Assessment against the 10 'design quality principles' for residential flat development

i. Principle 1: Context

Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area. Responding to context involves identifying the desirable elements of a location's current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.

The subject site is the first development of its scale within the Area 20 Precinct of the North West Growth Centre, as identified by the Growth Centres SEPP. The existing character of the precinct is that of large lot rural residential living. Notwithstanding this, the surrounding locality was similarly zoned R3 Medium Density Residential within the Area 20 Precinct on 21 October 2011. As such, the precinct is currently undergoing transition.

The site is situated within a convenient distance to the Rouse Hill Regional Shopping Centre, local schools, parks and entertainment facilities. The site is also located near the major arterial road of Windsor Road.

The desired character of an area is largely determined by the planning controls specified under the Growth Centres SEPP and DCP. The following objectives are established for the R3 zone:

- To provide for the housing needs of the community within a medium density residential environment.
- To provide a variety of housing types within a medium density residential environment.

General compliance with these policies has ensured that an appropriate design solution has been derived.

The design of the development consists of a "courtyard" style type residential flat building over 4 storeys with basement parking. It is considered that the development will contribute to the quality and identity of the area. The sites close proximity to services, facilities and a major arterial road network also makes this a highly desirable site for the development.

ii. Principle 2: Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings. Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

The proposed development is generally consistent with the maximum permissible building height of 12 metres, as established on the site and adjoining sites. Whilst the development does propose point encroachments up to 550mm, the development also complies with the numerical guidelines of the Growth Centres DCP. The proposed buildings are well designed and well articulated to justify their height.

The site provides for adequate building separation internally within the development and to adjoining sites to allow for future developments on adjoining sites to achieve their full potential.

iii. Principle 3: Built Form

Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

The proposed design has been developed in keeping with the requirements of the Residential Flat Design Code (RFDC) and the Growth Centres SEPP and DCP requirements in relation to building alignment, setbacks and building type.

The proposed built form consists of 4 individual apartment buildings, all 4 storeys in height. The development consists of 256 residential apartments, comprising a mix of 1, 2 and 3 bedroom units.

The built form provides for variation in design, through variation in roof height and articulation in building façade. The colours and finishes incorporate a variety of materials, texture and colour, including light and dark facebrick and aluminium finishes.

The proposed development provides an acceptable level of internal amenity, providing more than 4,000sq.m of communal open space. The development has been provided with setbacks and open space areas which fully comply with the minimum requirements and ensure that the development maintains an appropriate built form.

iv. Principle 4: Density

Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents). Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

The Growth Centres SEPP establishes a maximum floor space ratio of 1.75:1 on the subject site. The proposed development provides a floor space ratio of 1.56:1, which is complies with the development control.

In addition, the Growth Centres SEPP establishes a minimum residential density of 25 dwellings per hectare, which is a minimum number of dwellings which must be built on the site. Based on the R3 portion of the site of 1.536 hectares, a minimum of 39 dwelling must be built. The development proposes 256 units, which provides a residential density of 166 dwellings per hectare. The development complies within the required minimum density of the site.

The density of the proposed development fits in with the objectives of the Growth Centre planning instruments, which aim to cater for an increasing population through the provision of higher density housing near regional centres. The density proposed is compatible with the future character of the area, and can be comfortably accommodated on site. Given the proposed massing and well articulated building form, it is believed that the proposed density will be appropriate for the site.

The proposed density is also considered sustainable given the proximity of current infrastructure and services, including recreation facilities, support services and the Rouse Hill Town Centre.

v. Principle 5: Resource, Energy and Water Efficiency

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction. Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

The proposal has been designed so each unit receives a satisfactory level of natural light, energy and ventilation. Adequate building separation has been provided between buildings to ensure common open spaces receive adequate solar access. In particular, the proposal provides:

- 70% of the units with at least 3 hours of solar access to the main living areas.
- Active and passive sun control systems.
- Installation of low energy saving devices.
- Natural cross-flow ventilation to 63% of the units.
- On-site detention of run-off from paved areas to reduce peak flows.

The submitted Waste Management Plan (WMP) also details measures to maximise recycling during the construction and operational phases of the development. A condition will be imposed on any consent requiring evidence that the WMP has been implemented (condition 8.5.1).

vi. Principle 6: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

The landscape design will be integrated with the proposed buildings to provide a high level of aesthetic quality on the development site and a high level of amenity for the future occupants of the development.

The proposal provides for a central common open space area amongst the residential flat buildings of 4,397sq.m. The common open space area is embellished with multiple children's play areas, gazebos, BBQs and a common pool. A deep soil zone of 10,282sq.m has been provided to enable planting of mature vegetation throughout the development. Substantial landscape areas are provided throughout the entire common open space area.

The application has been supported with the submission of a landscape masterplan prepared by Canvas landscape architects. The landscape design incorporates large canopy tree planting, small tree planting and shrub plating throughout the development. A variety of feature elements, including timber decking, feature sandstone boulders and pedestrian walkways that interconnect throughout the development are proposed. Indigenous or low water use species have been incorporated throughout the landscape design, equating of 2,450sq.m of the landscaped area on site.

The overall landscape design ensures that the amenity of future residents and adjoining landowners is of a high standard.

vii. Principle 7: Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

The efficient yet spacious unit layouts provide a high level of amenity for all residents, and generally promote good visual and acoustic privacy.

Each unit is provided with an adequate outdoor private open space in the form of a balcony or terrace that is directly accessible from the internal living areas. All apartments have direct access to the basement via centrally located lifts and stairs, where parking for residents and visitors will be provided. Adequate storage areas have also been provided in the form of basement storage cubicles. All apartments have easy access to waste rooms, provided on each floor near the lifts, for the disposal of garbage into chutes and recyclables into collection bins.

70% of the proposed units also receive a minimum 3 hours solar access to the main living areas, and 63% of the units achieve natural cross-flow ventilation.

viii. Principle 8: Safety and Security

Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.

The proposal affords good casual surveillance of the street frontage and internal common open space areas through the design of the residential flat buildings promoting good casual surveillance. Appropriate lighting and CCTV is also to be provided to all common areas to increase the safety of those areas, especially at night. With regards to the parking areas, secure access is to be maintained at all times. Separation between the resident and visitor parking spaces has been achieved through their location, and basement car parking is to be provided with security garage doors at the basement level.

ix. Principle 9: Social dimensions and housing affordability

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the

case of precincts undergoing transition, provide for the desired future community. New developments should address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs.

The ground level also provides substantial on-site recreation facilities for residents, including a children's playground, barbeque facilities and relaxation spaces. Pedestrian links are also available to the public parks.

The proposal will provide an alternative type of housing to the area, and will provide high levels of amenity to each apartment. The apartments are diverse in design and orientation, and will provide a suitable mix of dwellings for people to choose from.

While most of the units have 2 bedrooms to reflect market demand (with 187×2 bedroom units provided), the provision of 29×1 bedroom and 41×3 bedroom apartments provides reasonable housing choice and affordability for the community, therefore satisfying the intent of this principle.

The design also provides 26 adaptable apartments (i.e. 10 % of the total number of units), as required by the DCP and the BCA, thus providing a choice of attractive living locations and facilities to persons with disabilities and their families. The design promotes easily accessible common facilities and outdoor recreation spaces, and caters towards ease of use for everyone from children right through to the elderly.

The development provides high levels of amenity to future residents and alternate housing opportunities in the locality. The proximity of the site to the Rouse Hill Regional Centre will also add to future occupant's quality of life.

x. Principle 10: Aesthetics

Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.

The development has been architecturally designed. The proposal has a high degree of architectural definition with an innovative design that positively responds to the provisions of the Growth Centres SEPP. Overall, it is considered that the appearance of the development is appropriate for its location.

The development provides a well articulated building form and an interesting streetscape, while the façade treatment of the buildings reflects contemporary architectural initiatives consistent with the objectives of this principle.

The use of quality finishes will also add to the visual interest of the buildings. The materials and colours have been selected to give the buildings an identity, and to 'soften' the apparent bulk and scale of the development. A variety of materials will be used, including facebrick, rendered and painted finishes for the facade walls, a combination of aluminium feature privacy columns and louvres.

The overall colour scheme, coupled with a large amount of glazing, will help give the proposal a sharp, modern look whilst not overpowering its surroundings. The feature colours will add warmth, interest and a sense of identity to the building. The development

will also be complemented with soft landscaping, various pavement patterns and colours, and timber decks, adding to the overall aesthetics of the development.

The choice and composition of the building elements are contemporary to reflect the time, but have also been chosen to reflect the desired future character of the area.

Accordingly, it is determined by the above assessment that the proposed development is acceptable when considered against the 10 design principles identified under SEPP 65.