

# VC2

## JORDAN SPRINGS

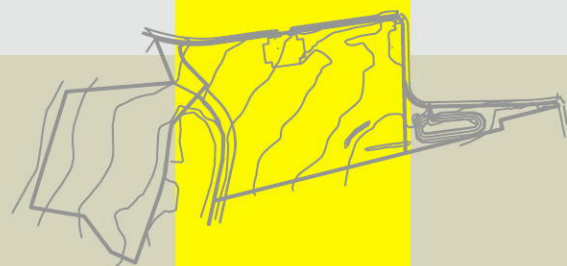
SEPP 65 & ARCHITECTS DESIGN STATEMENT :

**SEPP 65 -**

design quality of Residential Flat development;  
Residential flat design Code;  
rules-of-thumb schedule

7th March 2014

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## Vision

The site will be a quality mixed use development designed to meet the broad needs of the market whilst setting high standards for community living.

This place will provide a coherent and cohesive experience making sure that the design responds reflects and maximises the existing Town Centre character.

It will be a vibrant place with a greater sense of belonging focused in providing a range of uses such as living, retail, commercial, open spaces and urban spaces where people can meet and interact.

## Design Principles

The design principles for the proposal are:

### *Context*

- Maximises the density in close proximity to the Town Centre
- It's the southern anchor to the Main Street (Lakeside Parade)
- Provides east-west links to Town centre and links to Neighbourhood Park.
- The layout responds to solar orientation and prevailing breezes.
- Maintains and reinforces view lines to open space, Regional Park and Town Centre

### *Built Form*

- Building Height and densities increases towards the Town Centre.
- Provides a range of multi-dwelling housing typologies, including townhouses, apartments and SOHO to suit different lifestyle options.
- Two to three storeys fronting Jordan Spring Boulevard (west of road 1) to integrate with adjoining dwellings to the north.
- Use taller buildings to define and reinforce the public domain and Town Centre character.
- Appropriate separation has been created between built form to reduce bulk and overshadowing.

### *Public Domain*

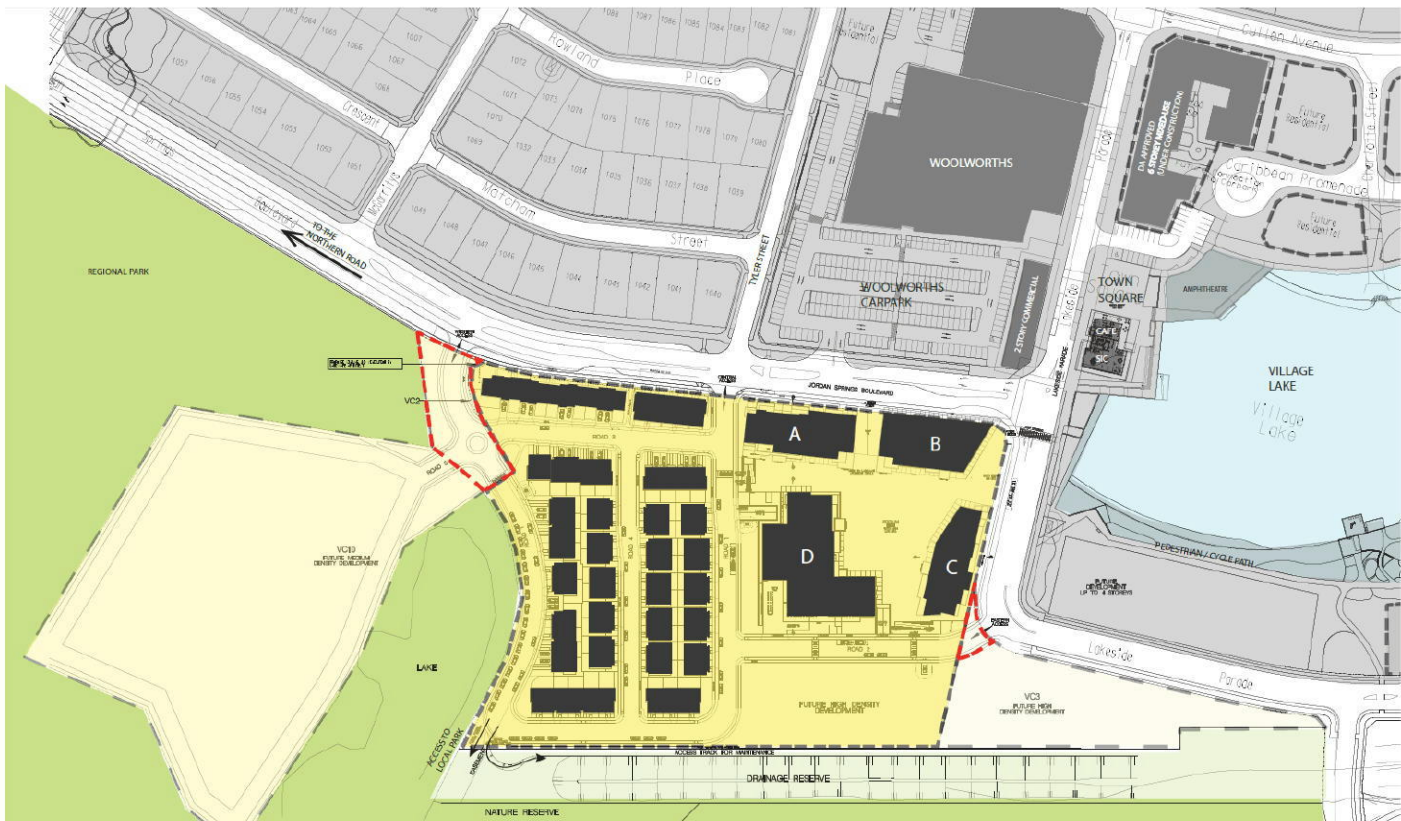
- A generous central piazza to provide an urban meeting space.
- Clear definition between public and private realm.
- Ensure the public spaces and amenities are accessible to the overall community
- Utilise existing streetscape elements in Lakeside Parade to integrate the site public realm to the overall Jordan Springs character.
- The landscape elements will create a strong sense of place and identity.

### *Mix of Uses*

- Commercial and retail uses located at ground level of buildings A - D ensures street activation to Jordan Springs Boulevard and Lakeside Parade.
- Commercial and retail uses to mainly face to the internal of the piazza for activation.
- High density residential to support and take advantage of Town Centre and amenities.

### *Access and Circulation*

- Main access points into the site are clearly defined either by open space or built form, creating a strong sense of arrival.
- Legible and permeable street layout connecting key nodes and amenities
- Simple block configuration to maximise site attributes.
- Provision of pedestrian links throughout the site, in particular links between the site and the Town Centre and Lake.



**Fig A:** Context Plan of Subject Site VC2 (dashed)

## Location

The former Australian Defence Industries (ADI) site at St Marys, now known as the St Marys Development site, was endorsed by the NSW Government for inclusion on the Urban Development Program (UDP) in 1993. The site was seen to present an opportunity to provide housing for Sydney's growing population within an environmentally sustainable framework.

The St Marys site is located approximately 45km west of the Sydney CBD, 5km north- east of the Penrith City Centre and 12km west of the Blacktown City Centre. The main western railway is located approximately 2.5km south of the site. The Great Western Highway is located another 1 km south and the M4 Motorway a further 1.5km south.

The overall Site had an area of 3.633ha. It stretches approximately 7 kilometres from east to west and 2 kilometres from north to south, from Forrester Road, St Marys in the east to The Northern Road, Cranebrook in the west. It is bounded by Llandilo and Wilmott in the north and Cambridge Gardens/ Werrington County and the Dunheved Industrial Area in the south

## Planning Context

Jordan Springs establishes a strong message in its initial planning that encourages a versatile and sustainable suburban attribute that define its context. Our proposal aims to be an extended interface that provides a variety of positive characteristics of a new urban realm. Village Centre 2 combines a wide variety of dwellings, amenities, recreational lifestyle and employment opportunities, in synergy with the Town Square and surrounding context and complements Penrith City future growth.

The existing approved Masterplan for the entire site has formed the template for this VC2 Stage DA submission;

The envelopes and controls of that approval which can be reflected upon in the 'St. Marys western precinct plan' developed by Penrith City Council in 2009, has formed the basis for this proposal, comprising of:

- Townhouse and Apartment Lifestyle living
- Variety of Apartment layouts and high standard design Qualities (Blocks A,B,C,D)
- Block A and B; Northerly facing predominantly 4 – 6 storey buildings, that have a dynamic mixed use ground floor use.
- Block C; North Easterly orientated 5 storey mixed use building, with stunning views to the Town Lake and Piazza.
- Block D: Predominantly 4 – 6 Storey L-Shaped footprint - Mixed Use Building

## The Site

The subject site for this Stage VC2 encompasses Buildings A,B,C,D.

The total site area for this stage VC2 DA and is 3.633 hectares this includes both the townhouse development as well as the proposed high-density component.

For the purpose of this report, VC2 will be referred to, and will only include the high density component of the overall development with its reference to the Residential Flat Design Code. This portion of the site will cover a collective area of 11,800 square meters in total.

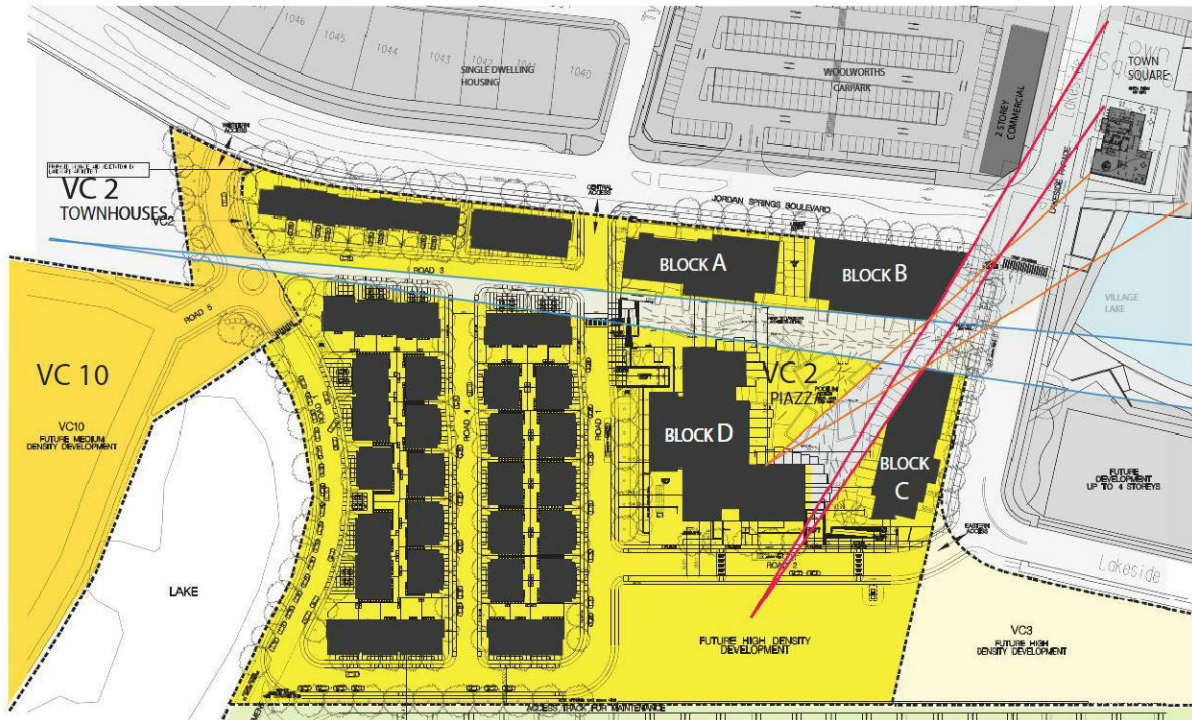
## Uses

The buildings are predominantly mixed-use commercial/residential consisting of a total of 160 apartments and 14 commercial tenancies which is outlined in the Apartment Summary Schedule.

There is a variety of uses on ground floor activated with 14 tenancies that are strategically situated in the and around the piazza fringes, comprising; food and beverage, outdoor dining, café alfresco, office spaces all activating the family inspired piazza.

## Built Form

The Four Buildings (A, B, C & D) envelope the piazza and define its existence. The buildings are well spaced out and defined by Urban links to the Town Square to gain a sense of identity and individuality from one another, and further articulated in various ways, however there is a consistent rhythm in the interpretation of the buildings unique usages and boundaries through the built form.



**Fig B:** Urban Link + Vistas

## Concept

The overall design philosophy is to consider the interaction of people and the built form at the detailed scale of the immediate environment, whilst approaching the overall buildings' relations at the city scale, and how the formal treatment of the elements give character and definition to the local context and beyond.

VC2 Apartment footprints and built form are derived by configuring a direct visual relation to the Village Centre. Bisecting the conventional footprint of Block B + C allows for a continuation of the public domain, and is demonstrated in both appearance and intended connectivity.

“The Springs” narrative which is further emphasised in the landscaping and building relation, has allowed for a harmonic rhythm of ‘ebb and flow’ in that the buildings are not treated as isolated building designs, but rather interactive. Each building embodies different programs and at different times within one day, our understanding of the uses of these spaces has been an integral aspect of the success of the concept and its announcement of the various usages. The concept is practical in that there are various languages that fold together, for instance the ground treatment is intriguing and playful and could seem blurred, yet there are distinct division lines in the formal geometries of the building elements, and the subtle perceptions of these architectural design language and principles to define the space in clarity.

It has also been a clear intention to ensure that the western face of the development, and hence, this particular side to buildings A & D, interacts sympathetically with the road (Road 1) due to this shared interface with the proposed townhouse (medium density) development. This has been achieved through increased setbacks, reduced storey-numbers and further articulation to the façade treatments.



**Fig C: Main Street Interaction and Activation**

**ESD**

The development has been designed to respond to and accommodate the requirements of both BASIX and the Residential Flat Design Code.

Passive environmental considerations include the use of dual-aspect, cross-ventilated apartments, and orientation of apartments. Water reuse will be integrated through the use of rainwater tanks, as per Basix requirements. All towers have Northerly orientated facades as well, further enhancing lighting and sun penetration qualities to majority of living spaces.



## Landscaping

We have worked in collaboration with Clousten & Associates to develop a landscape strategy for the overall site that takes into consideration the communal piazza space, the public domain, including the existing roads and setbacks.

“The Spring” narrative is further resonated in the landscape aspect of the proposal. Landscaping is not only pleasantly and abundantly presented but also has a further role in how it directs, subtly segregates, shades and serves nature. It also has the ability to attract desired links, buffer zones and softens built form.

The piazza orchestrates a flow of pedestrians who are invited to its destination, locals passing through invited by the soft build-up of activity and design interest. Mounds of green establish a playful venue for all ages to enjoy safely, the artwork that is inspired by nature; abstract tree formed canopies that provide artistic inspiration and definition for the public realm.

For further background on the landscaping strategy and design detail, refer to the separate documents by Clousten & Associates.



Fig D: Landscape Plan (refer to plans)

## Principal

# 1

### Design Quality

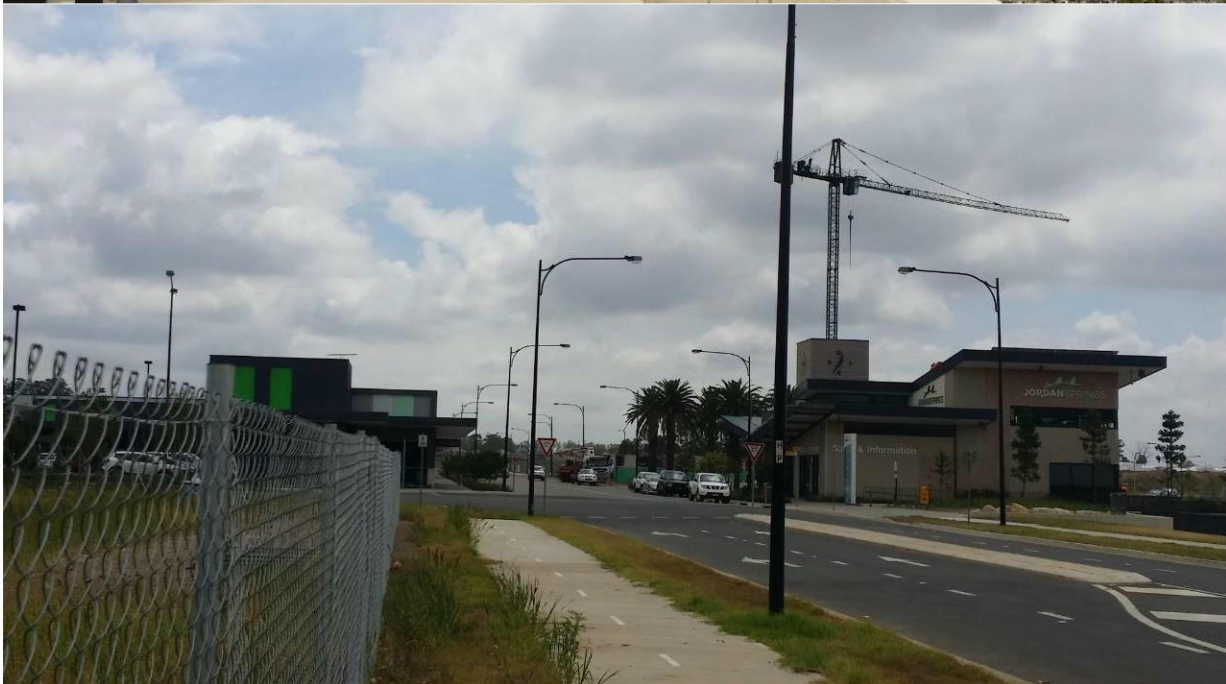
#### Context

Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area or local surrounds.

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.

#### Proposal

- The subject site is situated within the south- western part of an overall subdivided 3.633 hectare space in the newly established suburb of Jordan springs. The subject space is currently untouched, and only has plants, local shrubs and general vegetation growing on the surface. It is bounded by Jordan Springs Boulevard to its north and Lakeside Pde to its North East.
- The site has a considerable fall in topography from RL 38.70 at the North- Western corner to RL 36.2 at the South West corner.
- The immediate context is characterised by low-scale low-density residential to the North-West; a natural reserve to the south & a man-made lake to the north-eastern end, town centre.



**Fig E:** View from Town Square to 2 Storey Retail, View from Town Square towards VC2 Site, View to Lake from Lakeside Parade, View from VC2 Lakeside Parade towards Town Square. (In order)

## Principal 2

### Design Quality

#### Scale

Good design provides an appropriate scale in terms of 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.

#### Proposal

VC2 is accessed from two main roads; Jordan Springs Boulevard & Lakeside Pde. There are 3 proposed off streets that enter VC2, where 'Road 1' will form the interface between the townhouse developments, with the subject mixed use component.

The development consists of 4 buildings (A, B, C & D) on a single-storey podium with satisfactory separation in relation to the scale.

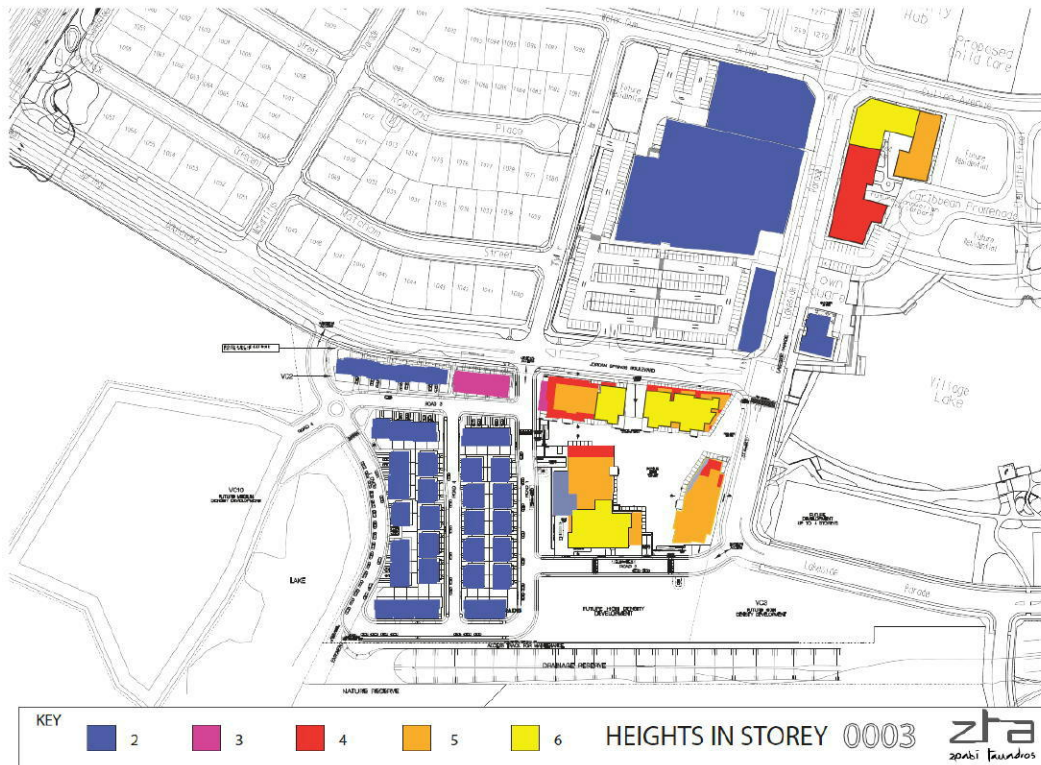
The building scale has been considered through a series of conceptual models that have formed the shape, recessing and scale sensitivity to each other and surrounding context.

- Heading East on Jordan Springs Boulevard the identity of the townhouse is evident and builds up from 2 to 3 storey townhouse units. There is a continuation of scale as the mixed Use part of VC2 across Road 1 Continues in scale and gradually builds up at towards the centre.



**Fig F:** Jordan Springs BLVD heading east from Townhouses to Mixed Use

- The Proposal responds well to the surrounding context in scale.
- Buildings are designed to visually be sympathetic and not dominate.
- The first 4 storeys are highlighted whilst the higher portions of the buildings are recessed back and/or treated with variations in materials
- Consistent building principles are carried throughout
- Consistency discipline with scale not impacting views and vistas to surroundings; Lake, southern bush land tree-tops and do not impact any of the surrounding residential components as to not impacting both overshadowing to other buildings, and to minimize view obstructions towards the lake on the north eastern end.



**Fig G:** Proposed Building Scale with relevance to DA Approved/Existing Structures

The proposed new road to the west forms a continuation of Tyler Street and reinforces the established suburban block and street patterns of the north western portion of this subdivided space.

The initial planning has been mindful of the surrounding scales of built form and sensitive to its use and inhabitants.

There is a wide footpath/verge along Jordan Springs Boulevard to the North. This enables a landscaped buffer zone to address the street. Deep soil planting activates ground floor uses and creates a green strip that connects the proposed future Northern development to the subject VC2. There is a generous setback to the west of the site that provides a green buffer and respects the border with the proposed low-density townhouse development component.

The building forms are designed in accordance with the approved building envelopes and parameters established by Penrith City Council and have therefore been considered to ensure that the buildings are proportional to the spaces around them.

## Principal

# 3

### Design Quality

#### 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 manipulation of building's 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.

#### Proposal

- The proposed building forms a breakup of building mass in its horizontal and vertical plane.
- The use of various building elements and juxtaposition of building fabric enables articulation to take place very conventionally.
- The folding of balconies and integration of design interest allows for clarity of desired planes that are defining the desired scale and mass.
- Generally balconies are pronounced to express a consistent skin to the building, and they become more expressed at the corners of the buildings.
- Overall each building is treated with articulation for a strong visual interest yet also defines use and incorporates opportunities for views, privacy, and shading.

## Principal

# 4

### Design Quality

#### 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.

#### Proposal

The Residential Floor plans indicate a range of :

- 1 bed,
- 2 bed/1bath,
- 2 bed/2bath and
- 3 bed apartments
- Including adaptable Apartments to allow for a range of typologies and living patterns.

The site is located within close proximity to Cranebrook to its North-West, and St Mary's to its East. There is a bus route extension proposed for the site, as well as the surrounding sub-divided lots.

There is an existing Woolworth's retail outlet will serve the diverse variety of our medium to high density of VC2 complex and Jordan springs overall. The additional commercial spaces located on the ground floors of towers A, B, C & D will provide services such as offices; food and beverage outlets.

## Principal 5

### Design Quality

#### 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.

#### Proposal

- The development is designed to embrace ESD principles. The proposal generates an exceeding amount of cross-ventilated apartments, in a range of 1, 2 and 3 bedroom units.
- Passive Solar design of layouts has been incorporated to reduce the need for heating and cooling, with majority of Apartments having cross ventilation.
- The development will include rainwater tanks for the retention of stormwater. This collected water will be recycled, and re-used for irrigation and for car-wash bays within the development.
- Sustainable materials are used throughout the ground floor feature elements.



## Principal 6

### Design Quality

#### Landscape

Good design recognizes 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 domain.

#### Proposal

Landscape design builds on the existing site's natural and cultural features in a responsible and creative way. It enhances the development's natural environmental performance by coordinating water and soil management, solar access, microclimate, abstract shade canopy. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character.

Landscape design will optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long-term management.

There are many layers of open space providing a hierarchy that responds to the need for a variety of different activities to occur within the site.

- The generous communal areas of the residential buildings will offer new lifestyle outdoor amenity for residents, as well as providing a good outlook space for those living above. The heavily landscaped fringes of the shared ground-floor piazza further enhances this aspect
- Each apartment has a private open space in the form of a balcony which allows an outlook to either the existing southern reserve bushland, and/or to the eastern lake side, and/or to the centralized piazza.
- Courtyard gardens have also been introduced, either through deep soil planter boxes or designated green spaces. These green gardens enhance visual appearance of the towers when viewed from street level, softening up any hard surface treatments, and, they also allow for improved privacy, amenity & tranquillity.

## Principal

# 7

### Design Quality

#### 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, outlook and ease of access for all age groups and degrees of mobility.

#### Proposal

- Apartments will feature a mix of unit typologies, providing a high level of cross ventilation with dual aspect orientation. The development exceeds the rule of thumb for apartments as naturally cross ventilated.
- Apartment layouts have been developed to maximise the number of north facing units and ensure the provision of street and district views
- The development achieves the requirements of apartments receiving 3 hours of sunlight to the living room glazing during the winter solstice. Refer to Control Checklist table.
- Minimum 10% of the apartments will be adaptable throughout the building in different typologies to offer variety to potential inhabitants.
- The piazza Public space encompassed by all the apartment towers will provide amenity for local residents and the greater public, as well as any guests to the precinct.
- The piazza is designed to be on the same level with the Main Street Interaction, inviting all to access with no change in levels, where there is change in levels (South and West Entrances to the piazza) there is a creative landscape integration of steps and ramp for accessibility for all.
- Integration of Glass and Composition of Acoustic Underside treatments form the lightweight, light emitting themed awning structures that enable an effective acoustic sound attenuation from Ground to First Floor and above.

## Principal

# 8

### Design Quality

#### 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 whilst 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 open space.

#### Proposal

- Clear pedestrian routes enable safe access within the site and outlook from apartments.
- Distinct Building differentiation between various Ground Floor uses enable Way findings and design cues to enable ease of direction, surveillance and secure atmosphere created.
- The open Central piazza is visible from both aspects of the entire site, there is a direct visual from North to South, and from East to West, vice versa. This will further enhance security and access, limiting potential breaches to the above towers.
- Furthermore visual connections are made between Town Square and Piazza
- Passive surveillance over the public domain is afforded by residential apartment whilst allowing privacy.
- There will be appropriate lighting to all exterior areas, both public and communal.
- There are clear entry points to each of the buildings via generous lobbies that are fully glazed and well-lit and defined by different blade/awning/landscape design features. This provides security and sense of privacy for the occupants of the Apartments above.
- This further provides activation and casual surveillance to the piazza space.
- The buildings will utilise a security system at all entry points, and within the lifts.
- Basement Car parks will provide security and division for Retail patrons / Apartment Visitors and distinguished from Residential Apartment occupants.

## Principal

# 9

### Design Quality

#### Social Dimension

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 optimize 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.

#### Proposal

- Social interaction is encouraged through the desirable flow of Main Street retail to spill into the piazza, yet not in a competitive way but rather complementing the public Domain. The proposal aims to establish a continuation of mixed-use properties that highlights the extension of the Village Centre, rather than isolating zones. This open ended extension to the town square creates a sense of social dimension that enhances the quality of this new piazza.
- The scheme provides a range of unit typologies and sizes that shall appeal to different markets.
- The outdoor spaces are designed to gentrify community spirit for residents within the development by offering both public areas for congregation and activity, as well as good linkages to any future developments to occur in the surrounding areas and the lake. There will also be an indirect link to the cities of St. Mary's and the suburb of Cranebrook.
- The buildings have multiple cores, where possible, to reduce the number of units off a corridor, and thereby forge a better opportunity for communal interaction.

## Principal 10

### Design Quality

#### Aesthetic

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 also relate to the context, particularly responding to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.

#### Proposal

A clear palette of materials and architectural language gives definition to each part of the buildings, while ensuring that the development has a single, holistic character inherited from the existing streetscape architectural language and characteristics of the Town Square and Main street.

Descriptions of the different building details are as follows:

#### Building A & B

Buildings A is 3-4 -5-6-storeys respectively from West to East

Buildings B is 6-5-4 storeys respectively from West to East

Buildings A & B comprise of two cores for each building and follow SEPP65 for good design principles in their internal arrangements.

The Northern frontage onto the Jordan Springs Boulevard is made up of large, contemporary portions of solid glazing, visually connecting to the Northern horizon. Jordan Springs Boulevard Streetscape is predominantly defined as a 4 storey building with the upper levels 5 and 6 recessed.

Interaction between Blocks B + C are moulded via an exploration of the views and vistas from the town square visual links. The building footprint is hence defined and articulated as it increases in height to enable connections. As a result Block D becomes a focal point and vice versa which enables Block D to have views to the Village Centre/Town Square and draws a visual and reachable connection to the Town Square without any effort.

Furthermore we have introduced architectural screening elements mimicking the nature reserve which has become the theme that draws visual interest when viewed from viewpoints.

The tips to the western and eastern end of Buildings A + B (respectively) peel away to increase the solar access to these internal apartments and piazza; thus improving the capacity for other apartments from buildings C + D to have unobstructed views and vistas and, reduce the overall bulk and scale. This shifted geometry creates a lively focus both for the communal piazza and when viewed from Jordan springs Boulevard.



**Fig H:** Block A + B as seen from Jordan Springs BLVD (Northern Streetscape artist's impression)

### Building C

Building C is 4- 5-storeys from North to South, to increase views from Block D.

Building C is similar to building B in aesthetic treatment where it interacts with Main Street. The architectural language of subtly drawing the lines that creates its envelope, yet to a pedestrian's scale is activated by the public extension of retail with a café to the North and East facing the Lake.

The East elevation has open living areas that have a clear view to the Lake and beyond.

The treatment of the building base also provides continuity with the other buildings on the site, and is activated with glazing and landscaped features at ground along the piazza (North - western elevation).

The residential building lobby entrances are architecturally segregated, whilst still ensuring a buffer zone between these intimate/private zones and the piazza space, through varying awning heights, upturn landscaping walls and landscaped elements.



**Fig I:** Block C as seen from Lake (Artists Impression)

### Building D

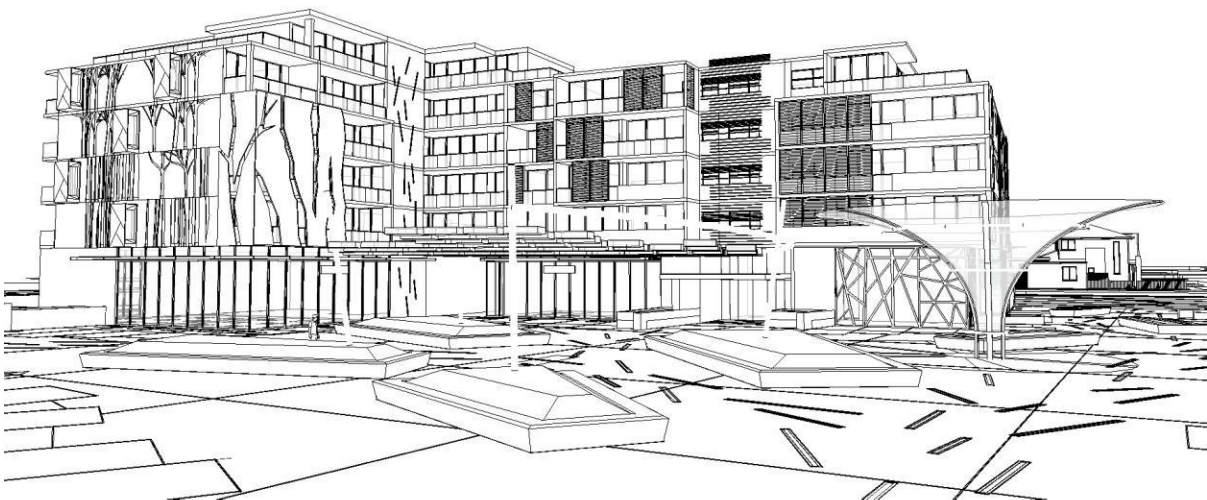
Building D is 4-5- 6 storeys.

Building D is the largest building form comprising of an “L” shape design, however enables larger spans of articulation due to its longitudinal nature, increasing in bulk and height as it moves towards its southern return-end, reflecting a more residential quality overall.

The materials and colouration draw on the palette used elsewhere in the development, but are used in a manner that reflects the differing scale.

Each terrace is clearly differentiated vertically with the strong use of blade walls and repeating elements, but is tied together with a horizontal stratification that reflects on each level.

Building D has a setback of over 9 meters from Road 1, minimizing any potential for overshadowing to the eastern facades of the townhouse development. This also reduces visual bulk and increases opportunity for deep soil planting zones and vegetation spaces.



**Fig J:** Block D as seen from Piazza (Artists Impression)





Page	Recommendation	Current
7	Relating to local context	<p><b>YES</b></p> <p>The proposal reflects the transformation undergoing in the surrounding context. This is consistent with the intentions of the future development of St. Marys western precinct plan aligned with higher density living.</p>
27	<p><b>Primary development controls – building depth</b></p> <p>Resolve building depth controls in plan, section and elevation.</p> <p>In general, an apartment building depth of 10-18 meters is appropriate. Developments that propose wider than 18 meters must demonstrate how satisfactory daylighting and natural ventilation are to be achieved.</p>	<p><b>YES and no, with qualifications</b></p> <p>Buildings A, B, C are less than 18m deep.</p> <p>On average They are all predominantly less than 18m deep with a small length being 18.2m. Building D is predominantly less than 18m deep with a small length being 20m. This small increase over the recommendation is considered acceptable due to the ‘non-complying portion’ being the northern end of the building. Thus, this entire end will be sun-filled throughout the day, due to exposure along all northern, eastern and western facades and larger glazed surface areas applied.</p>
44	<p><b>Site configuration - deep soil zones</b></p> <p>A minimum of 25% of the open space area of a Site should be a deep soil zone; more is desirable. Exceptions may be made in urban areas where sites are built out and there is no capacity for water infiltration. In these instances, Storm water treatment measures must be integrated with the Design of the residential flat building.</p>	<p><b>YES</b></p> <p>The overall site VC2 has an area of 14,800 sqm of which 3,785sqm is deep soil. This equals 25.6% of the total site area</p>
49	<p><b>Site configuration - open space</b></p> <p>The area of communal open space required should generally be at least between 25 and 30% of the site area. Larger sites and brownfield sites may have potential for more than 30%.</p> <p>Where developments are unable to achieve the recommended communal open space, such as those in dense urban areas, they must demonstrate that residential amenity is provided in the form of increased private open space and/or in a contribution to public open space</p> <p>The minimum recommended area of private open space for each apartment at ground level or similar space on a structure, such as on a podium or a car park, is 25 sqm; the minimum preferred dimension in one direction is 4 meters.</p>	<p><b>YES</b></p> <p>The Piazza is regarded as a main focal communal space and the size and landscaping provides an abundance of use for recreation</p> <p><b>YES</b></p> <p>Building A, B, C &amp; D comply with the 4m deep recommendation &amp; 25sqm</p>
50-51	<p><b>Site configuration - orientation</b></p>	<p><b>YES</b></p> <p>The relevant section of the RFDC relates to aligning with streets and maximizing the number of units facing north; this proposal reflects both of these requirements, for all buildings.</p>
58-59	<p><b>Site amenity – visual privacy</b></p> <p>Refer to building separation minimum standards</p>	<p><b>YES</b></p> <p>The illustrative building design is typically orientated such that units face predominantly away from those in the opposite building. All other units are orientated such that there are no proximity issues with other windows and balconies. Privacy screens are introduced for added comfort.</p>

69	<p><b>Building configuration – Apartment layout</b></p> <p>Single aspect apartments should be limited in depth to 8 meters from a window.          The back of a kitchen should be no more than 8 meters from a window.          The width of cross-over or cross-through apartments over 15 meters deep should be 4 meters or greater to avoid deep narrow apartment layouts.          Buildings not meeting the minimum standards listed above, must demonstrate how satisfactory daylighting and natural ventilation can be achieved, particularly in relation to habitable rooms.          If council chooses to standardise apartment sizes, a range of sizes that does not exclude the following minimum apartment sizes, which can contribute to housing affordability:          1 bedroom apartment 50 m2          2 bedroom apartment 70 m2          3 bedroom apartment 95 m2</p>	<p><b>YES</b></p> <p>100% of back of kitchens are within 8m from a window.</p> <p>The minimum depth for living and dining is 5.5m and the minimum depth for a kitchen is 2.5m.          This is a typically used and acceptable plan form, where this layout provides a high level of amenity. The windows are full height and full width, so adequate light and ventilation will be achieved in these instances.          Deeper sun penetrations achieved for longer periods for these North Facing Apartments</p>
69	<p><b>8m maximum depth to Single Aspect Units</b></p> <p>If more, demonstration of satisfactory day lighting and natural ventilation.</p>	<p><b>YES</b></p> <p>A minority of apartment layouts are marginally deeper by up to 1m due to the sequence of spaces from Glazing to back of wall including; dining, living, kitchen and a store room respectively. In effect the back of the Kitchen Wall is within the 8m rule. The store room is regarded as an ancillary and not a habitable space. Furthermore these layouts include 6.5m deep for all other spaces i.e. bedrooms, bathrooms, and laundry. Etc.</p>
69	<p><b>Minimum unit sizes:</b></p> <p>Studio: Not stated          1 bed: 50sqm 2 bed: 70sqm 3 bed: 95sqm</p>	<p><b>YES</b></p> <p>Minimum achieved:          1Bed:62m2 2Bed:80m2 3Bed:110m2</p>
72	<p><b>Building configuration – Balconies</b></p> <p>Provide primary balconies for all apartments with a minimum depth of 2 meters. Developments which seek to vary from the minimum standards must demonstrate that negative impacts from the context noise, wind cannot be satisfactorily mitigate with design solutions          Require scale plans of the balcony with furniture layout to confirm adequate, usable space when an alternate balcony depth is proposed.</p>	<p><b>YES</b></p> <p>Minimum width 2.5m</p>
74	<p><b>Building configuration - Ceiling heights</b></p> <p>The following recommended dimensions are measured from finished floor level to finished ceiling level. These are minimums only and do not preclude higher ceilings, if desired.          In mixed use buildings: 3.3 meter min. for ground floor retail or commercial and for first floor residential, retail or commercial to promote future flexibility of use          In residential flat buildings in mixed use areas: 3.3. meter minimum for ground floor to promote future flexibility of use in residential flat buildings or other residential floors in mixed use buildings:          In general, 2.7 meter minimum for all habitable rooms on all floors, 2.4 meters is the preferred min. for all non-habitable room, however, 2.25 is permitted          For 2 storey units, 2.4 meter minimum for second storey if 50% or more of the apartment has 2.7 meter minimum ceiling heights          For 2 storey units with a 2 storey void space, 2.4 meter minimum ceiling heights          Attic spaces, 1.5 meter min. wall height at edge of</p>	<p><b>YES</b></p> <p>2.7m to all living areas and bedrooms.          2.4m for bathrooms, kitchens and Laundries.</p>

	room with a 30 degree min. ceiling slope Developments which seek to vary the recommended ceiling heights must demonstrate that apartments will receive satisfactory daylight.	
<b>78</b>	<b>Building configuration - Ground floor apartments</b>  Optimise the number of ground floor apartments with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site. Provide ground floor apartments with access to private open space, preferably as a terrace or garden.	<b>No</b>  There are only 5 Ground Floor Apartments, due to the mixed use character of this proposal. All Ground Floor Units have Private Open Space; however, due to the varying footpath levels in relation to the Apartment Floor RL, this significant variance in level makes it difficult to obtain direct access from street. Furthermore access only through residential lobbies increases privacy / security provisions.
<b>79</b>	<b>Building configuration - Internal Circulation</b>  In general, maximum 8 apartments off of a double-loaded common area, the number of units accessible from a single core/corridor should not be limited to 8. Exceptions may be allowed: For adaptive re-use buildings where developments can demonstrate the achievement of the desired streetscape character and entry response Where developments can demonstrate a high level of amenity for common lobbies, corridors and units.	<b>YES</b>  Maximum 7 Apartments off 1 Lift Lobby.
<b>82</b>	<b>Building configuration – Storage</b>  In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates: One bedroom apartments           6m3 Two bedroom apartments           8m3 Three plus bedroom apartments   10m3	<b>YES</b>  There is a mix of Internal Apartment store rooms and Basement Storage Areas provided.
<b>85</b>	<b>Building amenity – daylight access</b>  Living rooms and private open spaces for at least 70% of apartments in a development should receive a minimum of 3 hours direct sunlight between 9am and 3pm in mid-winter. In dense urban areas a min. of 2 hours may be acceptable. Limit the number of single aspect apartments with a southerly aspect to a maximum of 10% of the total units proposed. Developments which seek to vary from the min. standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed	<b>YES</b>  The development achieves 77% of Units - a minimum of 3hrs solar access.  South single aspect Apartments is 10% .
<b>87</b>	<b>Building amenity – Natural Ventilation</b>  Building depths, which support natural ventilation typically, range from 10-18 meters. 60% of residential units should be naturally cross-ventilated. 25% of kitchens within a development should have access to natural ventilation. Developments, which seek to vary from the minimum standards, must demonstrate how natural ventilation can be satisfactorily achieved, particularly in relation to habitable rooms.	<b>YES</b>  The development exceeds this requirement as follows : Building Depths are a maximum of 15.6m in support of cross-ventilated apartments. 70% of Residential Apartments are naturally cross ventilated. 27% of Kitchens have access to natural ventilation.

**HIGH RISE APARTMENT SCHEDULE**



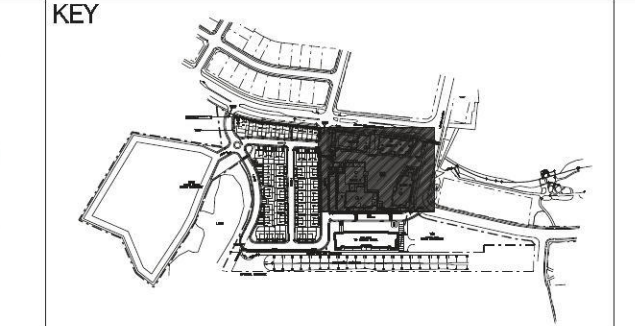


**BUILDING BLOCK DIAGRAMS**

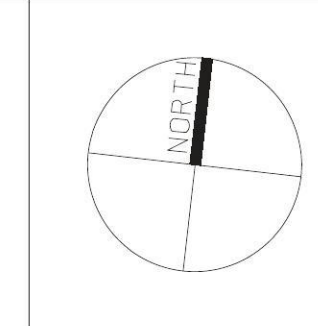


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REVISION	AMENDMENTS	DATE
F	FOR DA REV 1	3 FEB 2014
E	FOR DA	23 FEB 2014



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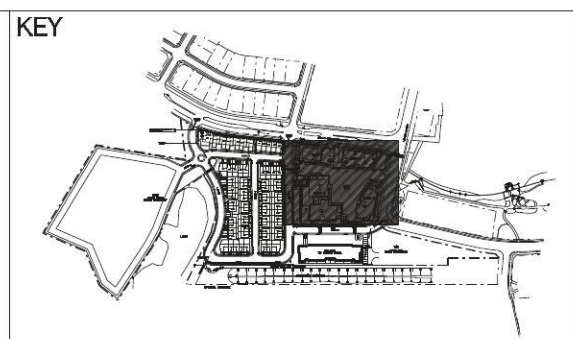
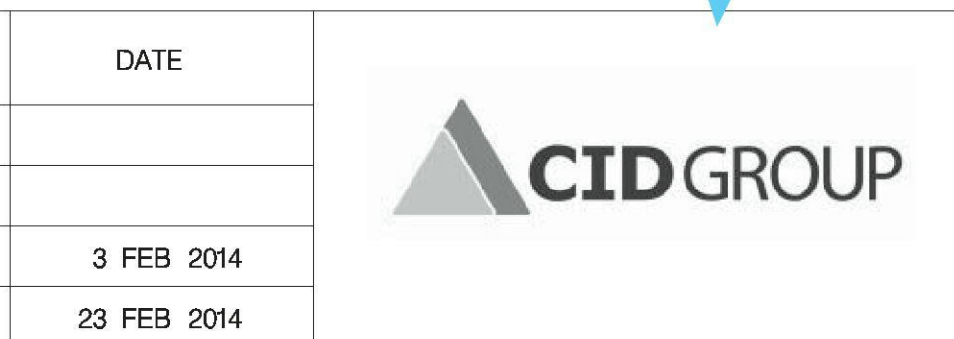
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 ISSUE FOR DA  
 DATE 15 JUL 2013  
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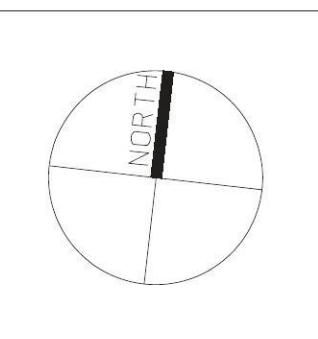


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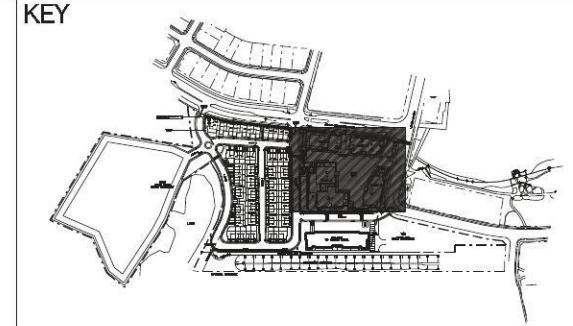


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ISSUE FOR DA	DATE 15 JUL 2013	SCALE 1:200 @ A1

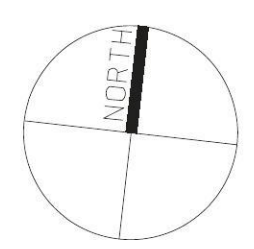


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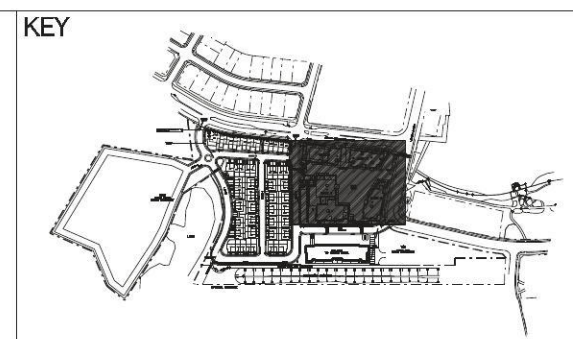


PROJECT  
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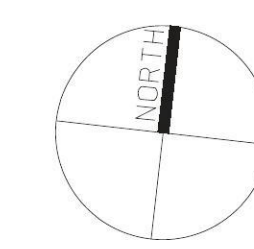


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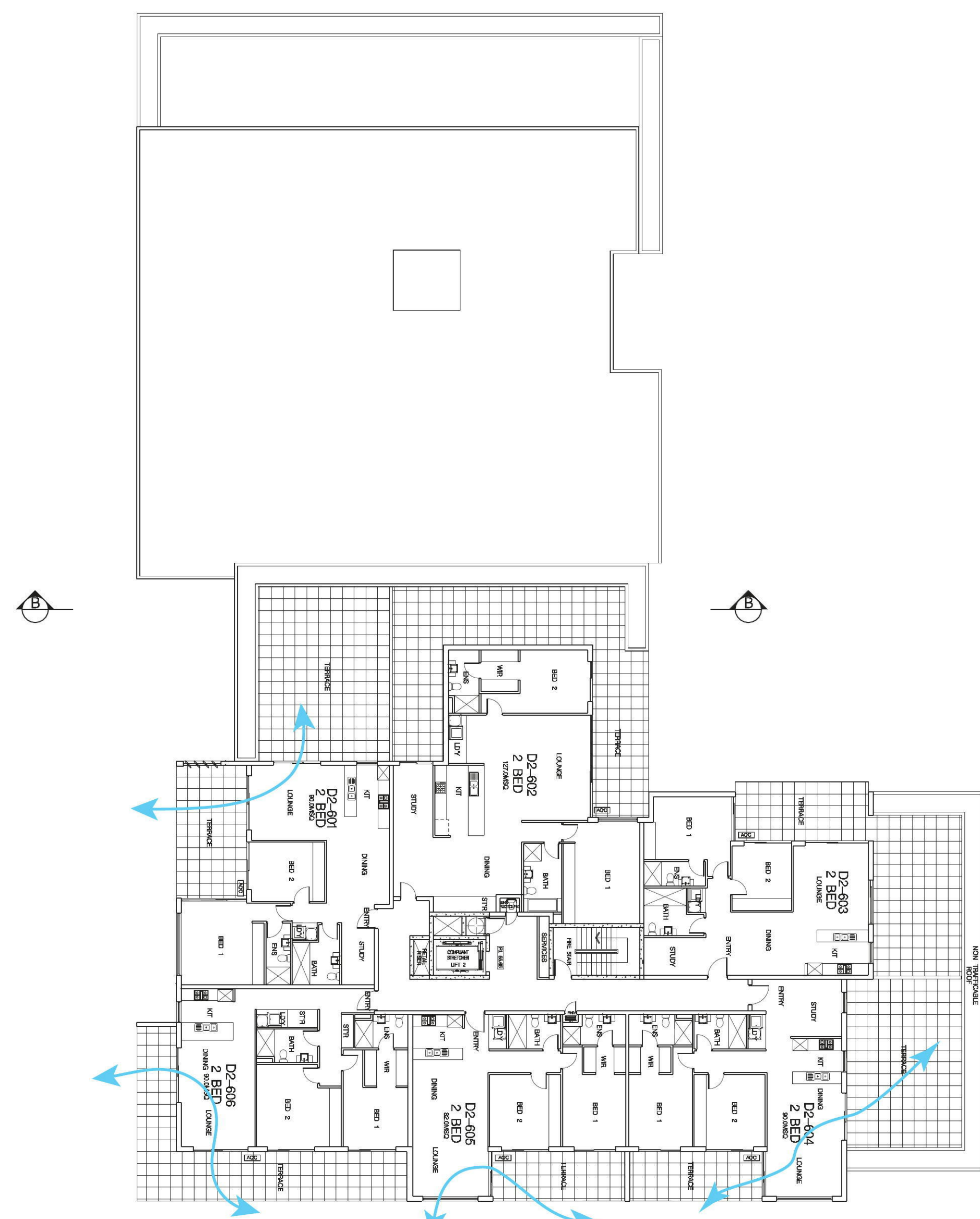
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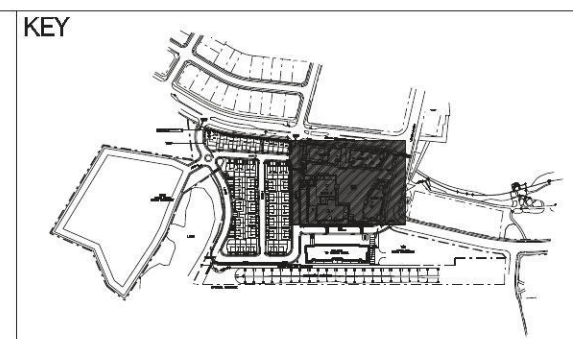
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ISSUE FOR DA DATE 15 JUL 2013 SCALE 1:200 @ A1



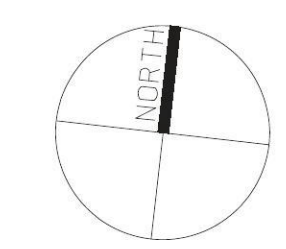
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PROJECT  
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 JORDAN SPRINGS BLVD (SOUTHERN ENTRY)  
 DRAWING No. DRAWN CHECKED  
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