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1 November 2019

Simon Ip
Manager, Place and Infrastructure (Eastern & South Districts)
Eastern Harbor City
Greater Sydney, Place & Infrastructure
Department of Planning, Industry and Environment
320 Pitt Street
SYDNEY NSW 2001

Planning Proposal – PP_2016_CBANK_00_01
30-46 Auburn Road, Regents Park – FSR Addendum to Urban Design Review Report

Dear Simon,

I refer to your email of 18 October 2019 and the McGregor Coxall letter dated 9 October 2019 referencing an FSR addendum to the Urban Design Review which was finalised in January 2019.

On 26 March 2019, a detailed submission was issued to the then Executive Director of the Department of Planning and Environment in response to the urban design review commissioned by the Department and prepared by McGregor Coxall. I note that the review scope sought to *"propose an appropriate maximum FSR controls for the site before the planning proposal is exhibited, and that this FSR not be subject to the provision of public benefits*".

That submission adopted the layout, urban form, building footprints, access, egress and open space offering proposed by the McGregor Coxall Structure Plan (MCSP) as it met the objectives of the Stanisic scheme. However, the MCSP was refined to bridge it from a structure plan to an actual development outcome that could be achieved on the site against the SEPP 65 and ADG criteria.

The findings of the refined developable scheme was an FSR of 2.6:1, based on a basic yield figure between GBA and FSR of 80%, resulting in a GBA of 67,760sq.m. This was presented, discussed and agreed at the meeting between the Department, the proponent, the proponent's architect Frank Stanisic and McGregor Coxall on 15 May 2019. We therefore feel that the GBA number of 63,293sq.m may be an oversight, as the measurements off the CAD set is 67,697sq.m of GBA which equates to 2.6:1, as illustrated in the below table. The calculation yield table is included in the 26 March submission at Attachment 1.

	GFA (m^2)	GBA (m^2)	COUNT	FSR	GFA/GBA (%)
McGregor Coxall (MCGC) aligning scheme	**55274**	**67760**	**623**	**2.611**	**81.57%**
MCGC + additional height to G, H & I	**57682**	**70956**	**653**	**2.725**	**81.29%**
MCGC tower scheme + additional height to G, H & I	**73152**	**90804**	**841**	**3.455**	**80.56%**

Table 1:RS scheme yield analysis report conclusion. (Source RS Attachment 1 SK17).

We note that in the earlier process there were some numerical discrepancies that were picked up, discussed and agreed on with Department staff prior to and at the abovementioned meeting. (It was not seen as a major issue at the time that these discrepancies occurred as McGregor did not have complete access to the precise DWG survey and design detail when undertaking the first stages of their assessment).

These differences included site area variance and other aspects of the higher level scheme layout prepared by McGregor Coxall. The meeting of 15 May 2019 settled these issues. This was a productive process that resulted in landing on the correct calculation of the site dimensions and the subsequent massing form. This aspect was also very important as it ensured the new open space layout was prescriptive and was not compromised. The precise DWG measurement was taken which as a result was then provided back to the Department and then later placed into the calculation table inside the submission. This showed the measured GBA calculation and open space area to the massing form precisely, being 67,697m2.

It may well be a simple oversight noting that the primary calculation advice in the letter on GBA to GFA is reliable. It seems however that the former GBA figure in the letter has now been referenced rather than the revised number that resulted after the precise calculation process. It is important to ensure, as it was originally, that we are working off the same base document for calculation.

I have attached the original submission of 26 March 2019, that adopted the McGregor Coxall layout, refined the building footprints to DA standard, confirmed the GBA and FSR calculations (as discussed above) and recommended the Department support the exhibition of a scheme which provides the higher densities and heights.

It is also important to note that at that time we contacted the council seeking a meeting to discuss the report and unfortunately a time was never arranged. Noting the Council's objection to the McGregor Coxall layout, density and heights, we therefore raise serious concerns with the administrative process of progression of the Planning Proposal by the Council as the relevant planning authority.

In conclusion, we note the original scope for the review as mentioned earlier being to *"propose an appropriate maximum FSR controls for the site before the planning proposal is exhibited, and that this FSR not be subject to the provision of public benefits*". In this context, we note that McGregor Coxall letter suggest a conservative calculation process based off two scenarios to consider an efficiency provision to set an FSR control. A notional figure of 2.4:1 was listed however this was based on the incorrect GBA calculation. McGregor Coxall also note that the FSR "*was agreed upon by all participants"*, which it was, but at 2.6:1. We therefore feel that this may be an oversight. Therefore, in that context of the refined calculation and the conservative methodology applied of 0.80 then the density should be listed for exhibition in the gateway at 2.6:1.

Thank you for your consideration of this submission and we look forward to an altered Gateway to allow the exhibition of the Planning Proposal.

Yours sincerely

Matthew Daniel
Development Director

James Matthews
Planning Director

Yours sincerely

Attached:

Attachment 1 – Original submission of 26 March 2019.

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26 March 2019

Mr Steve Murray
Executive Director, Regions
Planning Services
Department of Planning and Environment
320 Pitt Street
SYDNEY NSW 2001

Attention: Brendan Metcalfe

Planning Proposal – PP_2016_CBANK_00_01
30-46 Auburn Road, Regents Park

Dear Steve

We write to you in relation to the planning proposal to amend the Bankstown Local Environmental Plan (LEP) 2015 to increase the permitted maximum height of buildings and floor space ratio (FSR) controls applying to land at 30-46 Auburn Road, Regents Park.

On 13 February 2019 we received the urban design review commissioned by the Department of Planning and Environment. The review sought to "*propose an appropriate maximum FSR controls for the site before the planning proposal is exhibited, and that this FSR not be subject to the provision of public benefits*".

Thankyou for the opportunity to comment.

INTRODUCTION

The objective of the McGregor Coxall Urban Design Report is to:

> *"…evaluate the proposed design against a set of established performance criteria in multiple categories, compiled from strategy documents from regional to local levels. The assessment evaluates the proposal against relevant aims and objectives that have been distilled from the South District Plan and other relevant council plans and strategies …" The NSW Apartment Design Guide has also been considered, both in terms of compiling a comprehensive catalogue of performance objectives for the site, but also in terms of the intentions of primary physical controls as applied to residential development sites".*

The objective of the original Structure Plan prepared by Stanisic Architects (below Figure 1 is an extract from Landscape Plan prepared by Liam Noble) is based on the same performance criteria established in the McGregor Coxall Report and shown in the McGregor Coxall Structure Plan (MCSP). The Concept was premised on the ability of the urban form to respond to its context and achieve the best amenity outcome for future residents, enabled by orientating habitable building frontages away from the railway line and orientated towards open space. In doing so, the concept sought to prioritise pedestrians over vehicles creating an effective street network and connectivity and generous and diverse open spaces.

Figure 1 - Stanisic Concept (source: Stuart Noble Landscape Plan)

Critically, the Stanisic Concept has been planned and tested to the level of detail that a development application could be lodged, compliant with the principles and performance criteria of the Apartment Design Guide and SEPP 65. Previous concepts prepared by Architectus and the Olsson Review, while advocating for a configuration which offers the possibility of more effective precinct connectivity, a legible and active street network and a more generous open space offering, were not developed to the next stage of detailed Development Application design and lodgement.

The primary objective of the development on this site is to satisfy the future residents' needs; that is the end clients of the scheme. To achieve that objective, the task of the applicants and landowners is to encourage the efficient delivery of an urban renewal scheme to provide housing for a diverse range of future residents in a quality yet affordable neighbourhood.

Noting this objective, it is considered little utility and an inefficient allocation of resources, for all stakeholders by this response providing an in-depth critical analysis between the previous scheme attributes and the MCSP. Rather, the project team have focused in the analysis how, using the MCSP as a positive influence on the primary objective, how can the MCSP be refined to bridge it from a structure plan to an actual development outcome.

The best summary of the critical issue in the MCSP report can be found in the comments that state the previous layout is a more "*urban"* response to the development of the site and not one …"*which did not fully meet the performance objectives set out in the District Plan, the Local Area Plan and the Open Space Strategic Plan, especially in terms of district connectivity, precinct integration and open space delivery"....."most of the limitations inherent in the current planning proposal for the site derive primarily from site layout and the disposition of buildings and associated open spaces, and not necessarily from specific attributes relating to density or height"*.

As mentioned previously, the Stanisic scheme did meet the required benchmarks and provide a high-quality development scheme against the SEPP 65 and ADG criteria, identical in performance to a number of well-functioning and vibrant urban renewal schemes in Sydney. However, this additional critical analysis from the MCSP listed above provides an opportunity for further improvement to achieve the primary objective.

Therefore, this submission will respond to the MCSP, with a view to adopting the layout, urban form, building footprints, access, egress and open space offering. The submission will then target the primary objective by providing an analysis how the scheme can be transformed into an actual quality and affordable development outcome.

RESPONSE TO STRUCTURE PLAN

The MCSP has been reviewed by the design team, including:

- Frank Stanisic, Architect
- Liam Noble, Landscape Architect
- James Matthews, Town Planner
- Matthew Daniel, Development Manager
- Raymond Raad, Landowner and developer
- Michael Raad, Architect.
- Martin Musgrave, Economist.

It is noted that MCSP, in reflecting on the site consideration and performance criteria note "*it should be possible to achieve a version of the Structure Plan that satisfies the specific urban design aims of the precinct*".

With this in mind, the MCSP layout was adopted, and a detailed urban design prepared that adopted the urban form, building footprints and massing, locations of open space, access arrangements, and performance and design criteria. This has been tested and refined to the next level of detail, with floor by floor apartment and townhouse design progressed, and detailed performance against the ADG and SEPP 65 established. This work is named the Review Scheme (RS). The design report is included at Attachment 1. The following comments summary are made:

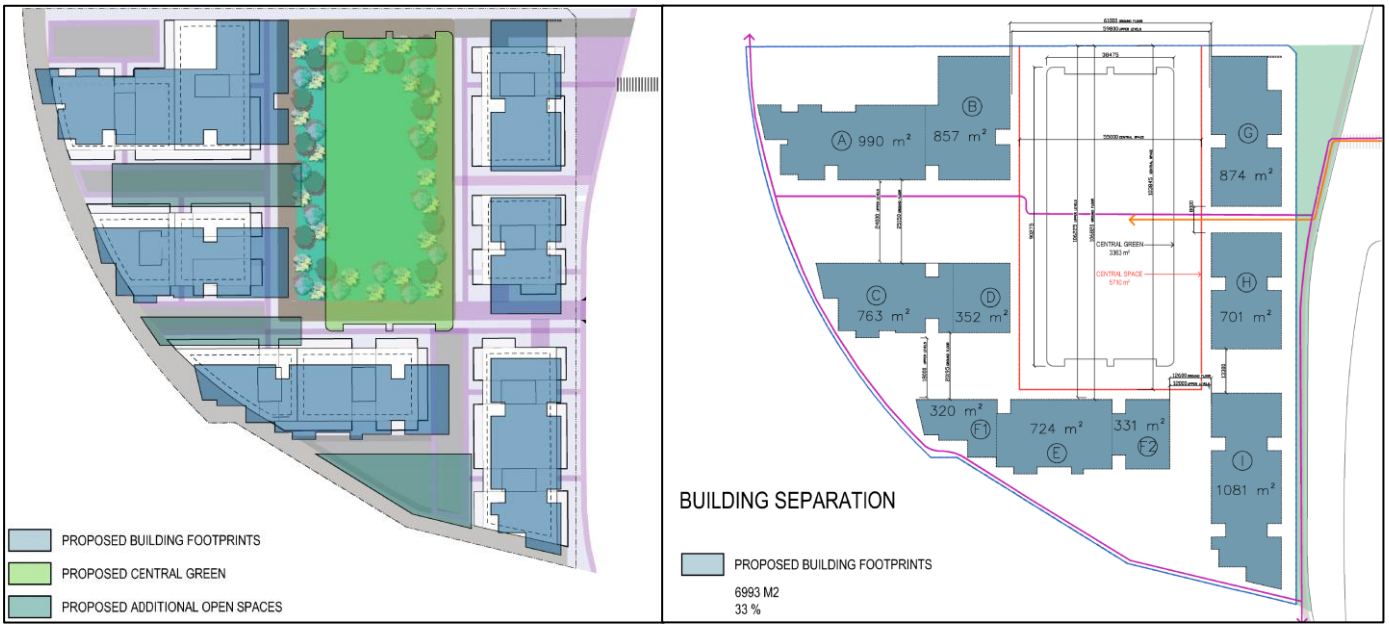
Criteria	McGregor Coxall Structure Plan	Response summary.
Blocks and building form	A legible and active street network, tied into Auburn Road and responding to the fabric of urban blocks in the precinct.	Adopted. Building separations in the RS have been increased and building depth decreased to meet the separation distances objectives of the ADG.
Access and parking	Residential vehicular traffic would enter and leave sub-surface parking areas mainly from access points near Auburn Road, minimising commuter traffic through the shared streets within the site, with single access points for entry and egress. Secondary access points to the	Adopted. The RS shows an adoption of the objective with refined entry points and street networks to meet the MCSP objective. The proposal will also have allocation for a car share

Criteria	McGregor Coxall Structure Plan	Response summary.
	underground parking could be incorporated into buildings deeper in the site, using the suggested street network framing the central green.	scheme for future residents and visitors including charge points for electric vehicles.
Open Space	A spatial hierarchy of open areas, with a central green as a multi-purpose "commons" for the site, with a series of smaller, more private, spaces leading off this central space, in between buildings.	Agreed – The central park model is adopted and refined. Creating a new larger open space of 5,710m2. with dimensions of 55m and 104m including the incorporation of an internal street network with public accessible access for the provision of share play opportunities. Due to the reduction in building footprints secondary open space areas increase in size from the MCSP.
Building Heights	A potential extension of the gradation of building heights along the curve of the rail line, from the highest point at the northwest corner of the site graduating downwards in height towards Auburn Road. The boundary conditions of the rail line suggest that some additional building height might be possible towards the rail line to the west, and away from both the central open space, and the furthest away from Auburn Road. The location nominated for potential increased height beyond 8 storeys is the furthest from surrounding residences within and surrounding the precinct, both in terms of view impacts and well as any potential overshadowing, which would be concentrated for the most part on the adjacent rail lands.	Methodology of heights location adopted and refined to further improve shadow impacts and residential amenity. The RS provides refined building footprints which reduce building footprints and reduced building depths that provides increased separations and increased secondary open space. The 6-storey element to the Auburn Road frontage is maintained with 8 levels fronting the central park. Greater heights were tested across the scheme the result being a location as per the MCSP recommendation furthest from surrounding residences within and surrounding the precinct.
Dwelling yield and FSR	Unit numbers have been calculated based on an average area of 85m2 per unit. Greater or lesser unit yields within the given envelopes may result from different mixes in apartment types and sizes. The site area is 20,400 m2. The gross building area (GBA) is 56,182m2. These calculations adopted a factor of 0.75 to calculate net floor space, resulting in a gross floor area (GFA) of 42,136m2 for this schematic configuration. This figure results in an overall site FSR of 2:1. The 0.75 factor is a conservative figure, which considers the proportion of structure, servicing and circulation areas to be deducted from gross floor area (in this instance, 25%).	The MCSP appropriately and in accordance with the scope, did not make a detailed interrogation of the unit layouts and dwelling typologies. The RS has undertaken that analysis. This has resulted in a refined, improved, efficiency-built form resulting in a more precise analysis and conclusion of the density whilst maintaining similar dwelling yield numbers from the MCSP. The RS has a diversity of apartment types including single and double storey (townhouses), dual aspect and winter gardens suitable for intergenerational living. The RS built form features a hybrid of ground level townhouses and apartments above to achieve

Criteria	McGregor Coxall Structure Plan	Response summary.
	<table><tr><th>Block</th><th>Storeys</th><th>Units</th><th>GBA (m²)</th></tr><tr><td>A</td><td>12</td><td>122</td><td>10324</td></tr><tr><td>B</td><td>8</td><td>93</td><td>7944</td></tr><tr><td>C</td><td>8</td><td>47</td><td>4000</td></tr><tr><td>D</td><td>8</td><td>52</td><td>4464</td></tr><tr><td>E</td><td>8</td><td>68</td><td>5850</td></tr><tr><td>F</td><td>8</td><td>83</td><td>7088</td></tr><tr><td>G</td><td>6</td><td>62</td><td>5310</td></tr><tr><td>H</td><td>6</td><td>46</td><td>3978</td></tr><tr><td>I</td><td>6</td><td>98</td><td>8394</td></tr><tr><td>Totals</td><td></td><td>657</td><td>56182</td></tr></table>	pedestrian scale and multiple access to dwellings from the streets. The result regarding unit average size in the RS shows an average of 88m2 with an efficiency rate of 81.6%. Noting that the MCSP stated that greater efficiencies and changes to dwelling types were likely. The mathematics in the MCSP report is respectfully questioned between the calculation and definition of GBA and GFA. (Please see Dwelling yield and FSR review section for further analysis).

Blocks and Built Form

The interrogation of the MCSP has maintained the street network methodology. The interrogation of the built form against deliverability and the objectives of the ADG has provided an adjustment in the building footprints. Figure 2 provides a comparison overlay and figure 3 the revised locations.



Figures 2 and 3 – design overlay and building separation. (Source RS Attachment 1 SK01 and SK02).

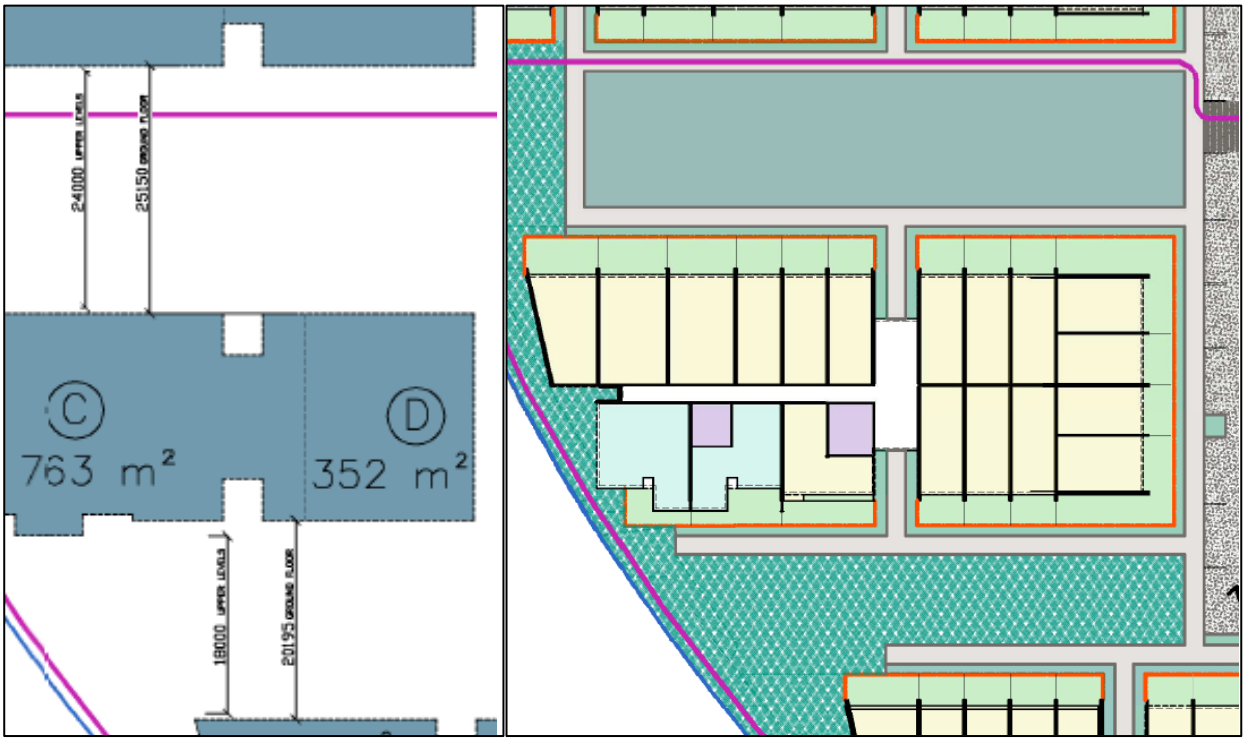
The overlay creates a reduced building footprint with a slightly adjusted location. This change provides a reduction in building footprints by 337m2 or 2%. The park location and orientation is maintained to maximise solar amenity. The location also results in improved building separation removing inefficient curved built forms whilst maintaining setbacks to maintain proposed pedestrian and cycle network to the perimetre and internal. The revised layout of reduced footprints provides larger secondary open spaces for use and social interaction. The revised location also provides dwelling orientation to achieve maximum solar and cross flow amenity whilst minimising exposure to the rail corridor. Table 1 provides a numerical variance analysis of the difference in footprints and site cover calculation.

	Block footprints (m2)		
Block	**MCSP**	**RS**	**Variance**
A	861	990	129.00
B	993	857	-136.00
C	500	763	263.00
D	558	352	-206.00
E	585	724	139.00
F (1+2)	886	651	-235.00
G	885	874	-11.00
H	663	701	38.00
I	1399	1081	-318.00
Totals	**7330**	**6993**	**-337.00**
Site cover %	**35%**	**33%**	**-2%**

Table 1 – Building footprint analysis.

Building Separations

A review of the MCSP showed that building separation distances between blocks AB – CD and EF would provide the future delivery of the scheme a challenge in meeting the objectives of the ADG. The RS in the example shown in Figure 4 has adopted a 24-metre separation of the buildings above level 1 between AB – CD and an 18-metre separation between CD – EF. Figure 5 provides an example of the increase in secondary open spaces.



Figures 4 and 5 – revised building separations additional open spaces. (Source RS Attachment 1 SK02 and SK03).

Dwelling Yield

Part 2 of the ADG provides guidance for setting and testing the primary controls for land use. The MCSP and the further interrogation of the RS report support the setting of the land use controls. Part 2A of the ADG states that *the rationale for setting the primary controls needs to be explained to the community, applicants and practitioners*.

The MCSP states: *The proposed structure plan achieves an overall architectural and urban design outcome for the site that is more appropriate for the precinct.* That position is adopted by the proponent and as detailed previously changes have been applied to ensure the scheme can be delivered at later stages whilst maintaining the integrity of the objectives of the MCSP.

The MCSP provided a dwelling yield in a range of 6 – 8 and 12 level buildings represented in Table 2. The average unit size stated is 85m2. Noting this is a typical final average number as a result of various unit mix scenarios in projects of this type in Sydney therefore this yield number is taken as the basis for the benchmark.

Block	Storeys	Units	GBA (m^2)
A	12	122	10324
B	8	93	7944
C	8	47	4000
D	8	52	4464
E	8	68	5850
F	8	83	7088
G	6	62	5310
H	6	46	3978
I	6	98	8394
Totals		**657**	**56182**

Table 2 – MCSP yield analysis table. (Source MCSP).

The MCSP states the following: "*The site area is 20,400 m2. The gross building area (GBA) is 56,182m2. These calculations adopted a factor of 0.75 to calculate net floor space, resulting in a gross floor area (GFA) of 42,136m2 for this schematic configuration. This figure results in an overall site FSR of 2:1. The 0.75 factor is a conservative figure, which considers the proportion of structure, servicing and circulation areas to be deducted from gross floor area (in this instance, 25%). Greater efficiencies in internal design and space planning may result in greater efficiencies, leading to a higher floor space ratio within the given building envelopes. This would be a product of the interior architectural design, and while it might increase the proponent's eventual yield, such changes would not increase either the building heights nor external envelope sizes".*

The calculation of dwelling yield numbers is considered to be near correct at 657 at an average unit size of 85m2; noting that, depending on layouts and dwelling types the RS has shown that generally this same yield can be achieved within similar building footprints (note only a 2% variance in site cover from Table 1), decreased building depths but with slightly increased building heights albeit not above the 12 level maximum due to the need to increase specific distances between certain buildings to improve solar performance of dwellings. The detailed design refinement undertaken by the RS shows that within these heights the dwelling yield is lower at 653 dwellings at an average size of 88m2 compared to the MCSP of 85m2. The RS is considered accurate as it has had the benefit of extending the MCSP study further to an efficient built form analysis compliant with the ADG objectives and including actual dwelling types.

The majority of the density statement from the MCSP above is correct in terms of the impacts of change of further refinement of the form. However, the mathematics applied to calculate the GBA and GFA calculation are not correct. Also, the site area calculation is incorrect. The survey shows the site area as 21,170m2. Please see Attachment 2 site survey.

The simplest way to unpack this numerical calculation error is applied by stepping through the scenario that copies the exact number reference in the MCSP as shown in Table 3 (albeit using the incorrect site area for the base calculation as per the MCSP) and then applying the actual average unit size that is calculated when the provisions stated in the ADG are applied when calculating GFA and GBA.

MCSP Yield Study Table analysis site area = 20,400m2

Block	Storeys	Units	GBA (m^2)	Average unit size to GBA (m2)	GFA @ .75 of GBA (m2)	Average unit size to GFA (m2)
A	12	122	10324	84.62	7743	63.47
B	8	93	7944	85.42	5958	64.06
C	8	47	4000	85.11	3000	63.83
D	8	52	4464	85.85	3348	64.38
E	8	68	5850	86.03	4387.5	64.52
F	8	83	7088	85.40	5316	64.05
G	6	62	5310	85.65	3982.5	64.23
H	6	46	3978	86.48	2983.5	64.86
I	6	98	8394	85.65	6295.5	64.24
Totals		**657**	**56182**	**85.51**	**43014**	**65.47**

Table 3- Yield analysis calculation. (blue – MCSP table, green – analysis).

It is noted that the MCSP states that further refinement of dwelling types and greater efficiency will result in higher or changed FSRs. This RS study shows this statement to be correct. The calculation shows that by applying the desired building type and maintaining a similar building footprint coverage (2% variance) with the rigour of further detailed design the efficiency has risen by 7% to 82%. Unfortunately, whereas the FSR will increase as anticipated by the MCSP the mathematical error in GBA calculation to GFA (and considering the legal definition of Gross Floor Area when calculating an actual FSR) provides an incorrect number far lower than what is actual in the MCSP. The actual number that should have been applied as the FSR against the dwelling yield of 657 in the MCSP is not 2:1 but approximately 2.7:1 for an average of 85m2 and 2.8:1 for 88m2 at an efficiency of 75%.

Table 4 shows a calculation of the proposed number of units in the MCSP (657) applying an 86m2 average unit rate based off a calculation of unit type mix applying ADG advised unit sizes. The 75% efficiency rate (net saleable area to gross floor area) is applied to by increasing the standard ADG unit sizes (it is noted that for the sake of a simple calculation less generous 1.25 is used. The exact calculation to determine 75% is actually 1.33 or 1 divided by 0.75) this provides the FSR rate. (It is noted that section 2B of the ADG advises that "…*a building envelope should be 25%-30% greater than the achievable floor area…"*). This is then applied to the site area to achieve the FSR calculation as determined by gross floor area. Note the actual area size of 21170m2 is applied as is the incorrect MCSP size of 20400m2. The rounded result is an FSR calculation similar to that of the RS scheme.

				MCSP unit number	Claimed average	site area MCSP	20400
	MCSP GFA claim	43014		657	65.47	site area actual	21170
	apartment percentage mix	Type/bed	ADG size min.	size of type at ADG compliant size at .75 efficiency rate (1.25)	Number of units by type	GFA.	FSR
	30%	1	50	62.5	197.1	12318.75	
	60%	2	75	93.75	394.2	36956.25	
	10%	3	95	118.75	65.7	7801.875	**2.70**
Totals	**100%**		**Average**	**86.88**	**657**	**57076.88**	**2.80**

Table 4 - MCSP review of actual yield with ADG application against the 657 count.

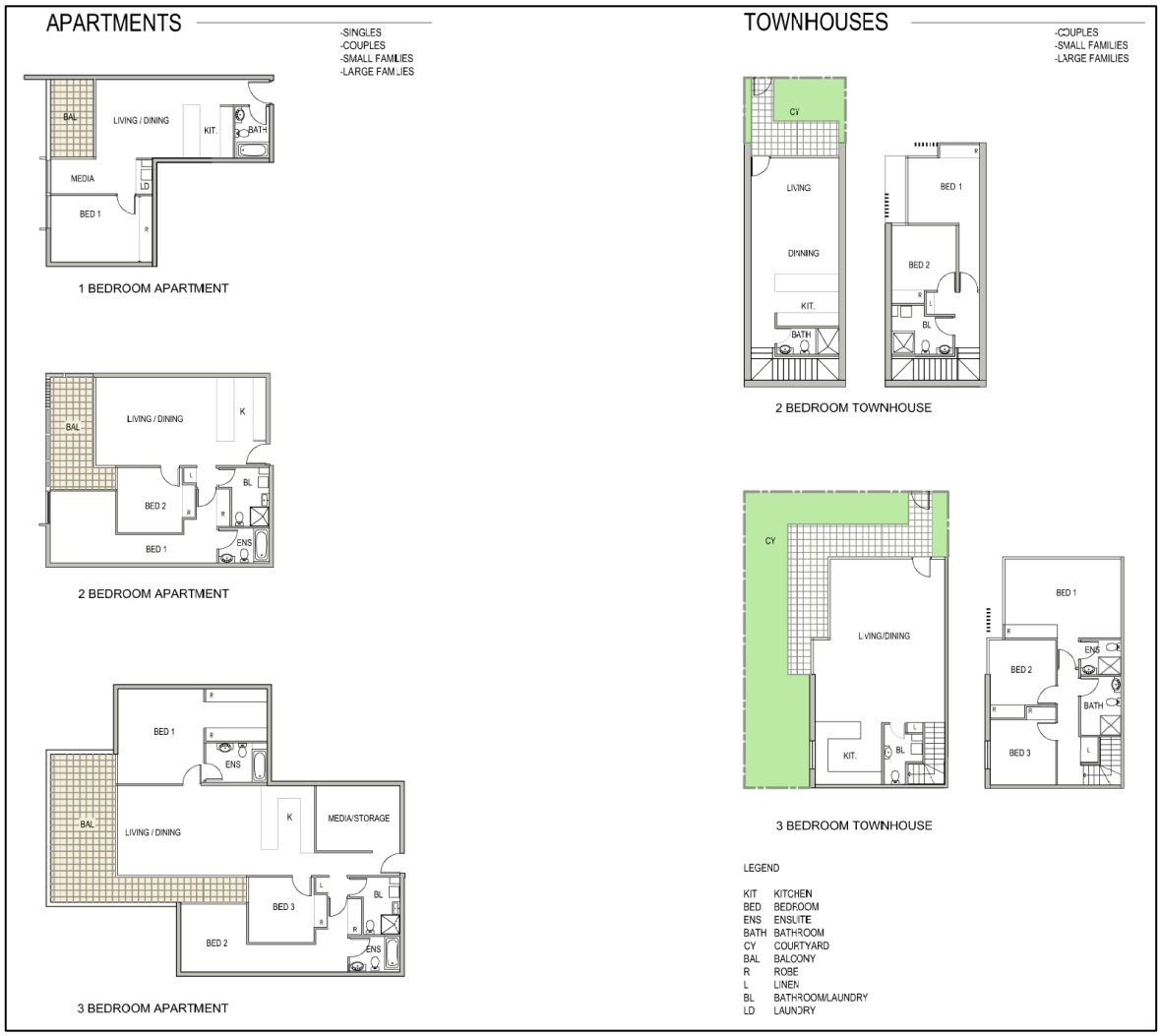
The RS report provides a detailed analysis schedule of the yields in various scenarios of the built form to achieve the MCSP number unit number of 657 (653 achieved in RS). Interestingly and predictably, the FSR number(s) from the assessments closely accords between the models when a simpler ADG calculation application as shown in the above MCSP (Table 4) yield review when the correct numerical calculation is applied to the MCSP yield. The RS model shows an FSR at 2.7-2.8 for a 653 yield and the MCSP a 2.7 – 2.8 for 657 with similar average unit sizes. Table 5 shows that the RS model benefits from improved efficiency as anticipated by the MCSP statement.

	GFA (m^2)	GBA (m^2)	COUNT	FSR	GFA/GBA (%)
McGregor Coxall (MCGC) aligning scheme	**55274**	**67760**	**623**	**2.611**	**81.57%**
MCGC + additional height to G, H & I	**57682**	**70956**	**653**	**2.725**	**81.29%**
MCGC tower scheme + additional height to G, H & I	**73152**	**90804**	**841**	**3.455**	**80.56%**

Table 5 - RS scheme yield analysis report conclusion. (Source RS Attachment 1 SK17).

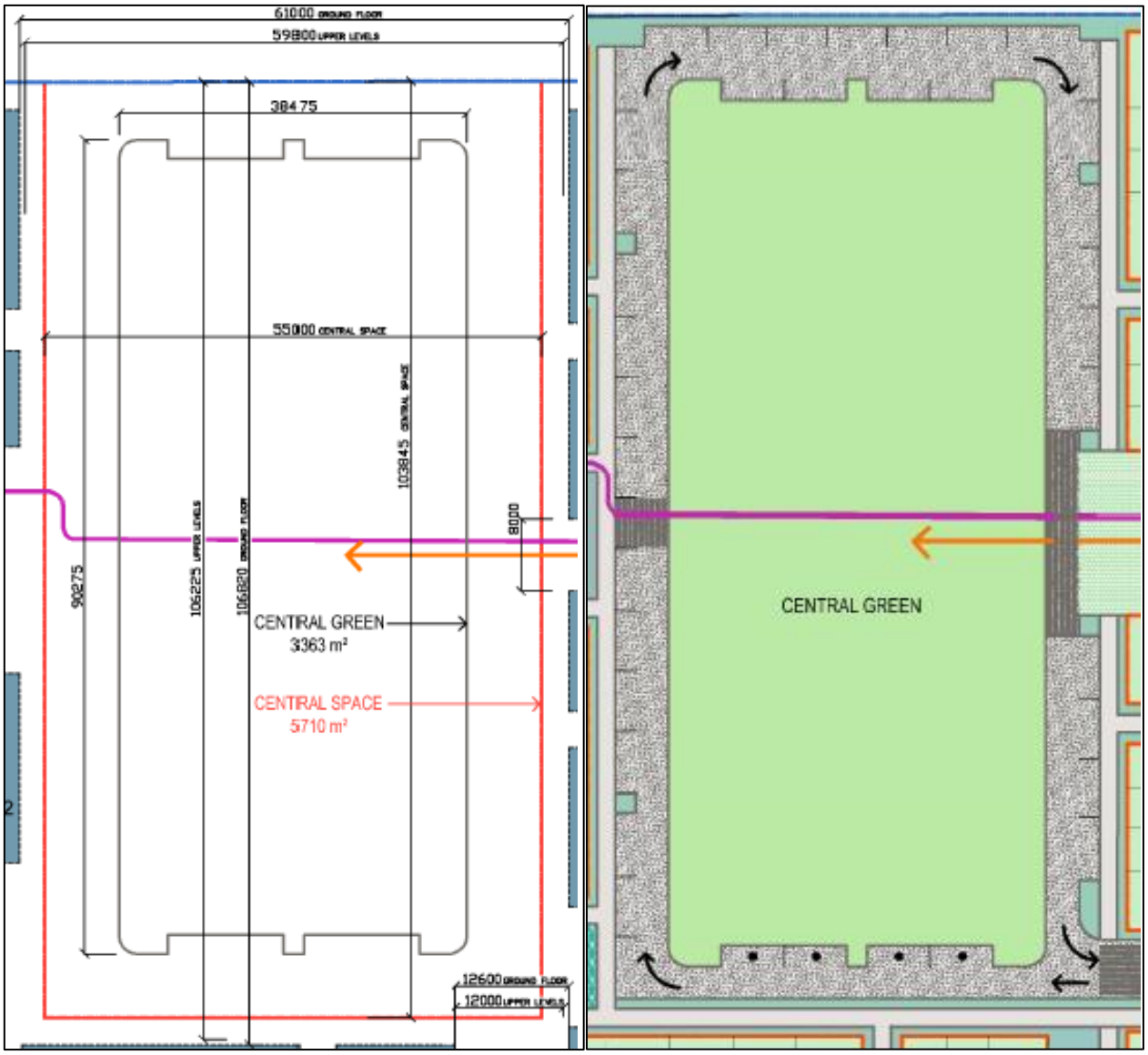
Unit Types

An integral attribute to the success of the new community created by the development will be the provision of a diversity of dwelling types that will cater for the current and emerging community of Regents Park. The RS has targeted the further interrogation of design with a diversity of apartment types including single and double storey (townhouses), some dual aspect dwellings and winter gardens suitable for intergenerational living. The RS built form features a hybrid of ground level townhouses and apartments above to achieve pedestrian scale and multiple access to dwellings from the streets. Figures 6 and 7 provide examples of dwelling types applied.



Figures 6 and 7 – Apartment and townhouse types. (Source RS Attachment 1 SK14).

Open space and Public Facilities



Figures 8 and 9 – Park dimensions and access location. (Source RS Attachment 1 SK02 and SK03).

Figures 8 and 9 shows the open space park north facing orientation is maintained. The open space in this location represents 28% of the land area. The park provides a very substantial and generous open space offering capable of being significantly enhanced for residential and wider community use. A large open space of 5,710m2 with dimensions of 55m and 104m is allocated. The open space incorporates perimetre roads as recommended by the MCSP with allocated public and car share scheme parking and pedestrian and cycle permeability. The internal street network with public accessible access also provides for the provision of share play opportunities and connected car parking for disabled access. Detailed design work will provide further enhanced design of the community space at later Part 4 stages. It is proposed that this open space will be provided for new residential and existing residents' community use.

Expanded and improved use secondary green space zones are created in the RS. These are represented on SK03 of the design set ground floor plan at Attachment 1. The cycle network is maintained as well as sufficient setbacks to the rail boundary for planting. Finally, the RS provides a childcare centre location with connection to open space, a bike shop, café and a provedore.

Value and treatment of Central Park

Previous discussion with council in earlier scheme reviews guided that council wanted a large central open space for the community in the project yet was not in favour of an acquisition of it. It is noted that council does have a limited budget and therefore the acquisition of land for parks, albeit considered almost priceless in the community attitude, is very expensive as is, and even greater when the ongoing maintenance of this type of social infrastructure is considered. If the land was zoned as RE1, which it is contended would better reflect the legal land use the council desires in the scheme, the applicant would be able to force the council to acquire the land under NSW law. The cost of the acquisition would be significant millions of dollars in land value.

The proponent does intend on providing the open space as per the methodology in the MCSP. By enabling it to be open and accessible to the public, it is tantamount to dedicating a substantial proportion of the site to council as a new public park but leaving the owners of it left with the liability and maintenance of the space that would benefit the public. It is important to consider what therefore is the value for the proposal for 5,710m^2 of the site to be dedicated to council as a park and related public access infrastructure.

Four scenarios have been devised to analyse the value of the park, both in land value terms and economic benefit terms. The scenarios differ on their land valuation ($2,500 to $4,000 per square metre) and their final catchment populations (5,000 and 15,000). The higher the valuation and higher the population catchment, the greater the net economic benefit of the park.

Benefit – Land Component

Table 6 outlines the land value of the park. Two scenarios have been used – a value of $2,500 per square metre and $4,000 per square metre as the price of the land[1]. This is the land component of the benefit of the creation of the park and is equal to the opportunity cost of the land. It is also noted that if council were to acquire a park in another location it would need to purchase and embellish land.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Size (m^2)	5,710	5,710	5,710	5,710
Land Value ($/m^2)	2,500	4,000	2,500	4,000
Catchment Population	5,000	5,000	15,000	15,000
Total Land Value ($)	14,275,000	22,840,000	14,275,000	22,840,000

Table 6 – Land Value of Park

As can be seen, the value of the park varies from $14.3 million and $22.8 million, depending on the per square metre value. This valuation has not been confirmed by a valuer and this can be further interrogated at later stages of the plan making process if required. The value is taken from a review of recent historical land prices in the precinct.

Table 7 details the costs involved in creating the park under all valuation and population scenarios. It would require demolition and levelling, landscaping and the installation of equipment (such as play equipment, barbecues, etc). The park will, therefore, cost around $2.7 million to create (under all scenarios), on top of the land value.

[1] The market value of the land is unknown at the time of writing this report. However, the estimates used are based on a review of available properties in the local area. Council would be required to pay a similar cost to the market value to acquire land from a home owner. Furthermore, a land owner would value the land at its current market value, rather than the Valuer-General's valuation, as that ensures that the land owner is compensated for the full value of the land. $2,500 to $4,000/m^2 has been assumed as a reasonable value of land in the area, based on recent sales. It does not represent an intention to value the land. The actual value of the land will be determined in the negotiation between the purchaser and the vendor. To the extent that this is more or less than $2,500 to 4,000/m^2, the value of the park will be more or less.

	Cost	Quantity	Total
Demolition ($)	140,000	1	140,000
Levelling (/m^2) ($)	200	5,710	1,142,000
Landscaping (/m^2) ($)	200	5,710	1,142,000
Equipment ($)			250,000
Creation Cost ($)			2,674,000

Table 7 – Costs of Park Creation – all scenarios

The total benefit of the land and creation component of the park would be between $16.9 million and $25.5 million as shown in Table 8.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Land Cost ($)	14,275,000	22,840,000	14,275,000	22,840,000
Creation Cost ($)	2,674,000	2,674,000	2,674,000	2,674,000
Total Cost ($)	16,949,000	25,514,000	16,949,000	25,514,000

Table 8 – Total Land and Creation Costs

Benefit – Use Component

The park will benefit the wider community (current residents from around the area and new residents in the proposed apartments).

The benefit is derived from the price that the average person places on leisure time, the amount of visitation, the travel time to the park, and the time spent in the park.

The estimated visitation to the park is based on the Zanon model[2], which estimates the number of visitors to a public park based on four attributes – standard of service, catchment population, area of the park and public awareness of the park. The model has been shown to provide good forecasts for visits to major parks and like spaces in Melbourne. It is assumed that park visitation is similar in Sydney and Melbourne.

Recently, Mr Marcus Spiller of SGS Economics and Planning[3], used the Zanon model to estimate visitation to a proposed public square as part of the redevelopment of the Queen Victoria Market in Melbourne.

The Zanon model uses the following formula:

$$Visits = 27 \times Standard\ of\ Service^{1.04} \times Catchment\ Population^{0.19} \times Area^{0.11} \times Public\ Awareness^{0.47}$$

where:

- Standard of Service is a figure between 0 and 100 indicating the "quality" of the park, judged by reference to amenities provided, including seating, shelters, barbecues, landscaping, etc
- Catchment Population is the population within a local catchment
- Area is the area of the proposed park in hectares
- Public awareness is the percentage of a random population that would be aware that the park exists.

Table 9 details the assumptions made for the variables in the Zanon model.

[2] A Model for Estimating Urban Park Visitation –Parks Victoria Occasional Paper Series, Dino Zanon, 1998

[3] Melbourne Am C245 Queen Victoria Market Precinct Renewal Evidence report of Marcus Spiller April 2016, SGS Economics and Planning

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Standard	90	90	90	90
Population	5,000	5,000	15,000	15,000
Area (ha)	0.571	0.571	0.571	0.571
Public Awareness	80	80	80	80
Visits	108,209	108,209	133,326	133,326

Table 9 – Estimated Park Visitation

As detailed in Table 9, the Zanon model calculates that between 108,209 and 133,326 visits per year would be generated by the park, depending on the final catchment population.

The value of leisure time is assumed to be $14.43[4].

Table 10 details the economic benefit of the use of the park. It is assumed that the median return travel distance would be 1 kilometre. At a walking travel speed of 5 km/h, the median return travel time would be 0.2 hours. It is further assumed that, once there, the median time spent at the park would be an hour. Therefore, the value of journeys to and from the park would be between $312,291 and $384,779 per year, and the value of time spent at the park would be between approximately $1.6 million and $1.9 million per year. The total annual value of visits would be between $1.9 million and $2.3 million.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Estimated annual visitation (no.)	108,209	108,209	133,326	133,326
Assumed median travel distance return (km)	1	1	1	1
Travel speed (walking) (km/h)	5	5	5	5
Median travel time to and from (hrs)	0.2	0.2	0.2	0.2
Time spent at open space (hrs)	1	1	1	1
Value of leisure time ($)	14.43	14.43	14.43	14.43
Value of journey ($)	312,291	312,291	384,779	384,779
Value of Time Spent ($)	1,561,453	1,561,453	1,923,897	1,923,897
Value of visits/ year ($)	1,873,743	1,873,743	2,308,677	2,308,677
Capitalised value of visits (50 Years) ($)	$40,252,102	$40,252,102	$49,595,423	$49,595,423

Table 10 – Economic Benefit of Park Dedication

The capitalised value of visitations to the park, over 50 years, would be between $40.3 million and $49.6 million.

Costs

Dedicating a public park to council will create an asset worth over $65 million. However, council will also need to fund the maintenance of the park and upgrades to it over time. Ongoing maintenance includes mowing, rubbish collection and removal, landscaping and amenities cleaning (e.g. barbecues, etc).

In the absence of definitive cost data, a number of assumptions have been made for ongoing maintenance of the park. Table 11 outlines these assumptions.

[4] ABS national accounts data.

Ongoing	Times	Hours	Cost	Annual Cost (2019 Dollars)
Mowing	26	4	50	5,200
Rubbish Removal	52	1	50	2,600
Landscape Maintenance	26	4	50	5,200
Amenities Cleaning	52	3	50	7,800
Total				**20,800**

Table 11 – Ongoing Maintenance of Dedicated Park – Cost Assumptions – All Scenarios

It is also likely that every 15 years or so, the park will need upgrading, facilities will need replacing and landscaping will need renewal. It is assumed that council will spend $150,000 (in 2019 dollars) to upgrade the park in Years 16, 31 and 45. Therefore, at an annual inflation rate of 2 per cent, it is assumed that council will spend $201,880 in Year 16, $271,704 in Year 31 and $365,678 in Year 46.

Under the forgoing assumptions, the net present value of the ongoing and capital costs would be $894,641 over 50 years under all scenarios.

Total Benefit

Taking the land value, the cost of creating the park and value of visitation, the total economic benefit of the park is estimated to be between $57.2 million and $75.1 million, depending on the value of the land and the catchment population. This is offset by the ongoing costs of park maintenance and upgrades of nearly $900,000 over the 50-year life of the park. As detailed in Table 12, the net benefit of the park is estimated to be between $56.3 million and $74.2 million over its assumed 50-year life.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Land Cost ($)	14,275,000	22,840,000	14,275,000	22,840,000
Creation Cost ($)	2,674,000	2,674,000	2,674,000	2,674,000
Visitor Benefit ($)	$40,252,102	$40,252,102	$49,595,423	$49,595,423
Total Benefit ($)	57,201,102	65,766,102	66,544,423	75,109,423
Total Cost ($)	894,641	894,641	894,641	894,641
Net Benefit ($)	56,306,461	64,871,461	65,649,782	74,214,782

Table 12 – Total Economic Benefit of Park Dedication

Delivery and Provision of the Central Open space as a Public Park and other benefits

Parks are tangible and socially beneficial to the residents of the scheme and if provided for public use create significant value to the wider community. The tangible and community benefits, through the model converts these to an economic value above that of just a land value.

The RS supports the methodology of the open space for the use of the wider community, the cost burden of its provision for continual public access places significant ongoing cost for the project in perpetuity whilst providing significant value to the community.

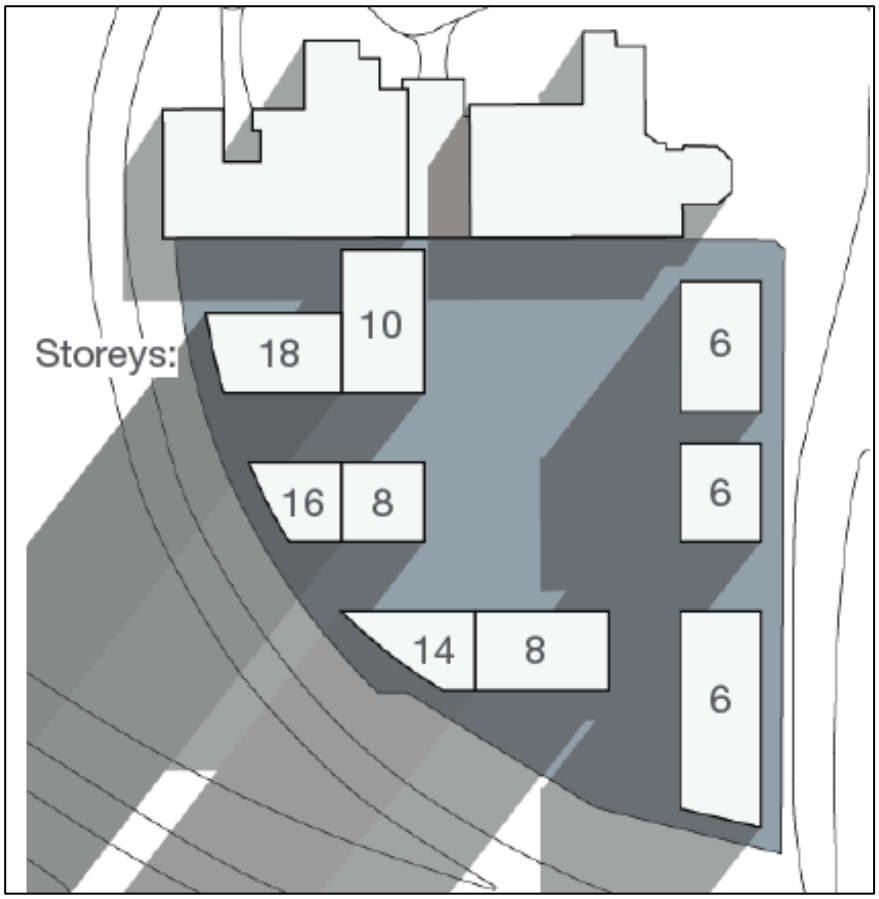


Figure 10 – MCSP additional heights model. (Source MCGC Alternate Cast Shadow Study pg. 33).

This RS has tested the higher density options that were contained in the MCSP additional documents where increased heights on blocks A, B, C and E as shown in Figure 10. The RS model has on refinement adopted these heights on these blocks. The shadow impacts and performance achieved is similar to that between the MCSP and the RS as the massing and location are similar (albeit with greater separation distances and reduced building depths in the RS model).

These greater heights have been tested and calculated for density in the RS model to provide a calculation of the FSR in these increased heights scenarios. Table 5 shows that the increase results in a density calculation of 73,152 GFA with an efficiency rate of 80.56%. This equates to an FSR control of 3.45:1. This takes the dwelling yield from 653 to 841.

Previous traffic study results, peer reviewed and agreed with council, conclude that the site can on traffic impact ground accommodate a density for this site and the adjoining currently zoned industrial land (if zoned as R4) at a density of 4:1. Thus this increased density scenario of 3.45 is acceptable on traffic grounds.

As introduced in this response submission, on 13 February 2019 we received the urban design review commissioned by the department. The review sought to "*propose an appropriate maximum FSR controls for the site before the planning proposal is exhibited, and that this FSR not be subject to the provision of public benefits*".

The MCSP report provides that acceptable level (657 dwellings) supported by the RS at a yield of 653 dwellings with relevant land use controls. Noting the impact and cost of the provision of a public park held by the landowner it is considered acceptable for the scheme to support the higher proposed yield adopting the additional MCSP heights to a maximum of 18 levels in specified locations with the no cost provision of the park with access to the community. Further, such an offer would also support the originally proposed upgrades to the proposed cycle network and linkages to Regents Park train station.

Conclusion

This submission has been prepared in response to the MCSP prepared to "*propose an appropriate maximum FSR controls for the site before the planning proposal is exhibited, and that this FSR not be subject to the provision of public benefits".*

While the Stanisic scheme did meet the required benchmarks and provide a high-quality development scheme against the SEPP and ADG criteria, this submission has responded to the MCSP, with a view to adopting the layout, urban form, building footprints and open space offering and providing an analysis how the scheme can be transformed into an actual development outcome.

In that context, the layout, urban form, footprints and provision of open space identified in the MCSP is commended. The RS has subsequently provided a refined study to a near development application level of detail. This has included the following:

- The building footprints have been altered to accommodate apartment layout and ensure building separation required by the ADG;
- A refined study to conclude a clear calculation of the density of the MCSP and the RS scheme to provide reliable land use controls to deliver the dwelling yields in the MCSP.
- Residents parking is confined to the basement, with visitor parking, car share scheme child care and open space access only on the shared streets through the site.
- Due to the slight changes in the building footprints and depths to comply with building separation and apartment layout, the large central park has shifted a few metres east and is 300sq.m smaller. However, due to smaller building footprints the scheme has actually facilitated more overall open space, with more generous spaces between buildings. This compliments the design objective of the Stanisic scheme which was to create a variety of different space for different types of recreational uses at different times of the year.
- The building height philosophy has been adopted with taller buildings away from Auburn Road:
    - It is considered 8 storey massing can be accommodated along the park edge i.e. rear of the Auburn Road buildings, as these have no visibility impact on Auburn Road and transition development form into the site. They also perform well from a solar consideration and increase passive surveillance within the site.
    - The graduation of height along the railway line is also supported. These buildings have no impact given their more isolated location, perform very well form a solar perspective, and have no to little visual impact from Auburn Road. The base scheme between 8 and 12 storeys is supported, however it is clear that heights from 10 to 18 storeys also have very little impact. Even on a smaller scheme there is no transition from 8 to 12 storeys, and part 12 storeys has not been contemplated along the rail line for all buildings.
- The value of the large open space area is considerable. MCSP provides study on a scheme with higher heights on specifically located blocks. The RS has interrogated and refined the MCSP to calculate the yield density. The adoption of the increased land use controls, supported on traffic impact, design and amenity provisions will enable the economics of the project to support the delivery of the open space for continued community use and provide the additional public benefit items for the community.

Therefore, it is recommended that the department support the exhibition of a scheme which provides the higher densities and heights as refined in the RS as shown in Table 5 at a yield of 841 dwellings with the provision of the benefits to the council in a no cost scenario. Such an exhibition would benefit from the provision of a draft development control plan and detailed public benefits submission to accompany any exhibition documentation. Noting the work undertaken by the applicant a draft DCP and public infrastructure study can be created by the applicant team for review at this time if supported by the delegate.

Finally, on release of the MCSP we contacted the council seeking a meeting to discuss the report. Unfortunately, a time has not been arranged prior to the required submission date.

We look forward to meeting with the department and if possible the council in the consideration of this response.

Thank you for your consideration of this submission as you finalise the Planning Proposal.

Yours sincerely

Matthew Daniel
Development Director
Pacific Planning

James Matthews
Planning Director

Attached:
Attachment 1 – Review Scheme.
Attachment 2 – Site survey
Attachment 3 - Stanisic response to MC evaluation

Attachment 1 – Review Scheme.

REVIEW SCHEME

30-46 AUBURN ROAD, REGENTS PARK

MARCH 25 2019

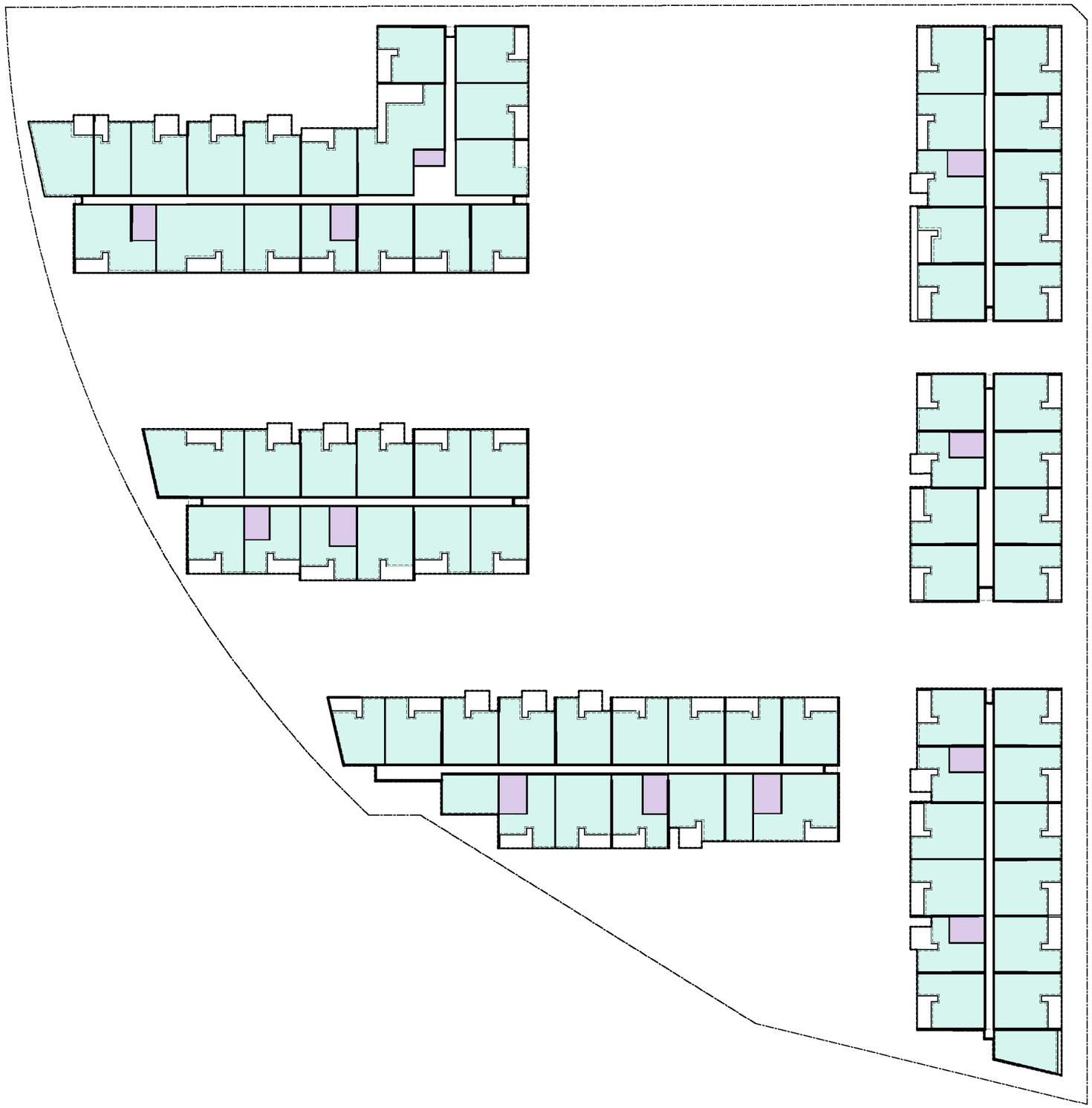
PROPOSED BUILDING FOOTPRINTS

0 2 5 20 40
SCALE (m) 1:700 @ A3

BUILDING SEPARATION

GROUND FLOOR PLAN

LEVEL 1



LEVEL 2 - 6

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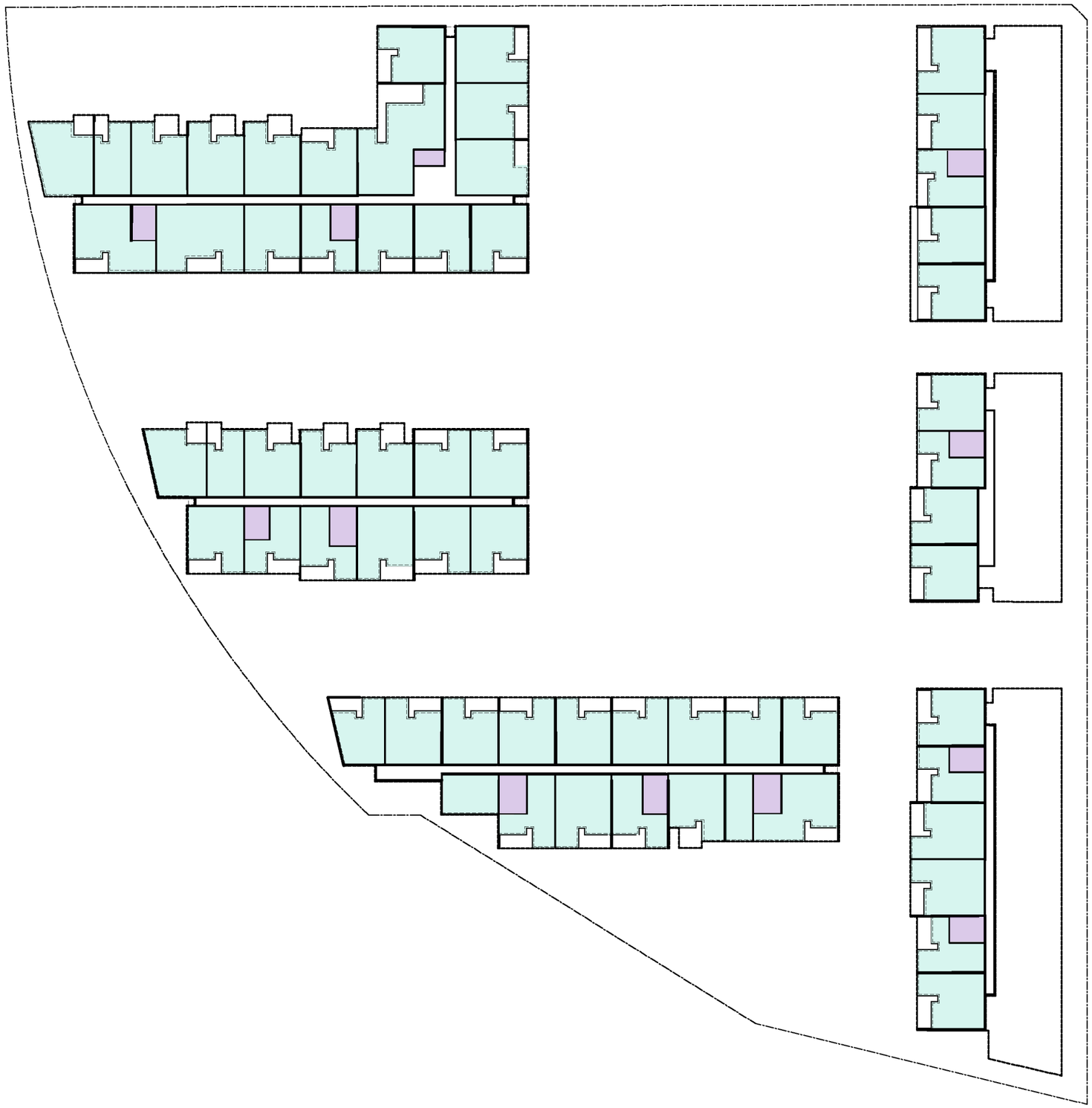

LEVEL 7 - 8

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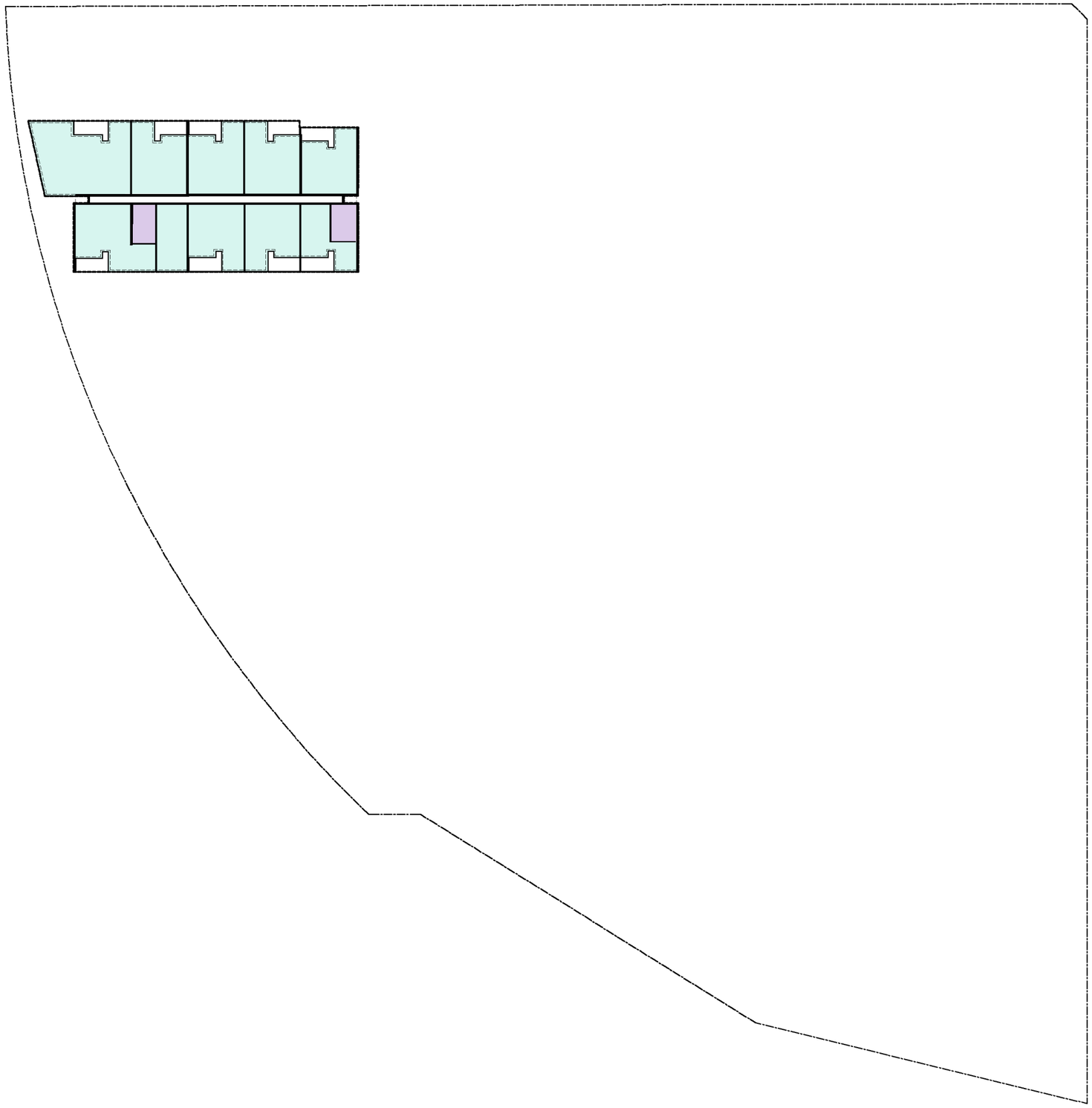

LEVEL 9 - 10

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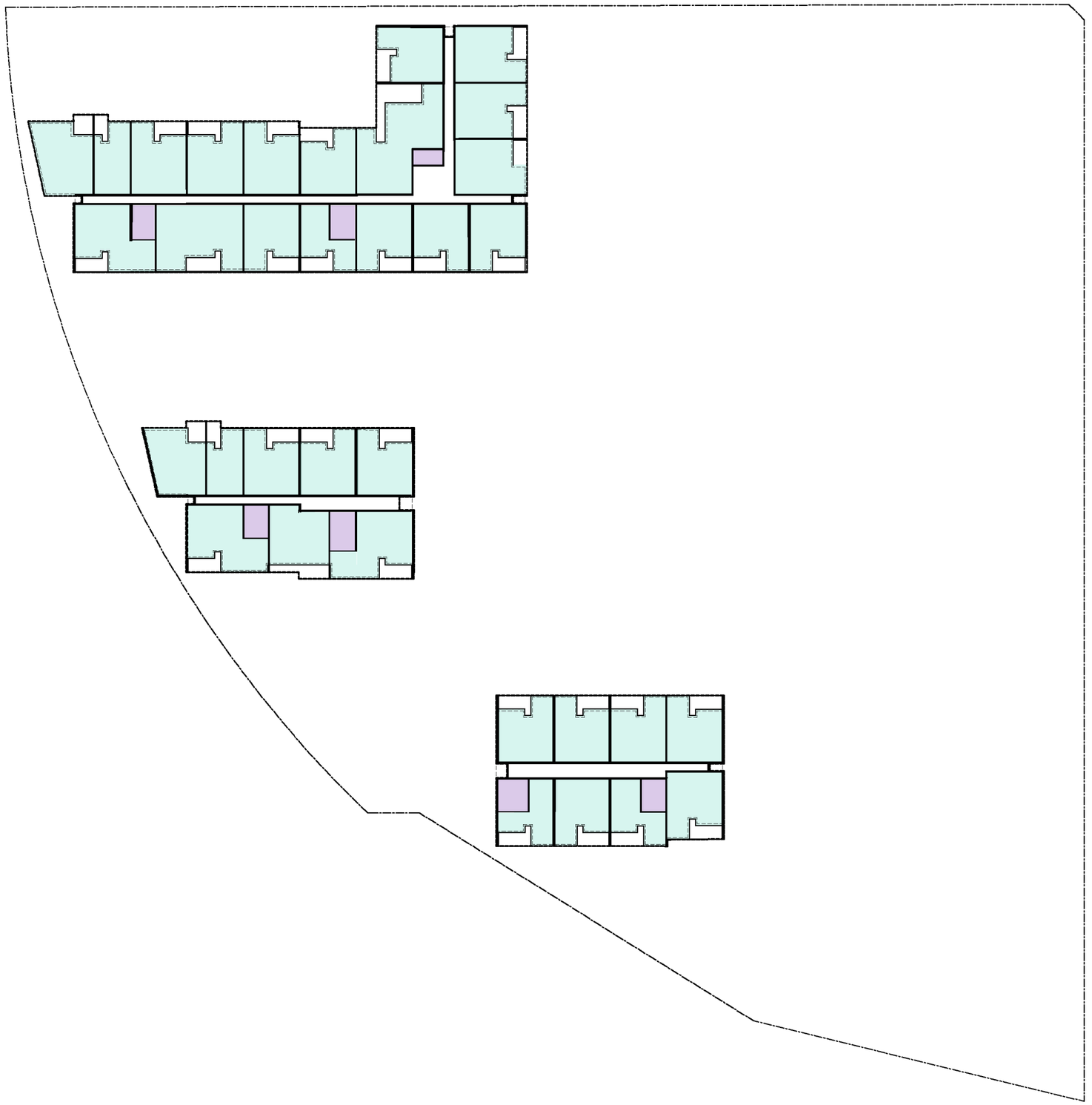

LEVEL 9 - 10 TOWER FORM

0 2 5 20 40

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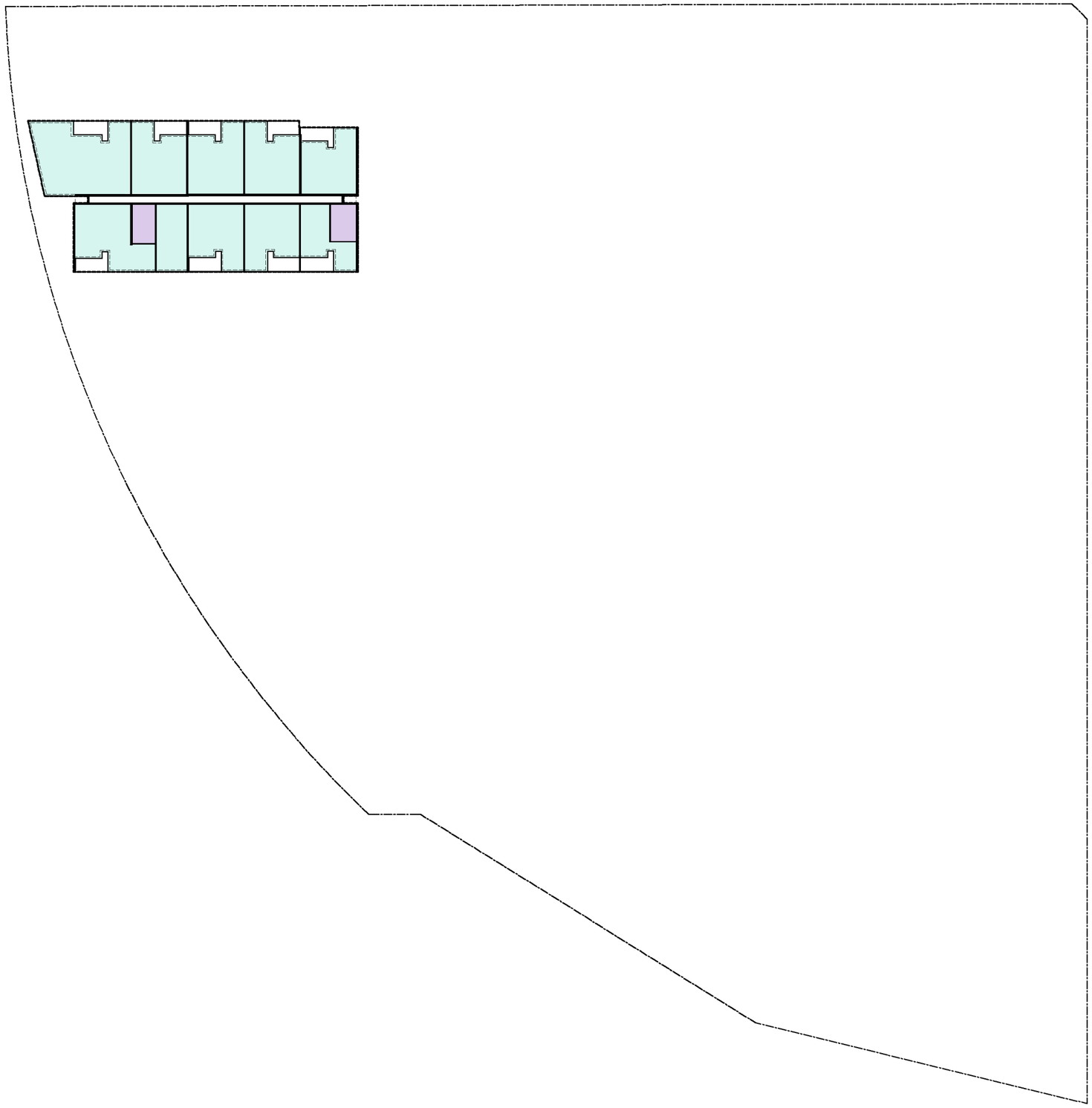

LEVEL 11 - 12

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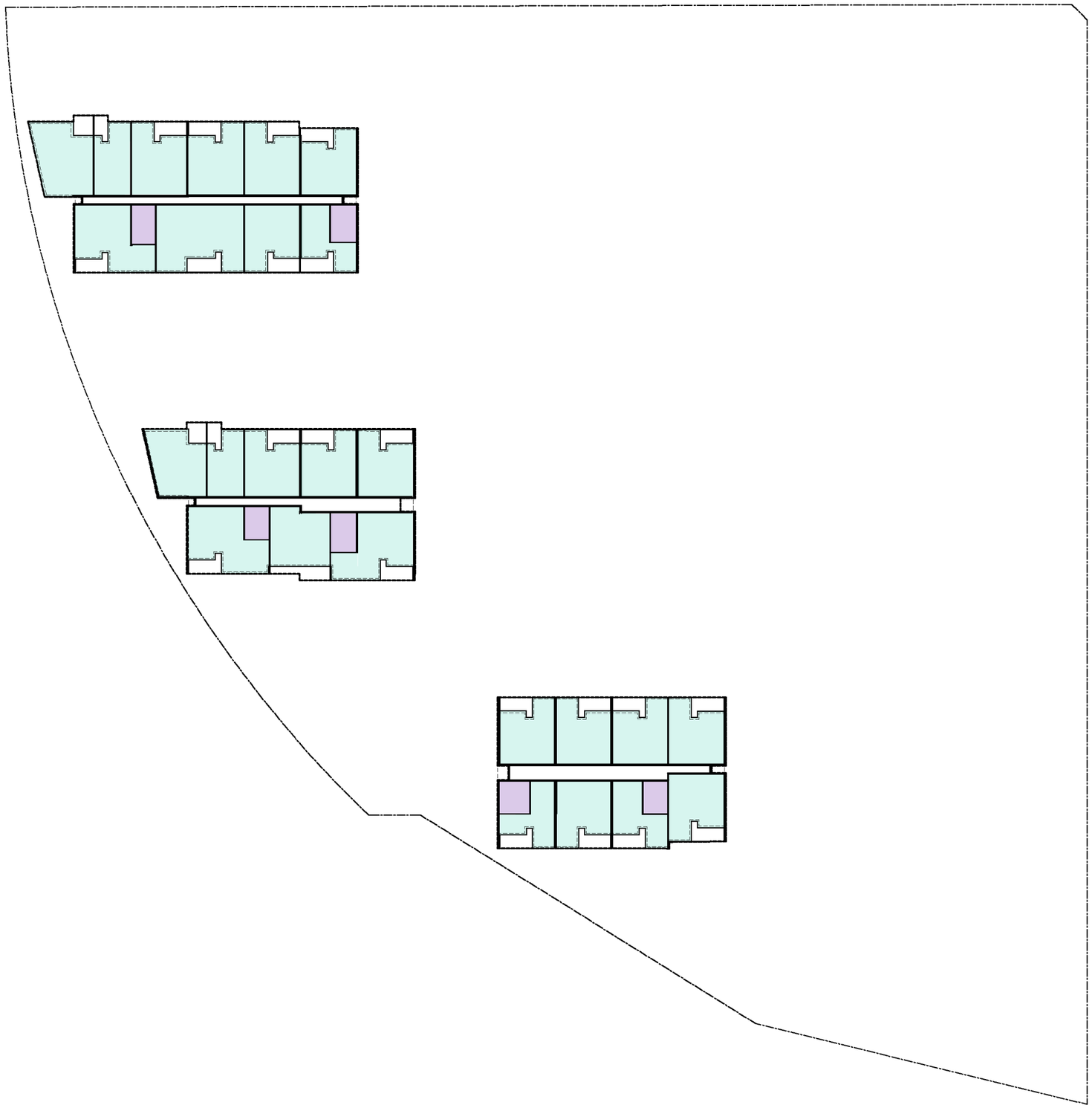

LEVEL 11 - 12 TOWER FORM

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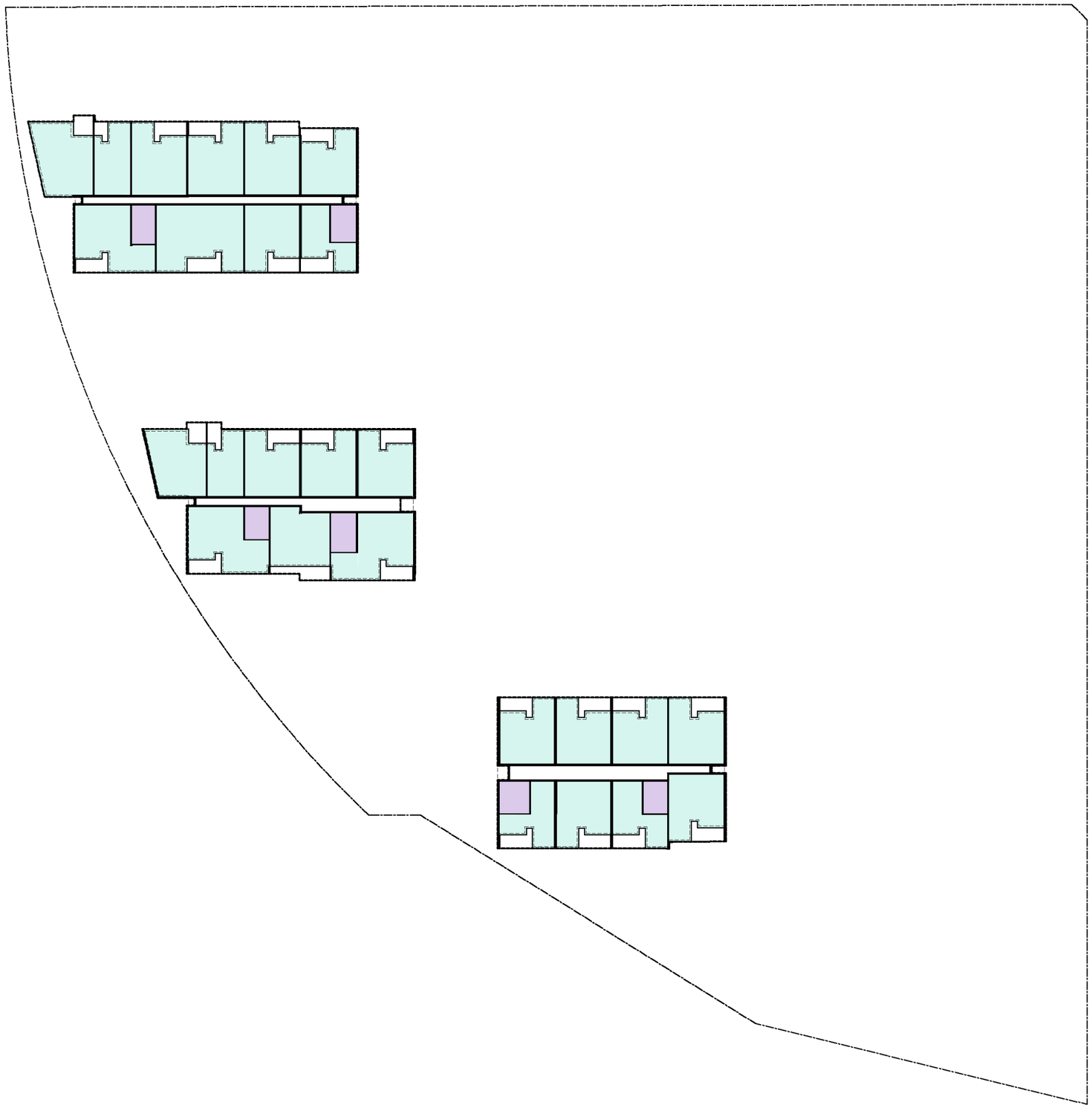

LEVEL 13 - 14

TOWER FORM

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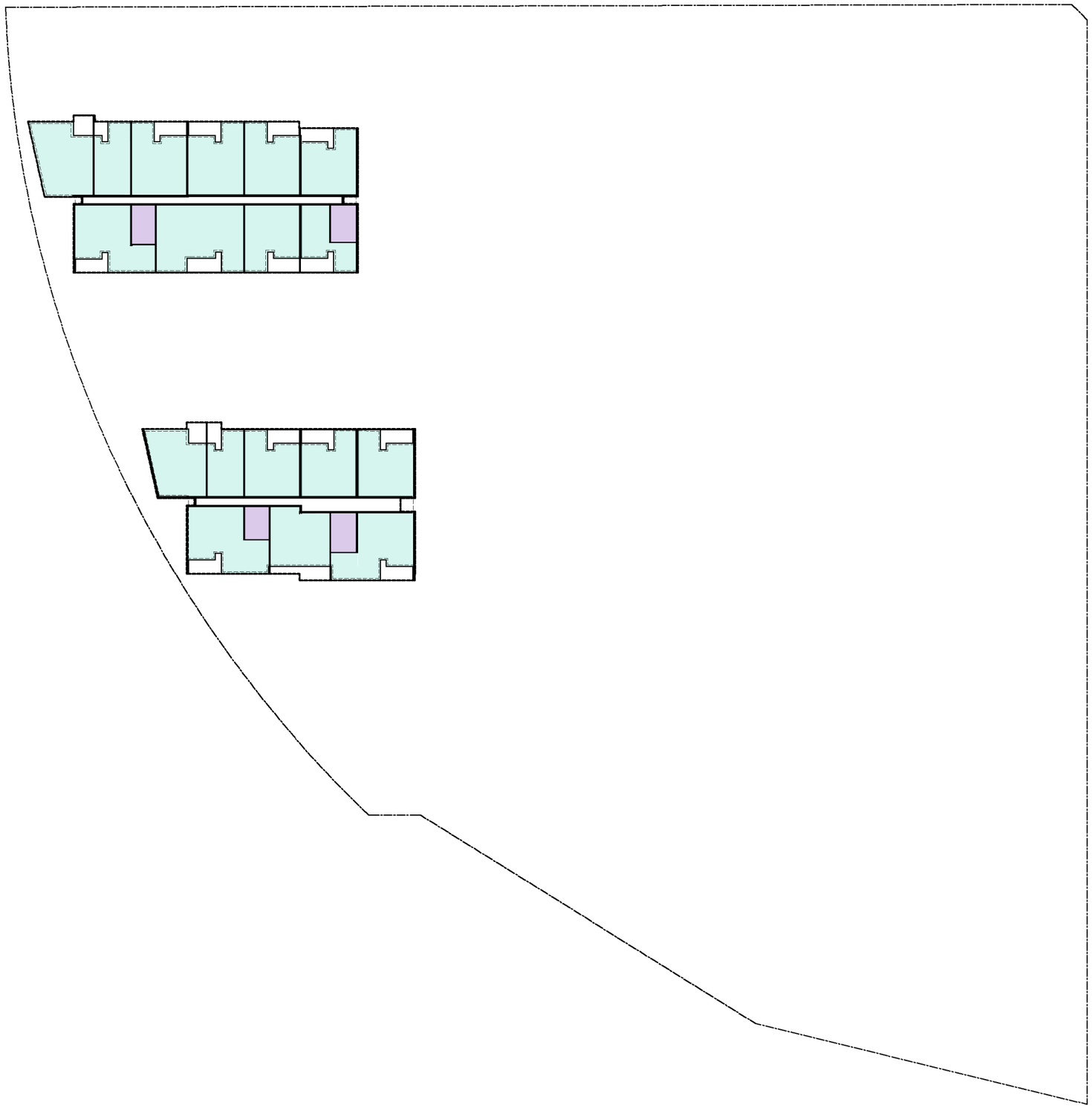

LEVEL 15 - 16

TOWER FORM

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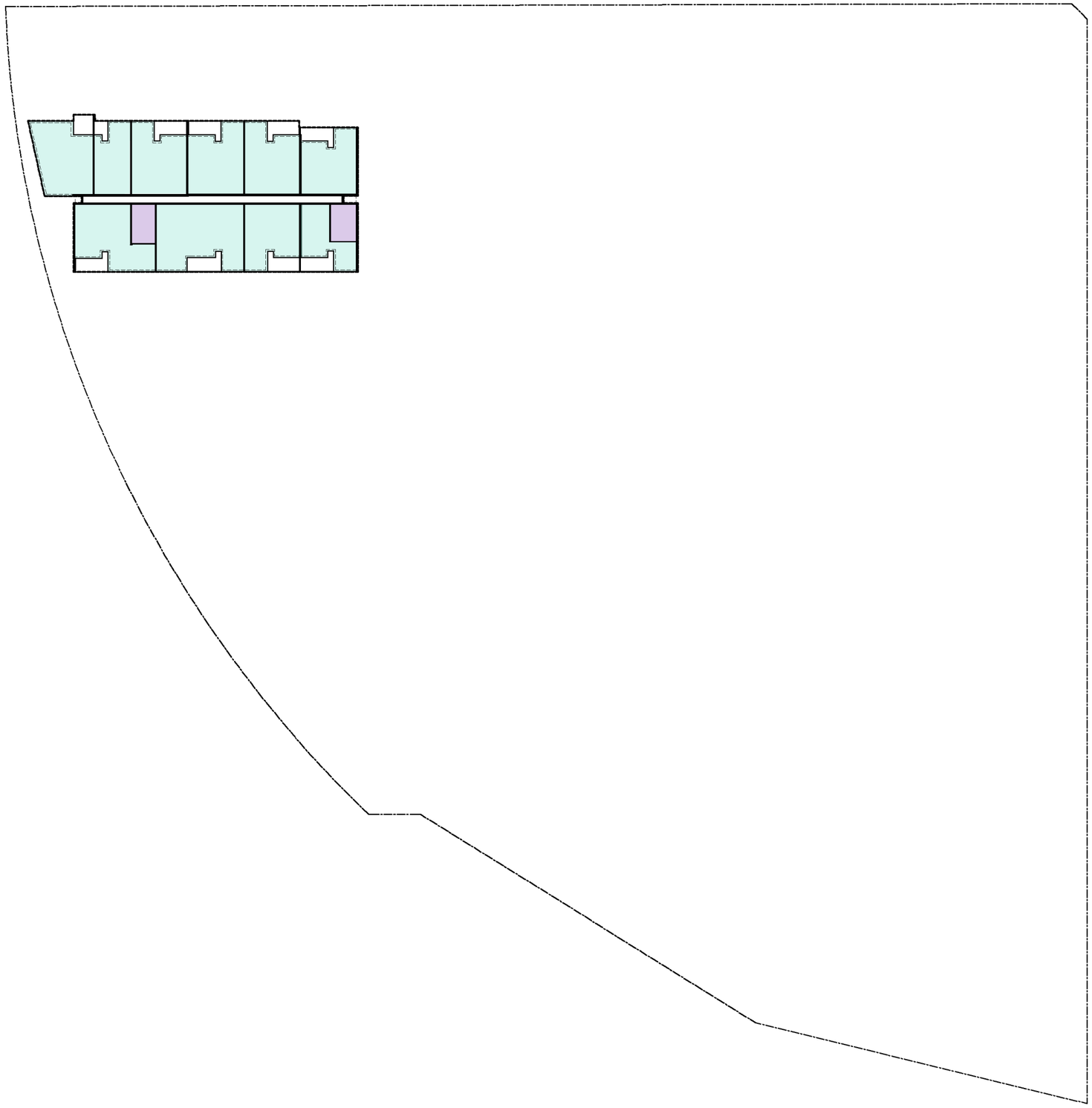

LEVEL 17 - 18

TOWER FORM

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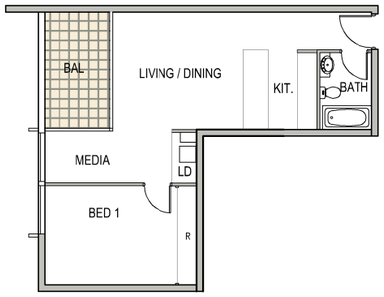
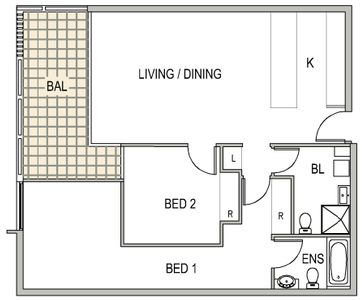
SCALE (m) 1:700 @ A3

APARTMENTS

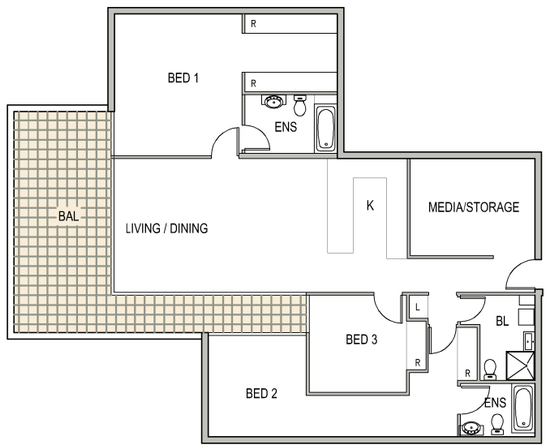
-SINGLES
-COUPLES
-SMALL FAMILIES
-LARGE FAMILIES



1 BEDROOM APARTMENT



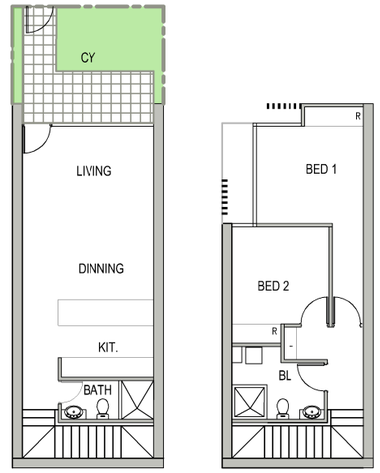
2 BEDROOM APARTMENT



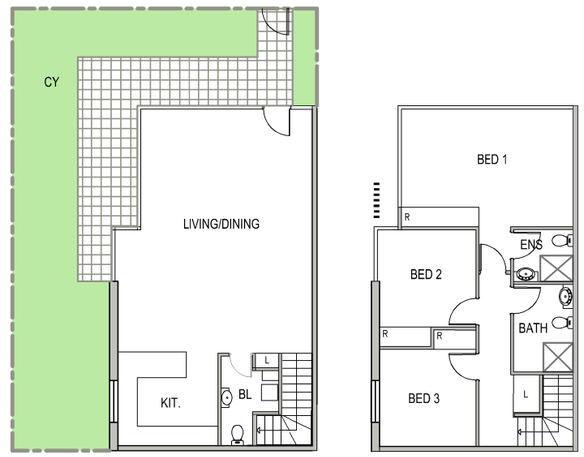
3 BEDROOM APARTMENT

TOWNHOUSES

-COUPLES
-SMALL FAMILIES
-LARGE FAMILIES



2 BEDROOM TOWNHOUSE

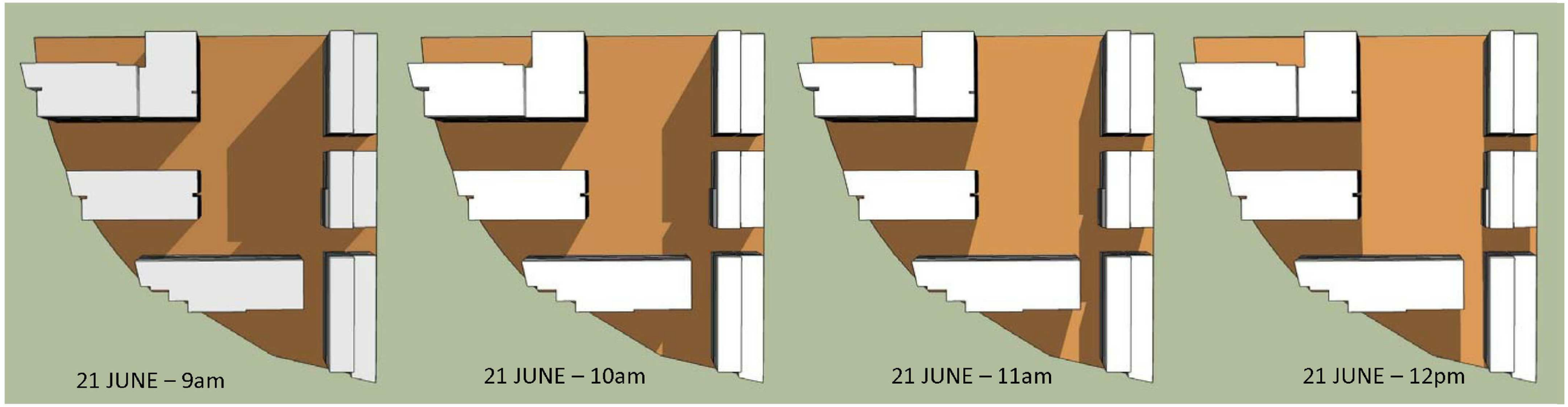


3 BEDROOM TOWNHOUSE

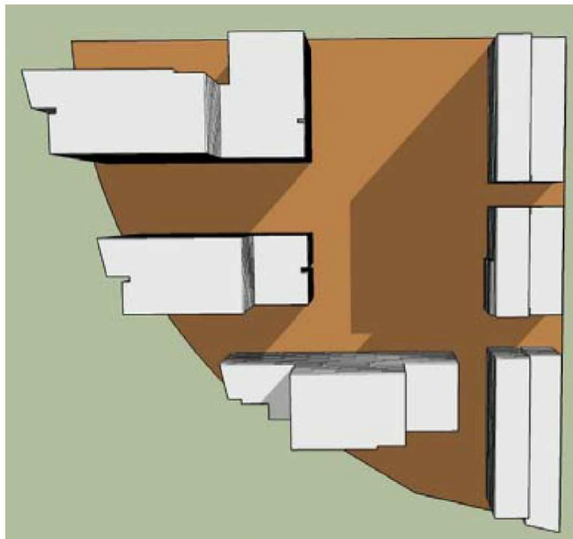
LEGEND

KIT	KITCHEN
BED	BEDROOM
ENS	ENSUITE
BATH	BATHROOM
CY	COURTYARD
BAL	BALCONY
R	ROBE
L	LINEN
BL	BATHROOM/LAUNDRY
LD	LAUNDRY

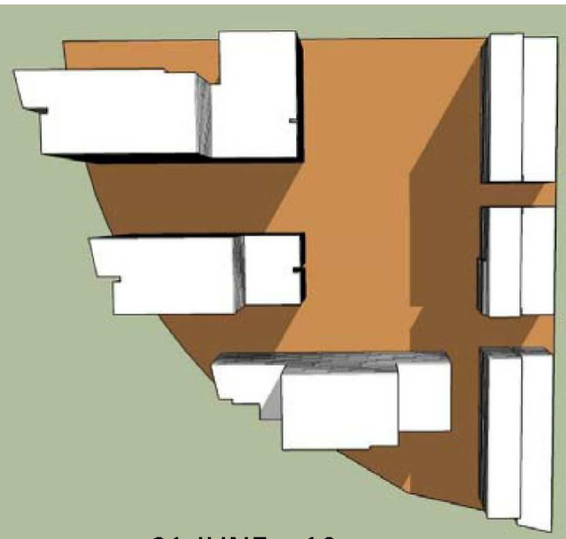
HOUSING TYPOLOGY



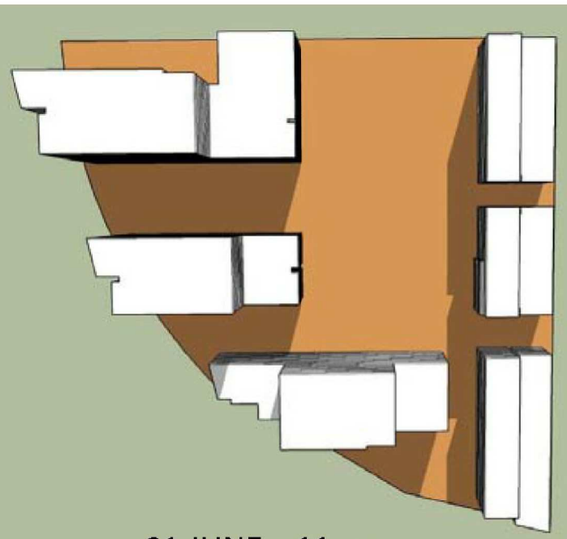
SHADOW DIAGRAMS



21 JUNE – 9am



21 JUNE – 10am



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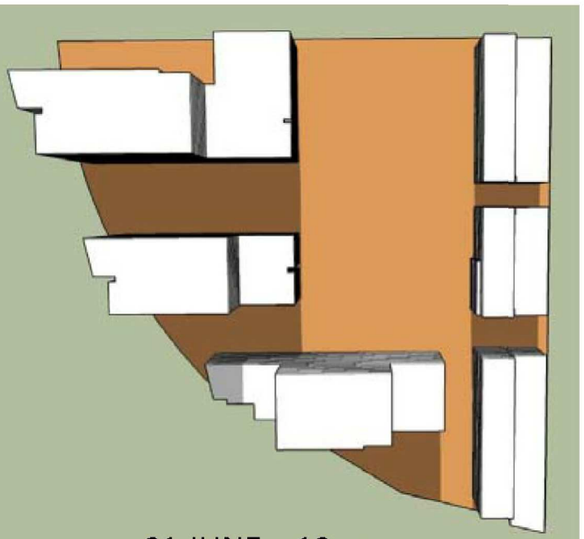

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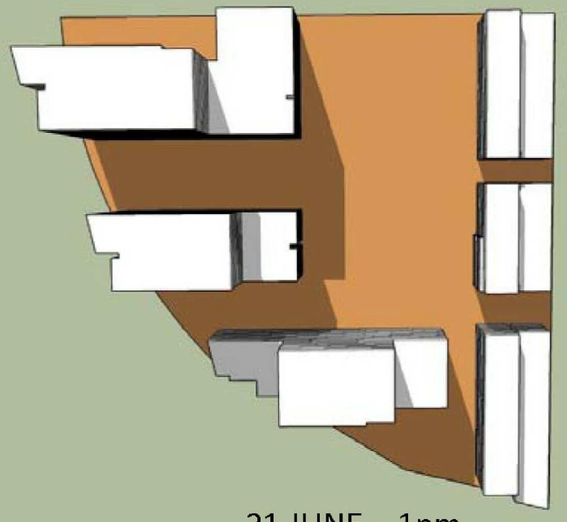
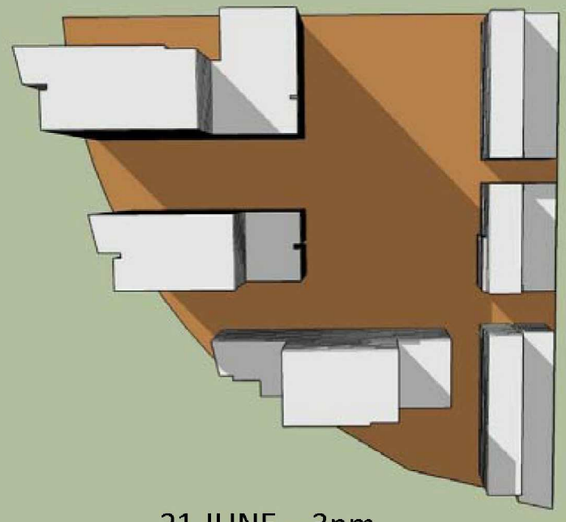


21 JUNE – 1pm

21 JUNE – 2pm



21 JUNE – 3pm

SHADOW DIAGRAMS TOWER FORM

LEVEL	BUILDING A			BUILDING B			BUILDING C			BUILDING D			BUILDING E			BUILDING F1 + F2			BUILDING G			BUILDING H			BUILDING I			SUBTOTAL		
	GFA (m^2)	GBA (m^2)	COUNT	GFA (m^2)	GBA (m^2)	COUNT	GFA (m^2)	GBA (m^2)	COUNT	GFA (m^2)	GBA (m^2)	COUNT	GFA (m^2)	GBA (m^2)	COUNT	GFA (m^2)	GBA (m^2)	COUNT	GFA (m^2)	GBA (m^2)	COUNT	GFA (m^2)	GBA (m^2)	COUNT	GFA (m^2)	GBA (m^2)	COUNT	GFA (m^2)	GBA (m^2)	COUNT
GROUND	903	990	8	803	857	9	687	763	11	337	352	8	642	724	9	602	651	11	751	811	11	646	701	9	983	1081	15	6354	6930	91
LEVEL 1	741	883	5	944	1125	3	698	832	2	348	410	0	665	793	2	609	727	1	862	1007	1	662	795	0	1040	1229	1	6569	7801	15
LEVEL 2	866	1057	10	763	956	8	618	850	8	320	388	4	634	799	8	600	734	8	818	1019	10	641	787	8	997	1244	13	6257	7834	77
LEVEL 3	866	1057	10	763	956	8	618	850	8	320	388	4	634	799	8	600	734	8	818	1019	10	641	787	8	997	1244	13	6257	7834	77
LEVEL 4	866	1057	10	763	956	8	618	850	8	320	388	4	634	799	8	600	734	8	818	1019	10	641	787	8	997	1244	13	6257	7834	77
LEVEL 5	866	1057	10	763	956	8	618	850	8	320	388	4	634	799	8	600	734	8	818	1019	10	641	787	8	997	1244	13	6257	7834	77
LEVEL 6	866	1057	10	763	956	8	618	850	8	320	388	4	634	799	8	600	734	8	818	1019	10	641	787	8	997	1244	13	6257	7834	77
LEVEL 7	866	1057	10	763	956	8	618	850	8	320	388	4	634	799	8	600	734	8	410	545	5	320	419	4	474	634	6	5005	6382	61
LEVEL 8	866	1057	10	763	956	8	618	850	8	320	388	4	634	799	8	600	734	8	410	545	5	320	419	4	474	634	6	5005	6382	61
LEVEL 9	866	1057	10	763	956	8	618	850	8				634	799	8													2881	3662	34
LEVEL 10	866	1057	10	763	956	8	618	850	8				634	799	8													2881	3662	34
LEVEL 11	866	1057	10				618	850	8				634	799	8													2118	2706	26
LEVEL 12	866	1057	10				618	850	8				634	799	8													2118	2706	26
LEVEL 13	866	1057	10				618	850	8				634	799	8													2118	2706	26
LEVEL 14	866	1057	10				618	850	8				634	799	8													2118	2706	26
LEVEL 15	866	1057	10				618	850	8																			1484	1907	18
LEVEL 16	866	1057	10				618	850	8																			1484	1907	18
LEVEL 17	866	1057	10																									866	1057	10
LEVEL 18	866	1057	10																									866	1057	10

BUILDING FOOTPRINTS	BUILDING A	BUILDING B	BUILDING C	BUILDING D	BUILDING E	BUILDING F1 + F2	BUILDING G	BUILDING H	BUILDING I	SUBTOTAL
	990 m^2	857 m^2	763 m^2	352 m^2	724 m^2	651 m^2	811 m^2	701 m^2	1081 m^2	6930 m^2
										32.74% SITE COVERAGE

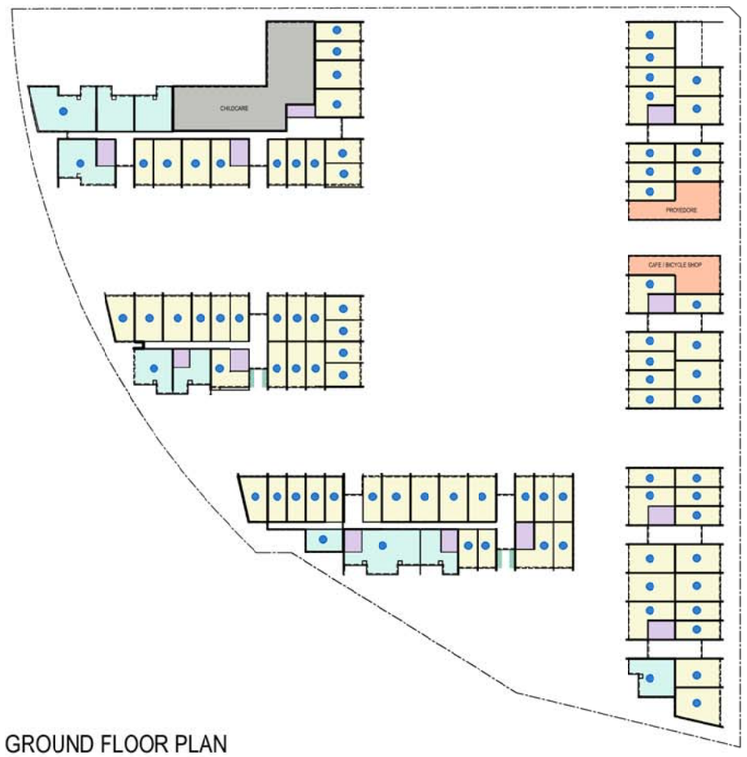
SITE AREA 21170 m^2

MCGC Tower Alternative

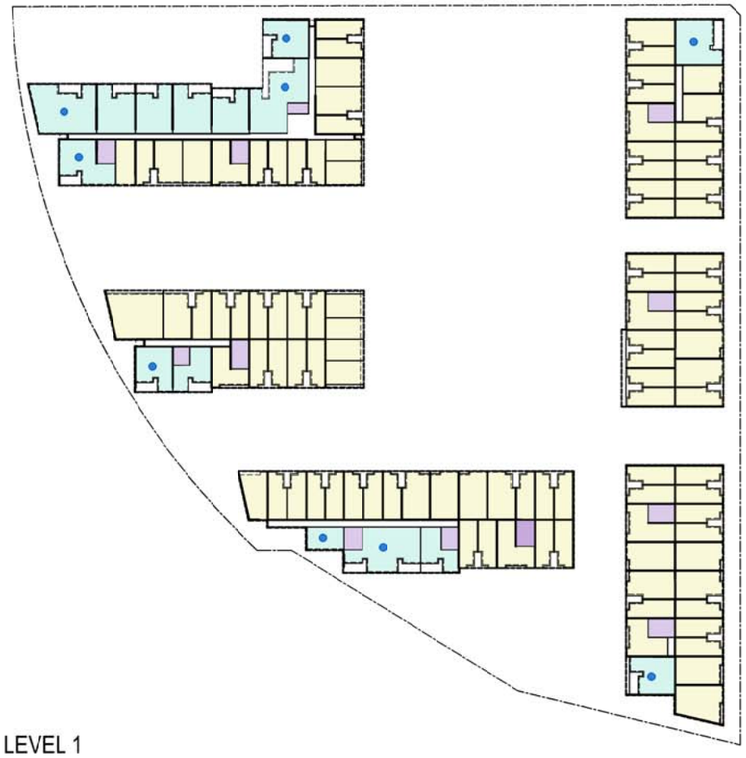
Additional height to Auburn Road Buildings

	TOTAL				
	GFA (m^2)	GBA (m^2)	COUNT	FSR	GFA/GBA (%)
McGregor Coxall (MCGC) aligning scheme	55274	67697	623	2.611	81.65%
MCGC + additional height to G, H & I	57682	70893	653	2.725	81.36%
MCGC tower scheme + additional height to G, H & I	73152	90741	841	3.455	80.62%

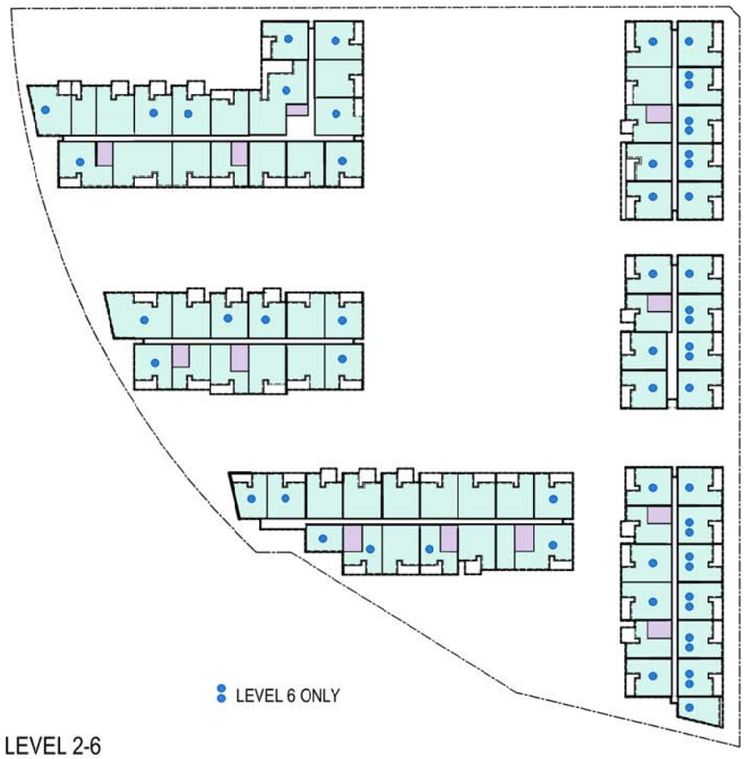
YIELD TABLE



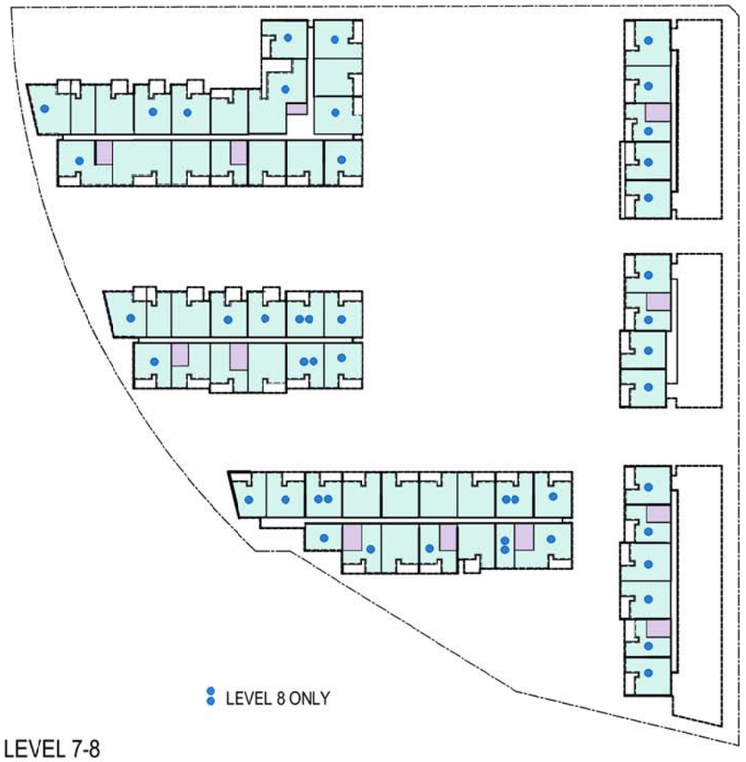
GROUND FLOOR PLAN



LEVEL 1



LEVEL 2-6



LEVEL 7-8

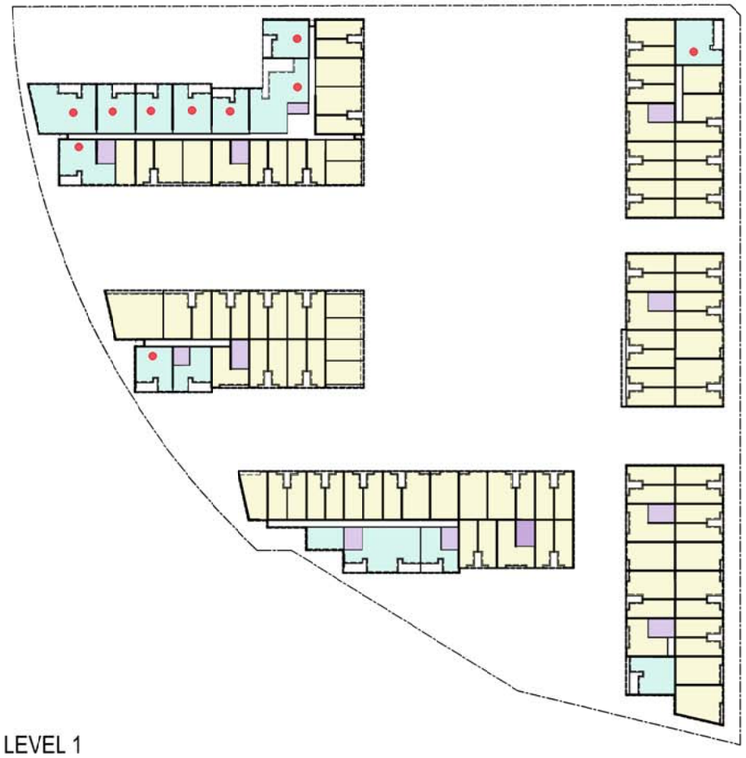
CROSS VENTILATION

CROSS VENTILATION

0 2 5 20 40

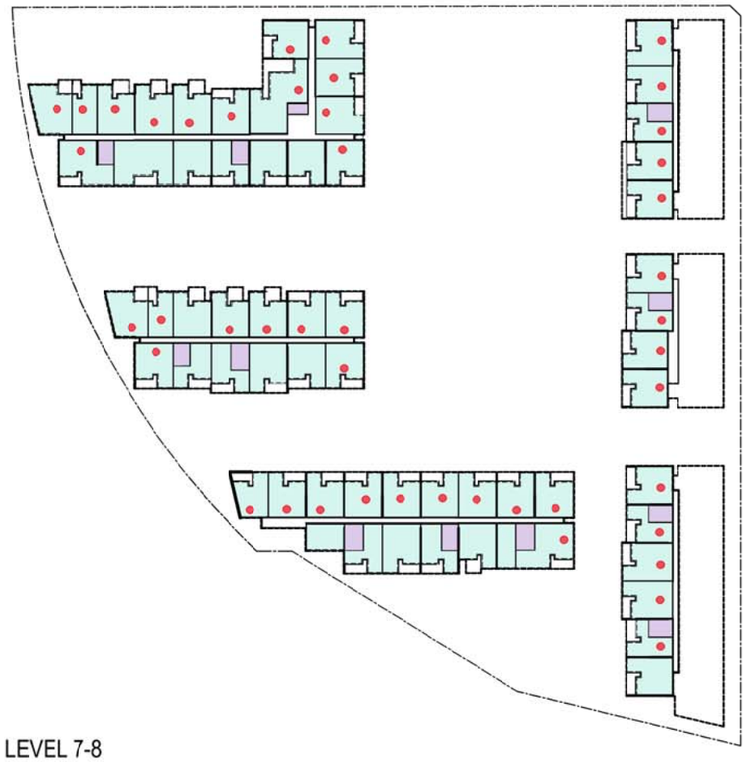
SCALE (m) 1:700 @ A3

GROUND FLOOR PLAN



LEVEL 1

LEVEL 2-6



LEVEL 7-8

LEVEL 9-10

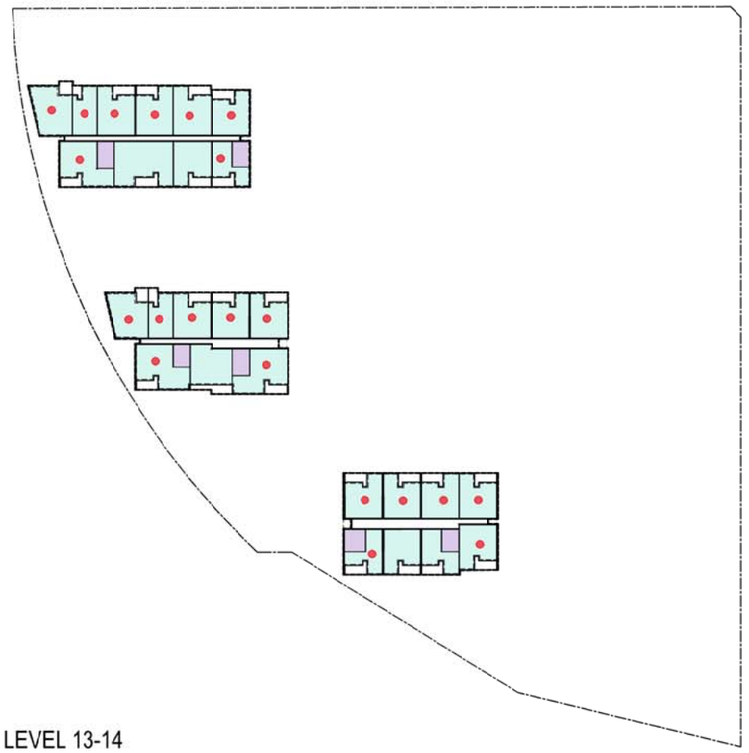
SOLAR ACCESS

0 2 5 20 40

SCALE (m) 1:700 A3

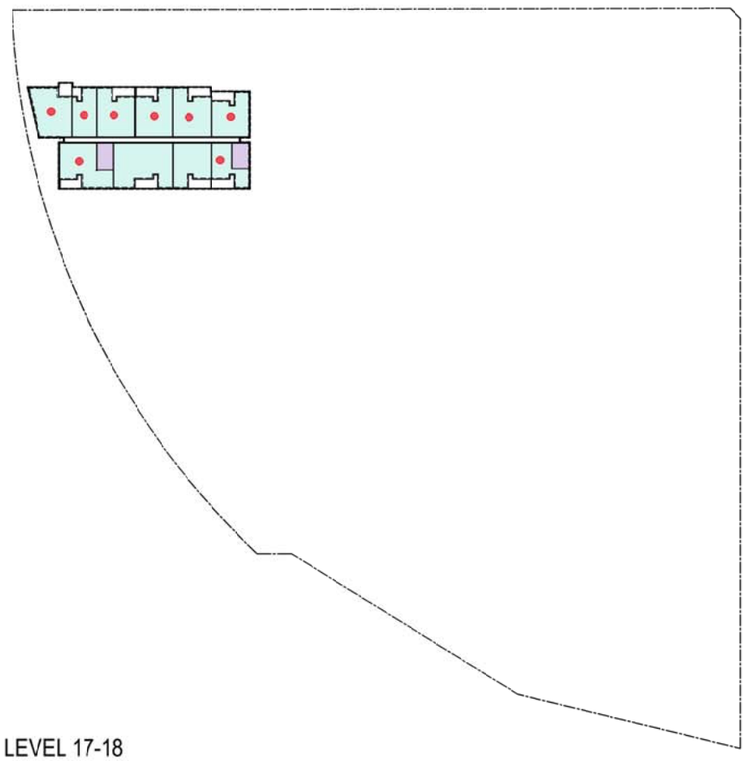
SOLAR ACCESS

LEVEL 11-12



LEVEL 13-14

LEVEL 15-16



LEVEL 17-18

SOLAR ACCESS

0 2 5 20 40

SCALE (m) 1:700 @ A3

SOLAR ACCESS

LEVEL	BUILDINGS A & B			BUILDINGS C & D			BUILDINGS E & F			BUILDING G			BUILDING H			BUILDING I			SUBTOTAL		
	SOLAR	VENTILATION	COUNT	SOLAR	VENTILATION	COUNT	SOLAR	VENTILATION	COUNT	SOLAR	VENTILATION	COUNT	SOLAR	VENTILATION	COUNT	SOLAR	VENTILATION	COUNT	SOLAR	VENTILATION	COUNT
GROUND	10	15	17	6	18	19	8	19	20	11	11	11	9	9	9	12	15	15	56	87	91
LEVEL 1	8	4	8	1	1	2	0	2	3	1	1	1	0	0	0	0	1	1	10	9	15
LEVELS 2 - 6	65	45	90	26	30	60	30	35	80	50	28	50	40	27	40	50	35	65	261	200	385
LEVELS 7 - 8	26	18	36	16	14	24	20	17	32	10	10	10	8	8	8	12	12	12	92	79	122
LEVELS 9 - 10	26	*	36	12	*	16	12	*	16										50	*	68
LEVELS 11 - 12	16	*	20	12	*	16	12	*	16										40	*	52
LEVELS 13 - 14	16	*	20	14	*	16	12	*	16										42	*	52
LEVELS 15 - 16	16	*	20	14	*	16													30	*	36
LEVELS 17 - 18	16	*	20																16	*	20

TOTAL DWELLINGS	841
TOTAL SOLAR ACCESSIBLE DWELLINGS	597
	71%

TOTAL DWELLINGS	613
TOTAL CROSS VENTILATED DWELLINGS	375
	61.2%

* ADG Objective 4B-3 states that "Apartments at ten stories or greater are deemed to be cross ventilated..."

SOLAR AND VENTILATION CALCULATIONS

Attachment 2 – Site Survey.

GEOMETRA Consulting
LAND SURVEYORS - DEVELOPMENT CONSULTANTS
20/1-5 Jacobs Street
Bankstown NSW 2200
Ph: 9708 5719
Fax: 9708 4362
admin@ geometra.com.au
www.geometra.com.au
ABN 69 074 616 087

PLAN SHOWING SITE DETAILS AT
30 & 46 AUBURN ROAD
REGENTS PARK

LOT 1 IN DP 656032 &
LOT 2 IN DP 433938
TOTAL SITE AREA: 2.117 ha

A1
1:250
units=metre

DATUM OF LEVELS:	AHD
ORIGIN OF LEVELS:	PM 53627
ADOPTED VALUE:	29.546
SURVEY DATE:	28/08/2001 & 01/05/2018
OUR REFERENCE:	6042-2
SHEET:	2 OF 2 SHEETS

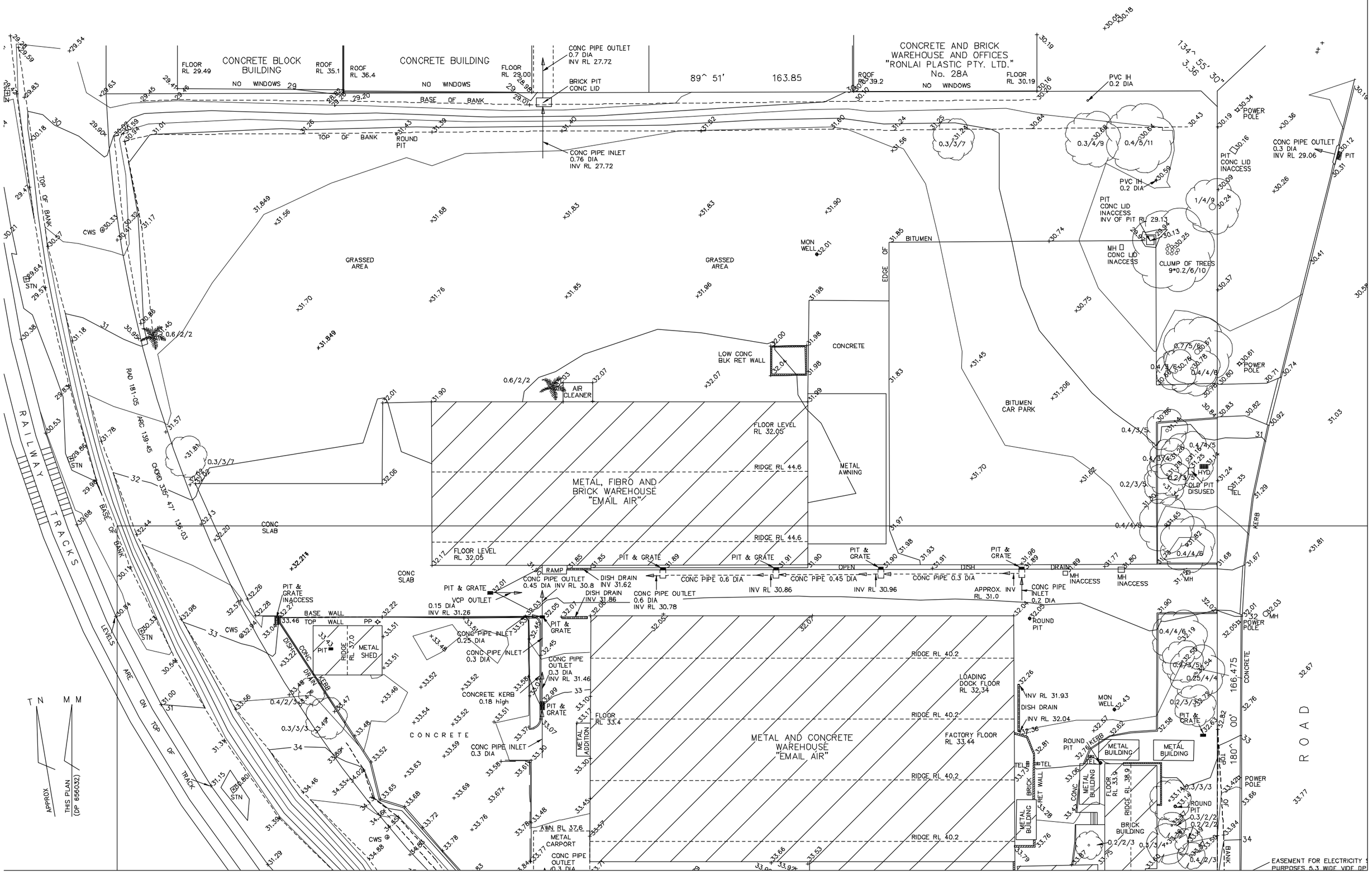
LEGEND

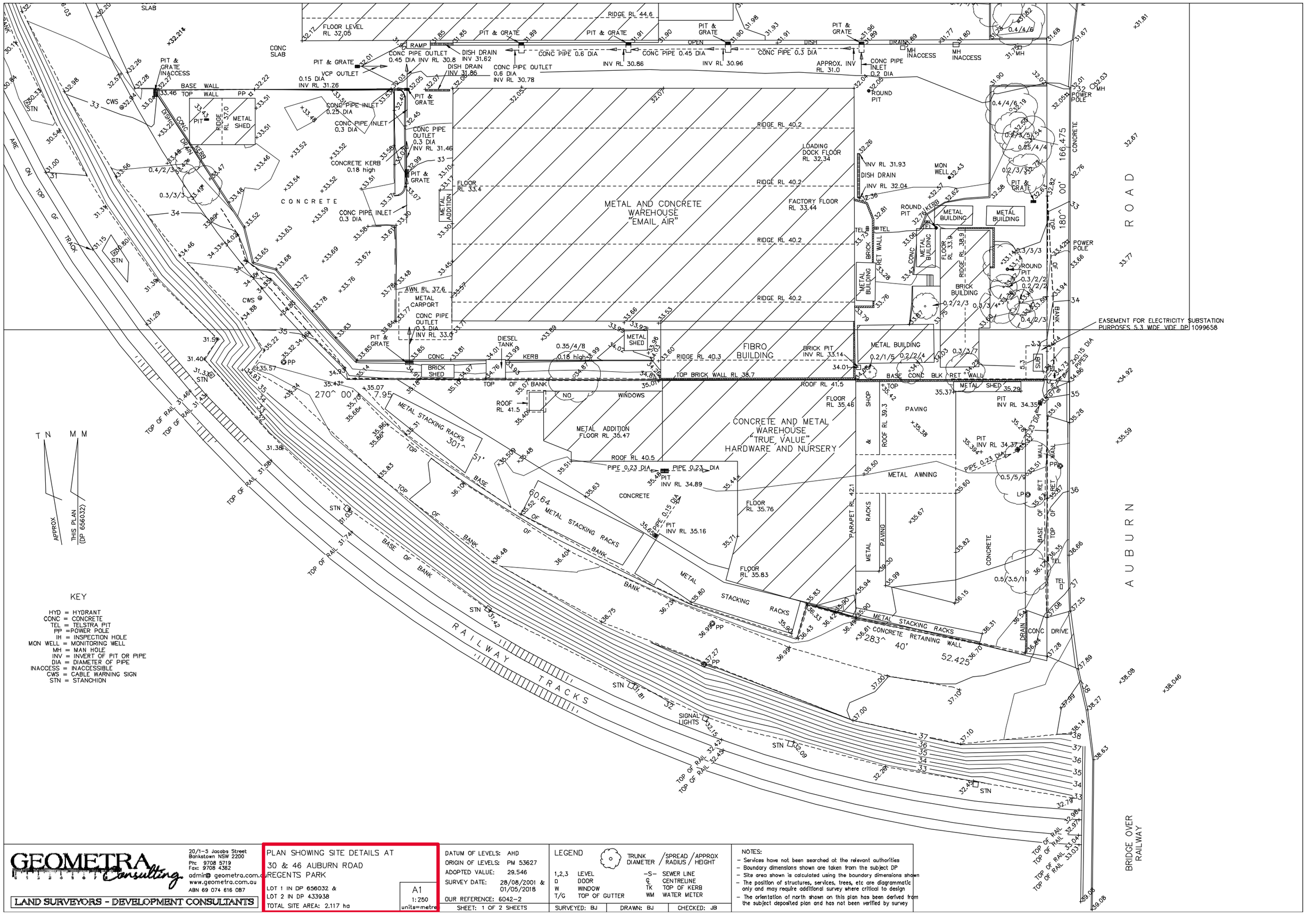
TRUNK DIAMETER / SPREAD RADIUS / APPROX HEIGHT

1,2,3	LEVEL	-S-	SEWER LINE
D	DOOR	℄	CENTRELINE
W	WINDOW	TK	TOP OF KERB
T/G	TOP OF GUTTER	WM	WATER METER

SURVEYED: BJ | DRAWN: BJ | CHECKED: JB

NOTES:
- Services have not been searched at the relevant authorities
- Boundary dimensions shown are taken from the subject DP
- Site area shown is calculated using the boundary dimensions shown
- The position of structures, services, trees, etc are diagrammatic only and may require additional survey where critical to design
- The orientation of north shown on this plan has been derived from the subject deposited plan and has not been verified by survey





KEY

HYD = HYDRANT
CONC = CONCRETE
TEL = TELSTRA PIT
PP = POWER POLE
IH = INSPECTION HOLE
MON WELL = MONITORING WELL
MH = MAN HOLE
INV = INVERT OF PIT OR PIPE
DIA = DIAMETER OF PIPE
INACCESS = INACCESSIBLE
CWS = CABLE WARNING SIGN
STN = STANCHION

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A1
1:250
units=metre

DATUM OF LEVELS: AHD
ORIGIN OF LEVELS: PM 53627
ADOPTED VALUE: 29.546
SURVEY DATE: 28/08/2001 & 01/05/2018
OUR REFERENCE: 6042-2
SHEET: 1 OF 2 SHEETS

LEGEND

TRUNK DIAMETER / SPREAD RADIUS / APPROX HEIGHT

1,2,3 LEVEL
D DOOR
W WINDOW
T/G TOP OF GUTTER
-S- SEWER LINE
℄ CENTRELINE
TK TOP OF KERB
WM WATER METER

SURVEYED: BJ | DRAWN: BJ | CHECKED: JB

NOTES:
- Services have not been searched at the relevant authorities
- Boundary dimensions shown are taken from the subject DP
- Site area shown is calculated using the boundary dimensions shown
- The position of structures, services, trees, etc are diagrammatic only and may require additional survey where critical to design
- The orientation of north shown on this plan has been derived from the subject deposited plan and has not been verified by survey

Attachment 3 – Response to McGregor Coxall Evaluation.

Urban Design Criteria	Precinct Objectives	Evaluation of Proponent's Concepts	Stanisic Response
Urban Form and Structure			
Precinct Scale	The Precinct is intended to be an extension of the Regents Park Small Village Centre, generally retaining the existing low-density residential character. The desired outcomes are to be a compact urban neighbourhood that allows for a transition in scale and density that is compatible with existing low density developments to the eastern side of Auburn Road. This will ensure the precinct site integrates with the scale of the broader industrial and residential character of the neighbourhood.	The proposal, with a series of buildings at 6 and 8 storeys, is compact, urban and dense. There is a transition in height from the existing one and two-storey residential fabric, with 6 storeys along Auburn Road and 8 storeys behind this line of buildings. However, the spatial character of the development is resolutely urban in character, rather than suburban, with available open space mostly being confined to streets. The spatial character of the existing neighbourhoods is directly evident immediately across Auburn Road from the site: a dense row of built form addressing the street, with generous landscaped open spaces beyond, offering spatial release, separation from roadways and recreational amenity. Low density residential character should be addressed in both built form responses as well as in terms of open space: scale, utility, character and legibility. The proposed scheme mostly proposes open space as a secondary outcome of streets, or as marginal spaces along the edges of the development.	• the spatial character is appropriate for the density of with a street network and widths that are common for this density. • the low density character of detached suburban dwellings and townhouses on the east side of Auburn Road is not an appropriate model for higher density development on the site. • the proposed street network is appropriate common open space in favour of excessive consolidated open space that is better provided in genuine public parks such as Magney Reserve. • there are no 'marginal spaces' – all common open space has been assigned a character and function as noted` in the Landscape Masterplan proposed by Sturt Noble.
Built Form	The built fabric pattern of the precinct will result in a Small Village	The proposal is a dense urban composition, with proposed building heights within a close range of	• the proposal has a diversity of apartment types including single

Urban Design Criteria	Precinct Objectives	Evaluation of Proponent's Concepts	Stanisic Response
	Centre, consisting of buildings creating legible overall urban form, with corresponding public spaces servicing the recreational and social needs of the residents. While buildings are expected to be generally of a similar height it is also expected that the urban neighbourhood will be composed of a diversity of building forms and corresponding architectonic expression.	6 to 8 storeys. While the proposal indicates building massing only, the forms, unit layouts, ground floor uses and deployment on the site and relative to the street suggest a single typology, rather than a diversity of forms. The building layout creates a precinct focussed on narrow streets, typical of a portion of a dense urban fabric, rather than developing the spatial sensibility of a village centre, as characterised by the surrounding residential grain around Magney Reserve. This deployment of the built form results in streets as public space, which are of limited utility, while also receiving limited solar access. The shadow and solar diagrams in the Appendix illustrate these limitations.	and double storey (townhouses), dual aspect and wintergardens suitable for intergenerational living. • the built form features a hybrid of ground level townhouses and apartments above to achieve pedestrian scale and multiple access to dwellings from the streets. • there are no narrow streets; the streets vary in width from 18-24m and are located to give a 1:1 proportion of height to width - a key urban design parameter to encourage good street character. • streets are not of 'limited utility' but are a fundamental element of rich urban environments.
Site Permeability	The street and block pattern should integrate the eastern and western side of the precinct across Auburn Road and create greater permeability and connectivity within the greater area to open spaces, schools, centres and transport. A fine grain network of interconnected streets will provide clear addresses for residential	The main axis of the proposal is a pedestrian space running east-west, and roughly aligned with Morris Street in the existing residential area east of Auburn Road. This street connects with two other internal streets, also pedestrianised, accessible only for emergency and service vehicles. There is no car access to or parking adjacent to any of the buildings - car access is solely via basement ramps at two points on Auburn Road. The streets do not create an internal network,	• the main east-west street is 24m wide and aligned with Morris Street to connect the existing with the proposed neighbourhoods. • the streets can accommodate resident and visitor vehicles, as well as pedestrians, if required.

Urban Design Criteria	Precinct Objectives	Evaluation of Proponent's Concepts	Stanisic Response
	development and increase safety, surveillance and social activation. Dead end streets should be avoided.	and terminate at the site boundary with the rail line. Pedestrian connections between streets are within and under buildings, rather than being external laneways. No future connection north to Gunya Street is possible.	• pedestrian connections under buildings provide a useful secondary pedestrian connection system; laneways are not appropriate without activation such as shops.
Place Identity	The precinct development should prioritise a people-friendly public realm with open space amenity and hierarchy as central organising design principles. Magney Park is a well-located spatial resource in the centre of overall precinct. Surrounding developments should reinforce the Park as a focal point for the community, and provide built form and precinct connectivity to address the park and provide greater community activation.	The development does not respond to Magney Reserve in any major way, save for locating a pedestrian crossing on Auburn Road, away from the main precinct entry point, and adjacent to one of the basement carpark ramps. The corner of the development does not respond to the adjacent spatiality or amenity of the park. Internally, there is no clear hierarchy of public open space, only a series of long, thin movement spaces tightly defined by building envelopes.	• the development does connect to Magney Reserve at the north-east corner with a pedestrian pathway and child care centre which will encourage additional pedestrian movement. • there is a clear hierarchy of streets and common open spaces– refer to Landscape Masterplan by Sturt Noble. • common open spaces will be publicly accessible; dedicated public open space are not appropriate for the site or preferred by Council due to ongoing maintenance costs.
Character	Community aspirations are to maintain a suburban neighbourhood feel with well-defined and tree-lined streets, and accessible and safe parks and green spaces. Attracting a diverse demographic ranging from young families to seniors, the precinct should be a	Given that nearly all vehicular access to the site will take place underground, the ground plane spaces will not function as genuine "streets," but mainly pedestrian access to ground floor units. Concentrating so much access and movement in the basement runs counter to activating the ground plane. The narrowness of the streets (as little as 6 metres) will necessarily limit the scale	• there are no 6m wide narrow streets; streets vary in width from 18 to 24m. • common open space is not 'sequested' but readily accessible to all residents and visitors and

Urban Design Criteria	Precinct Objectives	Evaluation of Proponent's Concepts	Stanisic Response
	"neighbourhood of homes" within a short walking distance of a wide range of local services.	of viable tree planting, while the open spaces seem too sequestered to encourage community interaction.	overlooked from balconies, lobbies and living areas.
Building Footprints	Community aspirations are for a variegated built fabric of low and medium–rise buildings augmenting the social amenity and infrastructural capacity of the precinct.	While the building depths generally comply with the recommendations, the street frontages are very long, over 60, 80 and 100 metres on various blocks. While the blocks have through connections and recesses, the continuous built form of the building overhead reinforces the overall lengths. Internal street setbacks do not adhere to the standard, nor that of the requirement to minimise units directly facing the industrial land. While the ends of buildings typically face the rail line, two blocks in the southwest corner face the rail line over the communal open space.	• building footprints are maximum 40m, joined with recessed elements in some places to avoid blank side walls and loss of sunlight to apartments – the elements are open for the first two levels and at the roof level. • all internal streets comply with the standards. • apartments directly facing the industrial land to the north are set back 20m and screened with trees planted in deep soil; the further development of the industrial lands to the north is likely and future building will be setback to achieve solar access to buildings on the subject site. • the allocation of common open space has been optimised to ensure that there is adequate sunlight available for private open space and living areas in apartments; the reduced footprints of the McGregor Coxall proposal will seriously impact on density and reduce sunlight to apartments.

Urban Design Criteria	Precinct Objectives	Evaluation of Proponent's Concepts	Stanisic Response
Public Realm and Amenity			
Open Space Network	The network of open spaces should emphasise a human-scale public realm that has a strong sense of place and reinforces neighbourhood identity and availability. The development should provide a centrally located open space that offers the potential for the maximum number of apartments to have a landscape outlook, as well as maximum flexibility for community uses. Additionally, the major open space should be supplemented by small pocket parks and intimate gathering spaces.		• the central pedestrian street is 30m wide and an appropriate open space element; again there are no 'narrow streets'. • the streets are supplemented by pocket parks with various environmental qualities and orientation which provide a range of activity – refer to Landscape Masterplan by Sturt Noble; • a generous consolidated common open space (not public as noted) is not required due to the proximity and size of Magney Reserve.
Public Space Delivery	Development should deliver active and protected outdoor places with high quality landscape, materials and fixtures. Generous building setbacks and deep soil zones within spaces provide the opportunity for significant tree planting to create user amenity, mediate climate and mitigate outlook and noise impacts. The primary open spaces should be directly connected, spatially and visually to the majority of residential buildings. Streetscapes should be	As noted, the limited width of the internal streets precludes generous tree planting and substantial landscape outcomes. There is a network of variegated spaces and elements within the main pedestrian street; however, the elevated and segregated relationship between the ground floor unit access and the public streetscape limits the function of the street and footpaths as genuine urban spaces.	• there is adequate space in the 18-24 wide streets for generous shade tree planting. Refer to Landscape Masterplan by Sturt Noble.

Urban Design Criteria	Precinct Objectives	Evaluation of Proponent's Concepts	Stanisic Response
	developed as part of the public open space network.		
Social Infrastructure	Setbacks from adjacent sites and from within buildings in the site should be configured to provide usable spatial amenity for residents and visitors. Within the network of open spaces and residential streets throughout the precinct, development should provide gathering spaces that encourage social interaction, supported by a matrix of robust and high quality social infrastructure (seating, play equipment, outdoor dining, shade structures, water features, cycling assets, etc).	As noted, the narrow streets obviate the pattern of street, footpath and active landscaped setback as suggested in the relevant open space guidelines. Gathering spaces and associated infrastructure are provided, but separated from residential units and their open spaces. As above, concentrating much residential access via the basement carpark correspondingly reduces the potentials for the streets to become active public spaces.	• residential access is available at ground level.
User Amenity	Pedestrian links in the precinct should directly connect to and enhance the footpath network on both sides of Auburn Road and along the streets around Magney Reserve. Along this movement network, provide a range of open space facilities to cater for a diverse range of community activities and cultural events, in a range of recreational settings to support those community demands (dog runs, skate parks, playgrounds, etc). Social spaces should reflect the needs of the community now, and allow for future evolution.	The pedestrian network is mainly internalised to the site, and not oriented to potential connections with the surrounding street and footpath network. The main precinct entry does not connect to this network, save by the single crossing of Auburn Road suggested at one point. The organisational network does not allow for expansion into a larger street grid if the site to the immediate north is redeveloped in future. Conversely, the proposed shared path is a closed loop until the neighbouring site is redeveloped - a cycle connection on Auburn Road would be more productive.	• the pedestrian network allows future connections to sites and grid to the north; refer to Contextual Structure Plan prepared by Stanisic Architects.

MCGREGOR COXALL | LANDSCAPE ARCHITECTURE URBANISM ENVIRONMENT BIOCITY RESEARCH

0691SYD - Ltr2650-19

9 October 2019

Teresa Gizzi
NSW Department of Planning & Environment
320 Pitt Street
Sydney NSW 2000

30-46 AUBURN ROAD FSR ADDENDUM TO URBAN DESIGN REVIEW REPORT

Dear Teresa,

As requested, please find below the addendum to the Urban Design Report supoorting a recommended FSR of 2.4:1.

To establish the FSR, it is important to determine the efficiency rates applied to GBA to get to a realistic GFA that in return will determine the FSR.

In terms of seeking disciplinary consensus on assessing the relationships between GBA and FSR, we have consulted various Architectural practices, which have decades of experience in both delivery of residential projects as well as framing planning proposals within Council and State regulatory frameworks.

We have received the following advice:

Advice 1:
As a starting point, 75% efficiencies is applied for GBA to GFA.

The next layer of detail includes;

- 60-65% for ground floor uses, accounting for service areas, ramps, lobbies, etc
- 80-82% for tower developments, excluding the podiums (some clients push for 85%, but that's only proven when the building envelope is more refined and accurate).
- 77% for podiums and street wall (block) development where greater confidence of the building form is known (i.e. not singular forms that run the length of a block).

Advice 2:
General Rule of Thumb for back of the envelope feasibility is 75/85. i.e GFA is 75% x GEA (envelope) and NSA (sellable) is 85% x GFA.

A 75/85 Rule for feasibility and urban design studies is generally used for mid-rise (up to 6 storeys) and 70/85 Rule for high rise (+6 storeys), which usually is quite accurate for dwelling yields. A 65/75 (Discount) Rule for ground floor levels is typically overlaid to allow for carpark entrances, plant and equipment rules and two storey void entries.

Taking into account both calculation methodologies, we can conservatively offer that a basic yield figure between GBA and FSR is 80%. Applying this figure to the area calculated from the model supplied by Pacific Planning delivers the following results:

- 63,293.1 x .80 = 50,634.5m2 GFA
- 50,634.5 divided by the site area (21,170) results in an FSR figure of 2.39.

This is within an acceptable range of the notional figure agreed upon by all participants, which was 2.4.

Based on this we conclude and recommend that the agreed upon FSR for the site should be 2.4:1.

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Manly NSW 2095

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sydney@mcgregorcoxall.com
www.mcgregorcoxall.com
ABN 16 439 584 596

Please don't hesitate to call if you have any questions, or if you'd like to discuss any of this information further.

Dajon Veldman
Associate Director Urbanism

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