By
DA0000	Cover Sheet	R1	AJ+C and NH Architecture
DA1000	Site Plan	R1	AJ+C and NH Architecture
DA1500	Controls Drawings	R1	AJ+C and NH Architecture
DA2000	Level 0 Plan Level 0A Plan	R1	AJ+C and NH Architecture
DA2001	Level 1 Plan	R1	AJ+C and NH Architecture
DA2002	Level 1A 7 2 Plan	R1	AJ+C and NH Architecture
DA2003	Level 2A & 3Plan	R1	AJ+C and NH Architecture
DA2004	Level 3A & 4 Plan Base Case	R1	AJ+C and NH Architecture
DA2004a	Level 3A & 4 Plan Commercial Tower option	R1	AJ+C and NH Architecture
DA2004b	Level 3A & 4 Plan Interchange Upgrade Option	R1	AJ+C and NH Architecture
DA2005	Level 4A Plan Level 5 Plan	R1	AJ+C and NH Architecture
DA2006	Level 6 Plan	R1	AJ+C and NH Architecture
DA2007	Level 7 Plan	R1	AJ+C and NH Architecture
DA2008	Typical Upper Tower levels	R1	AJ+C and NH Architecture
DA3100	Herring Road Elevation & Section	R1	AJ+C and NH Architecture
DA3101	Waterloo Road Elevation & Section	R1	AJ+C and NH Architecture
DA3102	Talavera Road Elevation & Sections	R1	AJ+C and NH Architecture
DA3103	Detail Mall Sections	R1	AJ+C and NH Architecture