

15 June 2020

Brendan Metcalfe Acting Director, Eastern and South Districts Department of Planning, Industry and Environment GPO Box 39 SYDNEY NSW 2001

Attn: Ms Teresa Gizzi, Senior Planner

To Mr Metcalf,

RE: Gateway Determination Review: 30-46 Auburn Road, Regents Park – Council Response (PP_2016_CBANK_001_00)

The purpose of this submission is to provide Council's perspective on the Gateway Review for 30-46 Auburn Road, Regents Park to assist the Department of Planning, Industry and Environment, and the Independent Planning Commission. It is an officer level submission which has not been endorsed by the elected representatives due to the tight timeframe for response. Attachment A outlines the reasons for not supporting the increased Floor Space Ratio (FSR) sought by the applicant; including but not limited to the following:

- Strategic context in the hierarchy of centres,
- Surrounding uses and associated setbacks,
- Building height and FSR impact on amenity,
- McGregor Coxall Structure Plan (MCSP) Layout Adoption
- Cumulative impacts on FSR
- Total public benefit of development

This proposal has been ongoing since 2012 and has involved multiple reviews by expert panels that supported Council's position including the JRPP in 2015 and IHAP in 2017.

Council's decision to support an FSR increase to 1.75:1 was founded on evidenced based analysis of the proposed design, which included multiple urban design peer reviews, traffic analysis and more recently, a detailed ADG analysis of the latest design.

Council's analysis indicates that the proposal would facilitate development that is out of scale and context for Regents Park, is inconsistent with Council's Local Strategic Planning Statement, and would result in multiple non-compliances with the ADG particularly in relation to building separation, solar access and cross ventilation.

I trust this information is of assistance to the Department and the Independent Planning Commission. If you would like more information in relation to the planning proposal, please feel free to contact me on (02) 9707 5470.

CAMPSIE CUSTOMER SERVICE CENTRE 137 Beamish Street, Campsie NSW 2194 PO Box 8, Bankstown NSW 1885



Yours sincerely

Mitchell Noble Manager Spatial Planning



ATTACHMENT A: REASONS FOR NOT SUPPORTING AN INCREASED FSR

Summary

Located within a 500 metre walk of the Regents Park train station, 30-46 Auburn Road in Regents Park, at roughly 2 ha in area, has the potential to transform the subject site into a high amenity residential community if planned appropriately.

Based on consideration of the strategic merit and site specific considerations of the Gateway Review proposal as set out through this letter, Council's position is that the following planning controls will enable and encourage an appropriate development outcome in response to the site's opportunities and constraints:

- a) FSR 1.75:1
- b) Heights of Buildings (HOB)
 - Auburn Road 22m for 6 storeys built form
 - Rest of Site 28m for 8 storeys built form
- c) Delivery of public benefits to support the increased residential density through a Planning Agreement for:
 - Publically accessible 'Central Green' open space,
 - Magney Reserve, street tree, cycle link and footpath upgrades and
 - Affordable Housing contributions

Council's recommendation is based upon a detailed review of the history and the applicant's latest submission by Council Officers and Architectus (refer Attachment B) which identified the following areas of concern as a result of the proposed increases sought to height and FSR:

- Regents Park is a small village centre within the hierarchy of Canterbury-Bankstown centres and should not support tall buildings above 8 storeys as it is not appropriate within the hierarchy of centres of the LGA.
- The proposed scheme, loosely adopted from the McGregor Coxall Structure Plan (MCSP), is inconsistent with state policies (including ADG) and the setbacks required from the surrounding uses (even based on the existing Bankstown DCP requirements)
- Transition of scale from the surrounding low density residential area is required along Auburn Road
- There are significant non-compliances including solar access and cross ventilation requirements which sit as low as 32.7% and 39.6% respectively, as opposed to the benchmarks of 70% and 60% (refer Attachment B for further details). Other issues found in the DA level drawings included building separation, setbacks, apartment layout and lift cores
- Building lengths and site coverage proposed exceeds industry rule of thumb standards, contributing to solar access, cross ventilation, visual bulk, permeability and landscaping issues.
- Inadequate treatment of adjoining interfaces and impact on future residents' amenity.
- Limited public benefit offered to the surrounding area as part of delivering the proposed development, despite the transformative nature of the proposed change.



Council does not agree with the applicant's argument that an increase to the provision of housing as per the Greater Sydney Regional Plan Priority should be the primary objective for increasing FSR (and consequently density) on a site such as 30-46 Auburn Road, Regents Park. A nuanced site specific response is required to ensure minimal impact to existing and future residents, with consideration of strategic merit and site specific tests as required in the assessment of any planning proposal

Council is satisfied that an FSR of 1.75:1 will appropriately facilitate future development of the subject site that is consistent with the suite of strategic planning policies, context of the area, applicable state policies and anticipated site specific DCP requirements.

1. Strategic Context - Hierarchy of Centres

The overarching proposal to increase housing on the site has strategic merit as it will provide additional housing stock close to public transport and amenities in line with the *Greater Sydney Regional Plan* and Planning Priority 5 of the *South District Plan*. However, the proposal is inconsistent with the hierarchy of centres as outlined within Council's newly adopted Local Strategic Planning Statement (LSPS) – *Connective City 2036* and supporting Local Area Plans (LAPs). Regents Park is identified as a Small Village Centre by both the LSPS and the North Central Local Area Plan (NCLAP) that spans across the Canterbury-Bankstown LGA.

The LAPs analysed the diverse centres across the Bankstown LGA prior to the Council amalgamation and categorised them into a hierarchy as related to the importance of each through the centre's provision of public transport, local services, community and civic places and residential areas.

This approach endeavoured to provide a consistent approach to planning across a variety of centres, thus ensuring that nodes of a similar standing are assessed against the same controls/guidelines as outlined in the table below.

Centres Hierarchy	B2 Local Centre Zone		R4 High Density Residential Zone		
	Height	FSR	Height	FSR	
Village Centres	6-8 storeys	2.5:1 – 3:1	4-6 storeys	1:1 – 1.5:1	
Small Village Centres	4-6 storeys	2:1 – 2.5:1	<mark>3-4 storeys</mark>	<mark>0.75:1 – 1:1</mark>	
Neighbourhood Centres	3-4 storeys	1.5:1 – 2:1	3-4 storeys	0.75:1 – 1:1	

Subsequently, with Regents Park identified as a Small Village Centre, an R4 High Density Residential Zoning within this centre should generally be developed up to a height of 3-4 storeys and an FSR of 0.75:1 to 1:1, as appropriate. As shown in the table above, higher FSRs above 2:1 are generally reserved for B2 Local Centre zoning as opposed to residential zones. This is generally consistent across the Canterbury Bankstown LGA, where there are very few exceptions for additional FSR above 2:1 for high density residential zones.

However, as an identified 'opportunity site' increased provisions of 1.75:1 FSR and 6-8 storeys has been supported at 30-46 Auburn Road in Regents Park with appropriate setbacks.



2. Concept 'Masterplan' DA Approval

The Concept DA approval referred to by the applicant bears no weight on the current assessment as it was for an earlier master plan (pre McGregor Coxall adoption) and is based upon the existing controls. The existing controls of 0.6:1 FSR and three storey height limit have quite different ADG requirements and assessment of impacts to the current proposal. Consequently, the concept DA approval is not particularly relevant to this assessment.

3. Surrounding Context

The subject site is affected by a number of opportunities and constraints as identified in Figure 1.

The existing surrounding neighbourhood is described in the NCLAP as a low density residential and industrial precinct. The low density residential areas are currently planned to be maintained, with master planning occurring in Council's higher order strategic centres to deliver housing. Regents Park is not intended on being master planned for increased density, given its local village status in the LSPS.

Due to the retain and manage approach for industrial and employment lands across the Greater Sydney region and within the South District Plan, redevelopment of the existing industrial area is unlikely in the short to medium term. However, any proposed development should be appropriately designed to future proof the subject site especially in relation to the road network, surrounding interfaces and setbacks.

Within this context, height and FSR for the subject site needs to be carefully balanced. While the site presents an opportunity to provide further forms of housing in close proximity to a public transport corridor (subject to the delivery of public benefits to support the increase in density), the low density character needs to be considered when determining appropriate heights and FSR on the subject site. An overall GFA efficiency of a site is not the key determinative planning consideration, which appears to be the centrepiece of the proponent's submission dated 17 April 2020.

Further to the broader area context, the site specifically has complicated interfaces on all sides as follows:

- The railway corridor accommodates a high frequency of both passenger and freight train movements,
- Auburn Road is regularly utilised by heavy vehicle movements,
- Light Industrial uses to the north which will remain for the foreseeable future, and
- Approximately 7m of fall from the south east to the north west corner needs to be managed on site.

These affectations require careful design to ensure adequate amenity for future residents. The scheme put forward by the applicant, described as DA lodgement ready, raises concerns about the built form outcomes proposed in order to facilitate the increased FSR sought.

Various urban design reviews have identified that appropriate setbacks, deep soil planting, acoustic and vibration treatments will be critical to creating a sustainable and liveable development. These matters are discussed further in Council's response.



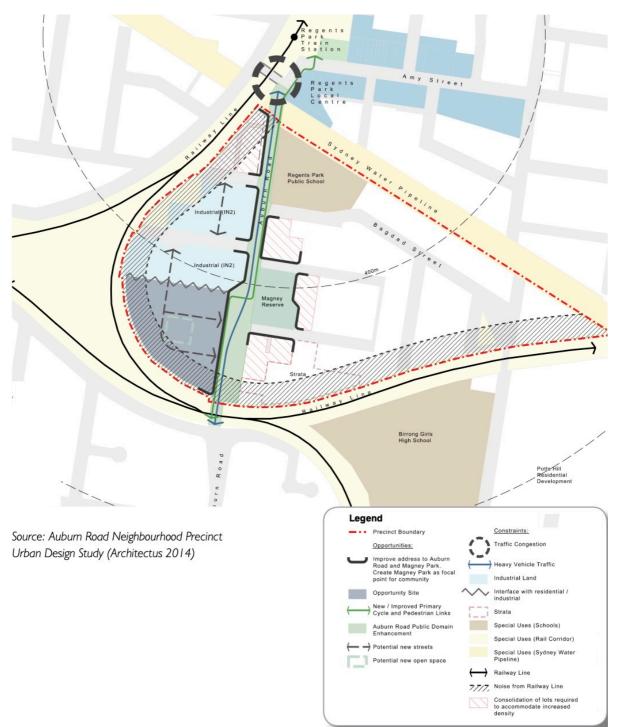


Figure 1: Regents Park Urban Neighbourhood Structure Plan – Opportunities and Constraints (Source: NCLAP, 2016)

4. Historical Urban Design Reviews

Council's recommendation of 1.75:1 with 6 storeys along Auburn Road and 8 storeys across the rest of the site was based on two (2) separate urban design firms (Olsson & Associates Architects and Architectus) independently reviewing the planning proposal.

Additionally, the long history of the planning proposal has included multiple reviews by independent expert panels including the JRPP in 2015 and the local IHAP in 2017. Each of these panels has endorsed Council's evidence-based position that an FSR of 1.75:1 will enable the site constraints to be suitably managed while delivering a development that is appropriate for place.

The heights, setbacks and ADG compliance of the latest design provided by the Applicant with the Gateway Review has been further reviewed by Architectus (refer Attachment B) and discussed in the subsequent sections. It is also noted that while the McGregor Coxall layout has loosely been adopted there are some fundamental inconsistencies that Council does not support and would impact on developable GFA, as detailed below within this letter.

5. McGregor Coxall Scheme Layout Adoption

Based on Architectus's analysis and a fresh review by Council officers, it is observed that while the applicant has proposed to adopt the rough layout of the McGregor Coxall Structure Plan (MCSP) there are some key design principles which have not adopted. The disregarded urban design principles include:

- Consistent and appropriate setbacks on all sides.
- Inclusion of balconies/private gardens on the blue building footprints overlaid in Figure 2 to enable a fair comparison.
- Entries into the basement off the internal road network to create an 'address' for the internal buildings.
- The extension of the internal road network out to Auburn Road on the northern boundary to reinforce a local street pattern and provide a setback for Building G from existing industrial uses.

A number of the principles which have not been adopted by the applicant, such as setbacks, are items which are also recommended by both Council and Architectus and will be included within any site specific DCP to ensure an appropriate design response.





Figure 2: Proposed Building Footprints Overlay on McGregor Coxall Structure Plan (Extract from Pacific Planning Attachment D - Review Scheme)

6. Setbacks

Under the NCLAP and supporting Architectus structure plan, Council identified a number of setbacks to be included within the site specific DCP as noted in Table 1. The NCLAP setbacks have been compared against those provided in the latest design. The setbacks demonstrated in the latest design are inconsistent with those proposed by Council and will likely create poor interfaces with Auburn Road, the railway corridor and neighbouring industrial land.

Surrounding Use	Apartment Outlook on to use	Council Proposed (NCLAP)	Applicant Design (Apr 20)	Variance
Auburn Road	Yes	6m	2.8m – 3.7m	> -2.3m
Industrial Land	No	10m	2.3m – 3m	> -7m
	Yes	24m	18m	-6m
Railway	No	6m	1.5m – 2m	> -4m
Corridor				

Table 1: Proposed Setbacks for 30-46 Auburn Road, Regents Park.



Council does not support the decreased setbacks due to a lack of suitable privacy, acoustic separation, allowance for appropriate landscaping and adequate relationship with the neighbouring streetscape conditions being demonstrated by the applicant. Nor does Council consider that these outcomes can be achieved in setbacks that are as little as 1.5m in some areas before any private gardens, which brings the boundary setback down to as little as 0.6m in other areas.

Considering that the site is surrounded by sensitive and pollution (air and noise) generating uses on all sides, appropriate setbacks and deep soil planting will be critical in achieving a positive urban development outcome and acoustic treatment. It is doubtful that the current setbacks can adequately provide for surrounding pathways and/or bikeways demonstrated in the concept plans, let alone any meaningful deep soil planting to mitigate the impact of the surrounding uses on the development. The lack of pathway loops and deep soil planting will decrease amenity for future residents, especially in a development of this scale.

Additionally, Architectus observed that minimum separations are required under the ADG to facilitate any future development that may occur on neighbouring sites (refer Attachment B) and the applicant should not rely on existing green spaces or built forms of the neighbouring sites to provide these setbacks. The minimum separations of the ADG, do not appear to have been observed within the latest design.

Lastly, the setbacks and levels currently proposed result in retaining walls within close proximity of the built form along both the north and south boundaries that are approximately 2 metres in height. Council would not support retaining walls of this height due to their impact on internal and external amenity in addition to the long term liveability and integration of the development to the neighbourhood precinct. The setbacks proposed by Council, along with an improved cut-to-fill strategy from the applicant would assist in mitigating these concerns.

As such, Council has resolved to apply a site specific DCP on the site with appropriate setbacks and building separation to protect amenity. The adoption of appropriate setbacks will impact the developable GFA and thus the suitable FSR for the site.

7. Building Heights – Number of Storeys

Council undertook to have a fresh look at the solar and cross ventilation analysis of the latest design, especially with consideration to the 12 storey built form endorsed by the recent Gateway Determination (issued in February 2020) as outlined in Architectus's response (refer Attachment B, Issue 3 for details).

Architectus produced a 3D review of the latest design utilising a flat terrain (as proposed by the applicant) with generic 3.1m floor to floor heights on each level for the following scenarios:

- a) 6, 8 and 12 storeys as endorsed by the February 2020 Gateway Determination, and
- b) 6 and 8 storeys as recommended by Council.

Solar Analysis

The solar analysis Scenario A identified that none of the buildings in the latest 'DA level' design is achieving the minimum 2 hour solar access to balcony and living areas between 9am-3pm on 21 June to 70% of apartments. As detailed in Attachment B, the latest design



does not achieve the 70% requirement on any building, with compliance ranging 32.7% to 66.7%. It is anticipated that the non-compliance is due to a high number of south facing apartments and impacts from other buildings (i.e. Building A on Building C-D) as shown in Figure 3. Council notes that in Scenario B as shown in Figure 4, the overshadowing impacts from other buildings is dramatically decreased by the adoption of an 8 storey height limit.

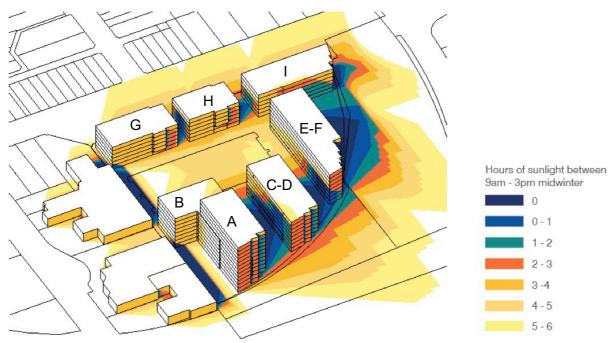


Figure 3: Scenario A Solar Analysis of Applicant's Design - 6, 8 and 12 storey buildings (Source: Architectus, 2020)

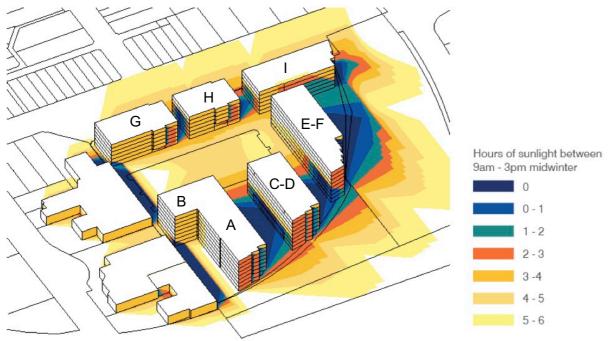


Figure 4: Scenario B Solar Analysis of Applicant's Design – 6 and 8 storey buildings (Source: Architectus, 2020)



Cross Ventilation

Cross ventilation requirements were also reviewed as part of the recent analysis and while 63% compliance is claimed, the 12 storey design only achieved an average of 44.1% across all buildings. Only one building achieved the 60% benchmark with most achieving around 40%, however these calculations assume all corner apartments are designed with appropriate openings unlike the latest design. Architectus notes that cross ventilation could be improved through the provision of shorter floorplates in length, cross through apartments and ADG compliance as identified in Attachment B. However adoption of these adjustments to comply with the ADG would lead to a reduced GFA that would impact the FSR outcome.

Based on the testing of the latest design, Architectus have identified fundamental urban design issues and various non-compliance issues with the ADG that would need to be revised in any future development application.

Also, the analysis shows that further consideration should be given to removing the 12 storey height allowance due to its impact on solar access as outlined above. Council would encourage that the allowable height on building A-B only be 8-storeys.

Nevertheless, by addressing the outstanding design non-compliances and issues it is anticipated that the developable GFA would decrease. The decreased developable GFA suggests that the FSR requested by the proponent is too high to appropriately deliver a reasonable future development that is capable of providing adequate amenity in line with the state policies including SEPP 65 and the ADG.

8. Building Heights – Metric Provision

Council's review noted that there have been multiple metric height values recently proposed for the site as outlined in Table 2. Based on the applicant's concerns and inconsistencies, Council requested Architectus review the metric height provisions against the ADG requirements to provide appropriate heights.

It is acknowledged that the Council resolution dated 25 July 2017 endorsed the following heights:

- Auburn Road 19m for 6 storeys built form
- Rest of Site 25m for 8 storeys built form

The heights recommended by Architectus following detailed analysis are noted in the table below based on the diagrams and rationale outlined in the Appendix of Attachment B.

Controls	Existing	McGregor Coxall Review	Architectus Review of MC	Gateway 3	Gateway Review Request	Council Proposed Metrics
Timing		Oct '19	Dec '19	Feb '20	Apr '20	Jun '20
FSR	0.6:1	2.4:1	1.75:1	2:1	2.4:1	1.75:1
HOB – Auburn Rd		23m	23m	19m	23m	22m
Edge		(6 st.)	(6 st.)	(6 st.)	(6 st.)	(6 st.)
HOB – NW Corner		47m	30m	38m	47m	28m / 41m
of site		(12 st.)	(8 st.)	(12 st.)	(12 st.)	(8 / 12 st.)
HOB – Rest of Site	13m	29m	30m	25m	29m	28m
		(8 st.)	(8 st.)	(8 st.)	(8 st.)	(8 st.)

Table 2: Comparison of Controls Recommended or Requested by Various Parties

Council officers acknowledge Architectus's methodology and recommendation for a metric height of buildings limit of 22m along Auburn Road and 28m across the remainder of the site, which are consistent with the intent of the Council resolution for 6 and 8 storeys.

These metric heights would facilitate a basic roof design and relevant ADG / retail ceiling height requirements without opening the opportunity for an additional storey to be developed beyond the 6 and 8 storeys intended. Council notes that Clause 5.6 of the Bankstown LEP 2015 allows lift overruns to exceed the height limit, without requiring a Clause 4.6 variation, where an architectural roof feature is provided.

While Council does not support the 12 storey component of Building A due to its impact on solar access of Buildings C-D (below 35% at winter solstice), a 41m HOB limit would be recommended were it to proceed. Council strongly opposes a height limit of 47m on this site.

9. Floor Space Ratio (FSR)

Council has reviewed the FSR requested by the applicant and the supporting concept plans through a detailed urban design review and ADG analysis by Architectus (refer Attachment B). The Architectus review raised a number of concerns with the plans that would impact the built form and subsequently decrease the developable GFA for a 'DA level' design.

Beyond the urban design and ADG analysis, Council conducted a high-level analysis on the maximum GFA and potential apartment yield of the recently discussed FSR as outlined in Table 3. The apartment yield numbers have been based upon a 75% GBA/GFA efficiency rate which is an appropriate figure as recommended in the ADG to allow for appropriate built form articulation and high quality building design.

	Scenario A	Scenario B	Scenario C	Scenario D
Position of Each Party	Council	Gateway		Applicant
Site Area	21,170	21,170	21,170	21,170
Floor Space Ratio	1.75:1	2:1	2.25:1	2.4:1
Maximum GFA	37,047.5	42,340.0	47,632.5	50,808.0
% Increase from Scenario A		14%	29%	37%
GBA (at 75% efficiency of GFA)	49,396.67	56,453.33	63,510.00	67,744.00
Apartment Yield (approximate – based on 85m2 GBA per apartment average)	581.1	664.2	747.2	797.0
Var from Scenario A		83.0	166.0	215.9
Potential Residents (3 per household based on ABS Census Data average size for the suburb)	1743.4	1992.5	2241.5	2391.0
Var from Scenario A		249.1	498.1	647.6

Table 3: Subject Site FSR Scenarios

Note: As the maximum GFA allowance remains the same while the likely apartment yield numbers decrease for a GBA to GFA efficiency of 80% compared to the 75% efficiency shown. All 80% GBA/GFA efficiency scenarios have not been demonstrated.



Based on the subject site having an approximate area of 21,170 m² the applicant is seeking an increase of 13,760m² or 37% increase to developable GFA currently supported by Council (Scenario A); and a growth of 20% from the latest Gateway Determination issued by the Department.

Irrespective of any efficiency factors or calculations as suggested in the applicant's submission about Council and Architectus' methodology, the fundamental concern is that the detailed review has identified a number of critical non-compliances and urban design issues which arise in the latest design for the Gateway Review. Appropriately responding to these concerns would likely see the developable GFA decrease, suggesting that the increased FSR sought by the applicant cannot be achieved without sacrificing amenity for future occupants and urban design outcomes.

Any intensification of development, especially an additional 20%, to an FSR of 2.4:1 is not supported by Council on the subject site as it would produce poor urban design and built form outcomes, and subsequent resident experience (as outlined by Architectus in Attachment B).

Furthermore, the applicant's claim that Architectus supported an FSR of 2.27:1 was taken out of context. The 2.27:1 FSR noted was the outcome of a simple efficiency calculation of the applicant's previous building envelopes, which Architectus believed to be unviable with regard to ADG compliance, amenity and relationship to the surroundings as outlined in Attachment B. Consequently, the higher 2.27:1 FSR was not supported by Architectus and 1.75:1 was recommended.

Given the proponent's assertion that the concept plans provided to the IPC are refined DA level drawings and with consideration of the issues raised throughout this letter including solar access, ventilation, building separation and setbacks, amongst others, Council does not support the proposed FSR sought in the Gateway Review.

10. Transport and Infrastructure Capacity

Council's recommended 1.75:1 FSR is not due to existing infrastructure capacity constraints, but in response to suitable urban design outcomes and an ADG compliant development being achievable.

While the original submission back in 2012 was affected by traffic issues, Cumberland Council has since upgraded the congested intersection and addressed these issues. Consequently, the traffic report supplied by the applicant should be disregarded and focus should be given to the fundamental issues that require resolution prior to development of the site; these are:

- Regents Park's role within the hierarchy of centres; and
- Urban design outcome that relates to the surrounding context and compliance with state policies (including ADG).



11. Infrastructure / Public Benefit – Planning Agreement

The proposal currently offers a publicly accessible 'central green' space to be owned and maintained by the future strata. While the applicant has provided some rough calculations on the value of the central park space, Council requires an independent report by a registered valuer to the potential value of a publically accessible area prior to entering any Planning Agreement.

Council recently endorsed a draft Affordable Housing Strategy which is consistent with the South District Plan and LSPS in requiring all proposals to provide at least 5% affordable housing contribution for planning proposals resulting in uplift or more than 1,000 sqm of residential floor space, unless otherwise agreed with Council. The contribution would either be to the Affordable Housing Contributions Scheme (AHCS) or through dedicated dwellings. This has not been acknowledged by the proposal.

Due to the resultant increase in the local population, the NCLAP identified the following infrastructure needs to support the increased number of pedestrians and cyclists movements produced by the proposed development:

- a) Embellish Magney Reserve to create an inviting place where people choose to walk, relax, sit and talk that functions as a focal point for the community.
- b) Construct footpaths on both sides of Auburn Road and the streets surrounding Magney Reserve to complete the footpath network with kerb build–outs installed at appropriate locations.
- c) Embellish Auburn Road and local streets with street trees to create a pleasant place to walk and cycle.
- d) Formalise a north–south regional cycle link along Auburn Road.

The above infrastructure items would facilitate the increased density endorsed in the Gateway Determination for the community and future residents to move safely and easily through the urban neighbourhood.

Should further FSR be considered above Council's recommendations or the Gateway Determination, further public benefits associated with the degree of uplift would be imperative; especially if any of the additional 37% developable GFA sought by the applicant is recommended by the IPC.

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15 June, 2020

City of Canterbury-Bankstown Civic Tower, 66/72 Rickard Road Bankstown NSW 220

To: Mitchell Noble Manager – Spatial Planning

30-46 Auburn Road, Regents Park

<u>Peer review of Pacific Planning's letter titled 'Gateway Determination Review</u> (PP_2016_CBANK_001_00) – 30-46 Auburn Rd, Regents Park, dated 17 April, 2020

Dear Mitchell,

INTRODUCTION

On 26 February 2020, as delegate of the Minister for Planning and Public Spaces, it was determined under section 3.34(7) of the Environmental Planning and Assessment (EP&A) Act 1979 that the Gateway Determination dated 23 September 2016 (since altered) should be altered as follows:

1. Delete condition 1(a) and replace with: a new condition 1(a) "reflect the outcomes of the urban design review by the Department of Planning Industry and Environment with a maximum FSR of 2:1 for the site and maximum building heights of 19 metres along the site's Auburn Road frontage, 38 metres in the north-western corner of the site and 25 metres across the remainder of the site;"

Pacific Planning submitted a letter of request to the NSW Department of Planning, Industries and Environment (DPIE) seeking a review of this Gateway Determination, requesting amendment to condition 1(a) above to include approval for:

- Maximum FSR 2.4:1; and
- Maximum Height 6 storeys 23m; 8 storeys 29m; and 12 storeys 47m

As noted in previous reviews, Architectus identified several key design issues related to the proposed envelopes that cast significant doubt on the density sought. The Proponent in the letter of appeal responded to our previous doubts by stating that the adopted scheme proposed (loosely based on the McGregor Coxall scheme) has been refined to DA level to ensure compliance with the design quality principles set out in Schedule 1 of the State Environmental Planning Policy Number 65 – Design Quality of Residential Apartment Development (SEPP 65) and the design criteria outlined in the NSW Apartment Design Guide (ADG) and to ensure an accurate FSR could be determined. The Proponent's letter also includes a signed design verification statement from Michael Raad Architects claiming compliance with the design principles of SEPP 65.

As part of this peer review, Architectus has conducted a review of this DA level documentation and ADG assessment provided by the Proponent (*Attachment I Architectural Design Report, April 2020*). Our conclusion from this review is that there remains of number of design issues and items of non-compliancy that have not been resolved to satisfy the required design quality principles of SEPP 65, particularly related to context, built form and scale, density, sustainability and amenity. A number of the issues are evaluated and outlined in the letter below. As a result, Architectus remains unconvinced that the density and heights proposed can be achieved. Architectus Sydney Level 18 MLC Centre 19 Martin Place Sydney NSW 2000 Australia T +61 2 8252 8400 F +61 2 8252 8600 sydney@architectus.com.au

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Architectus Australia Pty Ltd ABN 90 131 245 684

> Nominated Architect CEO Ray Brown NSWARB 6359

REVIEW AND RECOMMENDATIONS

1. Item / Issue: Proposed building heights

<u>Gateway Determination –</u> "…maximum building heights 19 metres along the site's Auburn Road frontage, 38 metres in the north-western corner of the site and 25 metres across the remainder of the site."

<u>Proponent request –</u> Maximum height – 6 storeys (23 metres); 8 storeys (29 metres); and 12 storeys (47 metres).

Architectus Review

A number of issues have been identified that will impact on the maximum heights in metres and storeys proposed:

Ground floor storey floor to floor height

- In regards to the floor to floor height of the ground floor storey, according to the section drawings
 provided, the proposal seems to include 3.1m floor to floor heights only, which does not comply with the
 design guidance of the ADG.
- Part 4C of the ADG recommends that the ground floor levels are a minimum of 3.3m for residential use and 4m for retail and commercial uses. While the minimum 3.3m floor to floor recommendation will impact on the height of all buildings, increased ground floor ceiling heights for Building A-B (containing proposed ground level child care centre), and Buildings G and H (containing commercial uses at ground level) will also need to be considered.
- Maximum height of building proposed to allow flexibility for either 3.3m or 4m depending on final ground floor uses.

Ground level interface with neighbouring sites

- The ground level interface with the surrounding uses (industrial / rail / regional road) is poor and needs further consideration.
- Currently it appears there is a 2 or 3 metre height variance between the proposed ground level of the new
 development and neighbouring site. Cut to fill also appears to be quite flat on the site, with little attempt to
 relate to the natural topography. Specifically:
 - The ground floor level of Building E-F is located approximately 2 2.5m below the southern boundary. This will create poor outlook and internal amenity for the ground floor units, particularly at the south-west corner.
 - The ground level of Building A-B is proposed to be raised approximately 2 2.5m above the northern boundary.
 - The northern edge of Building G fronting Auburn Road extends to a level difference of about 2m above the level of the footpath.
 - The significant level change between boundaries proposed limits the opportunity for any future integration of the local street network with the neighbouring site to the north.
- Further work is to be completed by the Proponent to improve the quality of the ground level interfaces by
 providing a closer relationship to existing ground levels and an appropriate level change transition to
 neighbouring sites.

Auburn Road elevation

• Further to the discussion above about relationship to the natural topography, the elevation along Auburn Road feels uncomfortable in the way that Building G is not lowered to follow the fall of the street.

 As per previous advice, Architectus agrees with 6 storeys along Auburn Road, but recommends an upper level setback be applied to the top one or two storeys fronting Auburn Road to provide an appropriate scale transition to the area of low density residential across Auburn Road.

Ground floor unit privacy

 Ground floor units appear to meet the ground along most edges without providing appropriate separation for privacy. As per Part 4L of the ADG, the elevation of private gardens and terraces of ground floor apartments are advised to be elevated above the street level by 1 - 1.5m to deliver privacy and safety without obstructing casual surveillance. Any level change above this height will result in a blank façade which is not a desired urban design outcome.

12 storey limit in north-west corner

- Highest building heights should generally have some relationship to the hierarchy of centres as well as local context. The *draft Canterbury-Bankstown Local Strategic Planning Statement: Connective City 2036* (Draft LSPS) identifies a hierarchy of 34 centres in Canterbury-Bankstown LGA to help better plan for growth. Within this draft strategy Regents Park is classified as a 'Small Village Centre.' Regents Park is only classified at a local council level. There is no classification at the District or Metropolitan level.
- As defined within the North Central Local Area Plan (LAP) by Bankstown City Council, November 2015, the subject site falls within the Regents Park Urban Neighbourhood Precinct which is recognised as an extension to the Regents Park Small Village Centre. Within this LAP, an indicative height distribution map for Regents Park Urban Neighbourhood Precinct is included which proposes a maximum height of 6 storeys fronting Auburn Road, and a maximum height of 8 storeys across the remainder of the site.
- Architectus disagrees with allowing the maximum height in the north-west corner of the site to increase to 12 storeys. As per previous advice, 12 storey buildings are outside the range of heights for similar areas in the LGA and would have undesirable view impacts on the broader precinct as well as impacts to the residential amenity within the site, particularly related to overshadowing.
- In particular, 12 storeys at the north-west corner creates overshadowing impacts on Building C-D which is further discussed in the Solar Access analysis section below. As demonstrated by the solar heat mapping provided in the Appendix, a 12 storey component impacts solar access as it produces additional overshadowing of about 25% to the northern façade of Building C-D when compared to an 8 storey building.
- If a control allowing up to 12 storeys in the north-west corner of the site was to proceed, then a suitable
 maximum height in metres would be 41m. Note, as per the Bankstown LEP 2015, Section 5.6, roof
 features including lift overruns may exceed this maximum height with development consent. The 47m
 requested by the Proponent in this location is excessive and would equate to roughly 14 storeys.

Alternative Gateway heights for 6 and 8 storey sections

- Architectus believes that the height in metres specified by the Gateway Determination for the 6 and 8 storey portions of the site (which were also originally recommended by Council) are too low to allow the nominated height in storeys to occur with the required design outcomes as listed above.
- Adopting 1-1.5m above ground level for occupant privacy at ground level units, 3.3m-4m floor to floor height for residential or commercial/retail ground floor uses, and 3.1m for floor to floor height for typical residential levels above ground level, results in greater height allowances required than what was specified in the Gateway Determination.
- However, while Architectus believes the nominated the heights by the Gateway Determination are too low, the heights sought by the Proponent are too high and open the opportunity for an additional storey to be developed beyond the 6 and 8 storeys intended. The Proponent noted in the letter of appeal that their proposed height in metres includes an approximate 2 metre zone for lift overruns. However, as mentioned above, Clause 5.6 of the Bankstown LEP 2015 allows lift overruns to exceed the height limit without requiring a Clause 4.6 variation, where an architectural roof feature is provided. Therefore this 2 metre

zone does not need to be provided for in the maximum height plane. (Refer to the Architectus markup of sections in the Appendix of this review).

Street wall height

 Architectus recommends an upper level setback of 3m to the top storey along all frontages facing streets including the internal streets and central area of open space, to reduce the overall bulk, and create a human scaled comfortable environment.

Recommendations

- 6 storey (22m) maximum along Auburn Road, (with a 4 or 5 storey street wall height and upper level setback of 3m).
- 8 storey (28m) maximum across the remainder of the site with an upper level setback of 3m along all frontages facing internal streets and the central area of open space.
- Architectus recommends a control is introduced to ensure the desired maximum number of storeys listed above is not exceeded under the height plane.
- As per the Bankstown LEP 2015, Clause 5.6, roof features including lift overruns may exceed this maximum height with development consent.
- The recommended heights in metres above are based on Architectus' high level review, however it is
 recommended that the Proponent look into these proposed heights further to address the identified
 issues, particularly related to the proposed ground levels and interface with the neighbouring sites and
 existing topography.

2. Item / Issue: Proposed floor space ratio

<u>Gateway Determination –</u> "...a maximum FSR of 2:1 for the site."

Proponent request - Maximum FSR of 2.4:1 for the site.

Architectus Review

Recent project history summary related to FSR

- Architectus has consistently maintained in previous advice that 1.75:1 is the maximum FSR suitable for this site to maintain a high design quality and amenity of buildings.
- McGregor Coxall was commissioned by the Department of Planning, Industry and Environment (DPIE) to conduct an urban design review of the planning proposal scheme prepared by Pacific Planning and Stanisic Architects for the site's development. Within this study, they developed an alternative scheme which the Proponent's proposed layout of buildings is loosely based upon. McGregor Coxall concluded that an FSR of 2:1 would be considered appropriate for the site (this final report was issued 9 January, 2019).
- On 19 March, 2019, Architectus conducted a review of the McGregor Coxall report and concluded that some of the envelopes had issues related to ADG compliance and that the FSR they were proposing was not appropriate. Architectus developed an alternative scheme for comparison which achieved a 1.75:1 FSR.
- On 9 October, 2019, McGregor Coxall submitted an FSR Addendum to their Urban Design Review Study to the DPIE, that provided an explanation of the Gross Building Area (GBA) to Gross Floor Area (GFA) efficiency rates used and resulted in an updated proposed FSR of 2.4:1.

- On 18 December, 2019, Architectus submitted a response to this letter and concluded that despite the
 efficiency calculations used, it did not address the significant ADG compliance concerns that there were
 related to the viability of the GBA envelopes proposed and so any calculation can not be relied upon until
 greater confidence around the proposed envelopes can be achieved.
- On 26 February, 2020, the Alteration of Gateway Determination issued by the DPIE states that the
 maximum FSR for the site is to be 2:1 for the site which reflects the outcomes of both the external urban
 design review conducted by McGregor Coxall for the DPIE and the DPIE's own internal review (using the
 Proponent's scheme and height in storeys provided by the McGregor Coxall review together with the
 SEPP 65 ADG standard of a 75% efficiency of GBA to determine GFA, resulted in a FSR of 1.93:1).
- On 17 April, 2020, the Proponent (Pacific Planning) submitted a letter of appeal to this Gateway
 Determination requesting a review of the Gateway Determination to be adjusted to an FSR of 2.4:1 (and
 alternative heights as outlined in the section above), claiming any concerns related to the ADG
 compliance of the proposed envelopes has been resolved and can be demonstrated through a scheme
 that has progressed to "DA level" resolution.
- This letter by Architectus presents a review of the refined "DA level" layouts proposed by the Proponent. Despite claiming ADG compliance, Architectus has discovered several ADG non compliances which are outlined below, confirming our view that the FSR sought is too dense.

Efficiency calculation

- The proponent's mention in the letter around FSR "Architectus using a blanket efficiency methodology not based off a detailed site-specific design approach, provided a response to the revised report and density on 18 December, 2019 (Attachment G), providing a density of 2.27:1, while remaining defiant on their original scheme and density of 1.75:1" is taken out of context and was never a suggestion of a 2.27:1 FSR. It is a number that resulted from a simple efficiency calculation, based off envelopes proposed by the Proponent that Architectus believe are unviable in regards to ADG compliance, amenity and relationship to the surroundings; and as such, regardless of the efficiency calculation used, the FSR proposed was too high for the site.
- Architectus have reviewed the areas / floor plans provided by the Proponent for the proposed building envelopes (BEA) and gross floor area (GFA) and according to these result in a 80 – 81.5% efficiency from BEA to GFA – however, this is a conclusion based off a number assessment only. As listed below, there are a number of issues with the proposed floorplates in regards to ADG compliance and urban design quality that mean that the size of the proposed envelopes are not suitable. Therefore this calculation efficiency extracted from the provided floorplates cannot be relied upon.

Recommendations

 Architectus stands by its initial recommendation of 1.75:1 FSR due to the many non-compliances with the ADG and associated urban design issues of the proposal (as outlined in the following sections of this review).

3. Item / Issue: ADG Assessment

<u>Proponent response –</u> The Proponent claims that the layout and concept is refined to DA level to ensure compliance with SEPP 65 and the ADG, and includes a signed design verification statement from Michael Raad Architects claiming that the plans provided, while of a preliminary nature, achieve the design principles set out in SEPP 65.

Architectus Review

Solar Access

- The very high number of south facing units (in excess of 125) would suggest that the proposal will fail to meet the design criteria of Objective 4A-1 of the ADG, which specify that a maximum of 15% of apartments are to have no solar access between the hours of 9am and 3pm in mid winter, and that living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter.
- While the Proponent maintains that minimum solar access compliance is achieved, Architectus took a closer at the DA level floorplates provided by the Proponent. Our conclusions are that no buildings proposed meet the design criteria for solar access compliance:
 - Building A-B, C-D and E-F
 The number of apartments that have no solar access between the hours of 9am and 3pm in midwinter exceed 15% for each building.
 - <u>Building A-B</u>
 116/190 units (61% solar access)
 - <u>Building C-D</u>
 34/104 units (32.7% solar access)
 - <u>Building E-F</u>
 68/126 units (54% solar access)
 - Building G 41/60 units (66.7% solar access)
 - <u>Building H</u> 29/45 units (64.4% solar access)
 - <u>Building I</u>
 48/80 units (60% access)
 - **TOTAL** 336/606 (55.4%)
- Many units included in the Proponent's compliant table do not appear to receive sun, because:
 - the living rooms are located behind protruding built form on the northern side of the unit and/or
 - the living rooms are located too deep behind balconies
- To be conservative, Architectus have counted many units that are borderline down the eastern façade of G, H and I for example. Our calculations also includes units that receive solar access from skylights; however, all of these need to be verified by the Proponent with detail sections showing how sun reaches the floor for 2 hours this is quite difficult and cannot be assumed. This is also the case for cross ventilation. A sustainable strategy must also be in place for how these top floor apartments deal with excess heat gains through skylights in summer.
- Refer to the solar heat mapping by Architectus in the Appendix of this review.

Natural cross ventilation

- Generally buildings greater than 60 metres in length are difficult to ventilate unless multiple core locations are located with dual aspect, cross-through apartments and corner apartments.
- Buildings A-B and E-F exceed 60 metres in length and do not consistent of any cross through apartments.
- The very high number of single sided apartments and lack of dual aspect and cross through apartments means that the proposal cannot comply with the design criteria of Objective 4B-3 of the ADG, which requires that at least 60% of units are naturally cross ventilated.
- The cross ventilation table provided by the Proponent includes as cross ventilating, a number of apartments that are:
 - single sided (including re-entrant corner units such as A215 and above, which are not considered to naturally cross ventilate)
 - Duplex units, (which are not considered to naturally cross ventilate)
 - reliant on notches not complying with the proportions tabled in ADG 4B-2 (such as units A203, A204, A216, A217, G210, G211, C203, C204, and above)
 - containing openings that cannot be provided due to visual and/or acoustic privacy issues (as above and H202 and H205 and above)
- While 63% cross ventilation compliance is claimed by the Proponent, after taking into account the above listed issues, our review found that the overall compliance is between 39.6% to 40.8% (for below 9 levels, which is a more conventional way of gauging cross ventilation required). The proposal should demonstrate that each building complies with the ADG's cross ventilation requirements. However, all buildings proposed apart from Building H, do not achieve cross ventilation compliance. This is not acceptable.
 - Building A-B

44/157 units (28% cross ventilation – in the first 9 storeys. However, this number includes corner apartments that do not seem to cross ventilate due to various issues, such as the side wall being underground or adjacent to an escape stair or a commercial tenancy).

51/157 (32.5% cross ventilation - in the first 9 storeys and including the corner apartments excluded above)

84/190 (44.2% cross ventilation - including all levels below and above 9 storeys)

- Building C-D
 43/104 (41.3% cross ventilation)
- Building E-F
 47/126 (37.3% cross ventilation)
- Building G 31/61 (50.8% cross ventilation)
- Building H
 27/45 (60% cross ventilation)
- Building I
 35/80 (43.8% cross ventilation)
- TOTAL
 227/573 (39.6% below 9 storeys and excluding corner apartments mentioned above)
 234/573 (40.8% below 9 storeys and including corner apartments mentioned above)
 267/606 (44.1% all storeys including corner apartments mentioned above)
- The proposal also includes slots to single sided units that are covered above. See units AG03, AG20, AG14, AG15, AG16, AG17, AG10, AG11, CG04, CG04, CG01, CG02....and above. These units do not

comply as covering these slots traps smells and inhibits movement of air. Some of the slots proposed are excessively long and narrow (see units A111, DG07, DG08, and above) which greatly reduces access to light and air.

Apartment layout

Architectus have found a number of units that do not comply with:

- Minimum width living rooms (ADG 4D-3 : "Living rooms or combined living/dining rooms have a minimum width of 3.6m for studio and 1 bedroom apartments") and, living rooms with reduced widths in front of balconies, thereby not complying with (ADG 4D-1: "A window should be visible from any point in a habitable room"). These units are: G.210 and above; and I.304 and above.
- Buildings G has only one lift therefore it fails to comply with the design criteria of Objective 4F-1 of the ADG, which advises that the maximum number of units served by one core is limited to 8.
- While Buildings G and H are less than ten storeys (ADG, 4F-1), a single lift serving more than 40 units is not advisable or likely to be supported by Council.
- The proposal includes a number of internal habitable rooms with no access to natural light. See units AG03, AG20, A111, AG15, AG16, GG06, GG07, H107 and above). These rooms do not comply with the design criteria of Objective ADG 4D-1.
- The proposed building envelope for Building A-B is too deep at the corner to provide appropriate daylight to the third bedroom.

Building separation

- With non compliant separation between Buildings G and H (8m proposed; the ADG requires 12m up to 4 stories and 18m up to 8 stories), it is not clear how cross ventilation will be achieved on all units facing into the gap, without impacting on acoustic and visual privacy. Therefore, these units would not comply with the ADG's requirements for separation and privacy.
- Similarly, the separation between buildings H and I (13m proposed; the ADG requires 18m between 4 and 8 stories) and buildings E-F and I (12m proposed; the ADG requires 18m between 4 and 8 stories) is non compliant and liable to lead to privacy non compliances.

Building setbacks (related to ADG)

- Proposed building separations do not provide sufficient setbacks from the property boundary to satisfy ADG requirements and provide for future growth. Setbacks proposed to the north appear not to comply with the requirements of 2F of the ADG, where mixed use development of a similar scale is likely.
- Although future development to the north of the site is liable to generate similarly scaled buildings, the northern setback for buildings A-B and G is about 3m. With bedrooms facing the northern boundary in unit G209 and above, adequate and complying separation will be impossible, thereby leading to acoustic and visual non compliance (part 3F). Nor is it clear how units facing this boundary will achieve cross ventilation if openings will lead to similar privacy issues.
- Property boundary setbacks to the south and west as discussed in the section below will need to contain the impacts of rail noise; this has not been demonstrated.
- The property boundary setback to Auburn Road proposed is also not sufficient and is discussed in the section below.

Recommendations

 Based on our assessment, the proposal does not appear to be achieving the minimum solar access design criteria to any of the apartment blocks. In view of these major discrepancies, Architectus recommends that all units must be verified in plan and sun's eye view to demonstrate 2 hour's mid winter solar access.

- The proposal does not apply to the minimum design criteria for cross ventilation. Architectus recommends that the length of floorplates and number of single aspect apartments per floor be reduced, cross through apartments be introduced where multiple cores serve a single floor, and any notches/building indentations used be open to the sky and follow the width to depth ratios specified in the ADG. This will reduce the overall GFA of each building.
- The assessment of solar and cross ventilation compliance is to be conducted on a building by building basis, and not collectively.

4. Item / Issue: Other urban design considerations

Architectus Review

Building setbacks (other urban design issues)

- The Proponent's design proposes a 2.8m to 3.7m building setback along Auburn Road. As per previous advice, Architectus recommends a minimum 6 metre setback (which is also consistent with the Bankstown DCP 2015) to provide suitable privacy and acoustic separation from the major road, allow for appropriate landscaping and to relate to the neighbouring streetscape conditions.
- A stepped building setback is proposed by the Proponent along the rail corridor, getting as close as 1.5 2m in many locations. This does not provide for an appropriate acoustic and visual buffer to the rail corridor (including the opportunity for landscaping buffering/deep soil zones). As per previous advice, Architectus recommends that this rear setback be increased to a minimum of 6 metres for where the short end of the building meets the boundary. This minimum of 6 metres is consistent with the suggested planning control changes in the *North Central Local Area Plan*.
- The proposal shows a side setback of 2.3 3 metres to the adjoining industrial land to the north and 18m setback from the building length to the boundary. This is not an adequate setback to achieve the appropriate amenity separation between residential and industrial. In addition, minimum separations are required under the ADG to allow for any future development that may occur on neighbouring sites (refer to ADG assessment above). As per the *North Central Local Area Plan*, a minimum 10 metre setback is proposed to industrial land, and where a building length faces the industrial land, this setback is to be extended to a minimum of 24 metres. As per previous advice, Architectus recommends to adopt these suggested setback control changes.

Building length

The length of proposed Buildings A and E-F are concerning from a visual bulk, permeability, cross ventilation and overshadowing perspective. As per previous advice, Architectus recommends that 6-8 storeys buildings should not exceed 65m in length in order to provide good streetscape with built form and architectural variety, and appropriate cross ventilation of apartments. Buildings A and E-F exceeds this recommendation. In addition, any built form above 8 storeys should be a maximum of 45 metres. Building A exceeds this recommendation.

Building footprint site coverage

- Roughly a third of the site is a good rule of thumb for building footprint coverage for a site of this size that needs to provide internal roads and communal open space.
- The building footprint coverage of the McGregor Coxall scheme measured approximately 32% of the site area, while the current Pacific Planning scheme seems to have increased in area measuring approximately 38% of the site area.

Landscape quality

- Minimal context analysis has been provided. It is not clear if the new street network and open spaces are
 private, public or publicly accessible and if they are intended to connect with future developments, etc.
 However, it is assumed that the large area of open space will be publicly accessible.
- No updated landscape plan is provided to explain the proposed uses, activation and character of the central space, street types/sections, footpath widths, lighting etc and to ensure that it will provide an acceptable level of urban design quality, safety and open space amenity for future residents.
- No basement plan has been provided by the Proponent to illustrate the extent of the proposed basement. However, assuming no basement is provided beneath the central communal open space and is setback 6m from the boundaries, the proposed scheme has the ability to satisfy the minimum requirements for deep soil zones as specified within the ADG.
- While the proposed area of central communal open space receives good solar access in midwinter, the quality of the interface of the central communal open space with the northern industrial land (by not having a building along this northern edge) is a concern, especially as the industrial use is unlikely to change in the foreseeable future. It is recommended that a generous landscape edge be provided along this northern boundary to provide an appropriate buffer between the area of open space and existing industrial use.

Movement and access

- Due to the proposed size of the development, a new street and block pattern are necessary to integrate the precinct into the surrounding neighbourhood and to create greater permeability and connectivity within the precinct to open spaces, schools, centres and transport. The street network also facilitates better address for residential development and increases safety and surveillance. The proposed layout results in zero street address to Buildings A and C-D with no direct vehicle drop-off access.
- The McGregor Coxall plan, January 2019, illustrated basement entries/ exits located off the new internal loop road network, while the updated proposal by Pacific Planning, *Attachment I - Architectural Design Report, April 2020*, illustrates one basement entry / exit directly off Auburn Road. No comment has been provided in the Traffic Assessment report on the viability of locating this single basement entry / exit off the major road.
- Two access points to the internal street network are proposed (one entry and one exit as per the original McGregor Coxall plan). Neither access point has any relationship to the intersection with Morris Street which limits the opportunity to provide greater integration into the existing road network. Similarly, no comment has been provided in Traffic Assessment report on the viability of these two access points, as opposed to one.
- A pedestrian crossing is indicated on the ground floor plan in the Pacific Planning report dated March 2019. No comment has been provided in the Traffic Assessment report on the viability of this pedestrian crossing. Architectus agrees with the necessity of a pedestrian crossing at this location.
- The ground floor plan in the Pacific Planning report indicates a cycle path along the perimeter boundary adjacent to the railway corridor, however, a 1.6 -2m setback along this edge does not allow sufficient space for a safe, amenable cycle path with appropriate tree planting and path lighting.
- Similarly, along Auburn Road a cycle path is indicated on the plan, but there is an inadequate setback to allow this cycleway to happen within the site boundary. The building setback along this edge ranges from 2.8 3.7m, and the ground floor private gardens extend into this zone leaving only a 0.6m setback from the boundary.

Recommendations

- More generous setbacks are important to maintain appropriate amenity protection from adjacent land uses (ie, industrial, rail and major road), and allow for deep soil planting and shared cycle paths.
- The lack of appropriate landscaped setbacks, identified residential amenity impacts and overall building bulk suggests the building footprint coverage is too large for the site area and should be decreased to around the 30% mark.
- Architectus recommends that a generous landscape buffer be incorporated to mitigate the interface between the communal area of open space and adjacent industrial land.
- Traffic assessment report to be updated to provide comment on the proposed internal street network and basement entry/exit locations.
- Street address to Buildings A and C-D to be reconsidered to allow convenient, equitable access.
- Architectus recommend that provision be provided to enable any future integration of the proposed internal street network with the neighbouring site to the north.

Conclusion and key recommendations

In view of the many non-compliances with the ADG and urban design issues associated with the proposed envelopes, it is doubtful that the density proposed is achievable. Unless a viable scenario can be demonstrated that addresses all the key issues identified above with a greater degree of certainty, a density of 2.4:1 cannot be supported.

As advised in one of our earliest reviews dated 17 November, 2015, "there is a risk that at the DA stage, design quality and amenity of buildings will be compromised to achieve the FSR." (And this was a comment based on a previously proposed FSR of 2.2:1 that was considered too dense for the site with 6 and 8 storey building maximums). Since reviewing the proposal that has been progressed to the "DA level" of refinement, the shortcomings of the proposed design outcome are as previously identified.

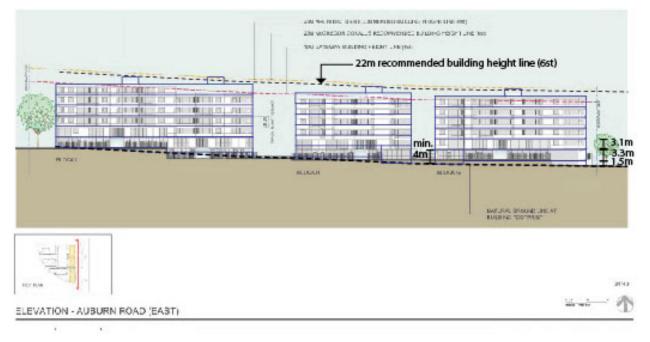
Architectus' previous recommendation of 1.75:1 for the site stands with a maximum height of part 28m (8 storeys) and part 22m (6 storeys).

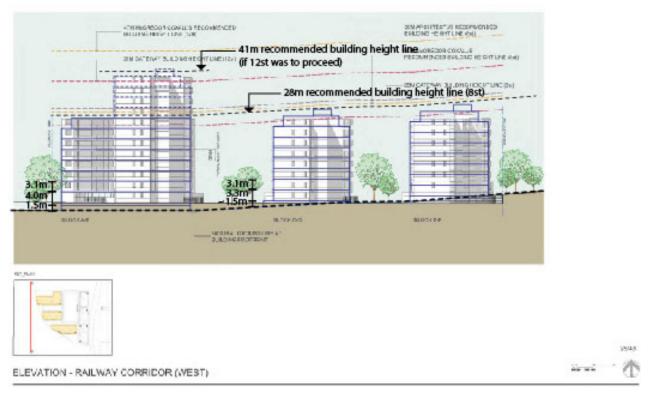
Yours sincerely,

horga.

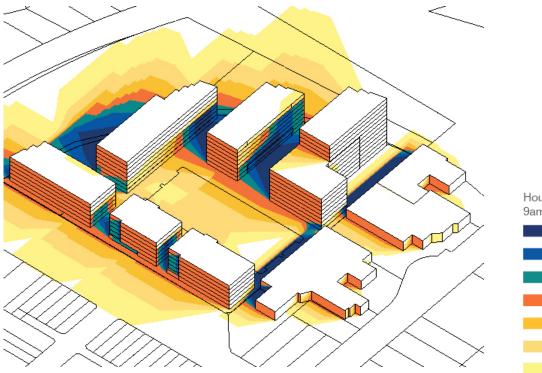
Greg Burgon Principal, Urban Designer

APPENDIX



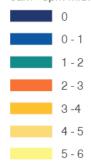


Above: Architectus markup of sections. *Note: these indicative studies provide only high level consideration of appropriate ground level – appropriate levels to be investigated further by the Proponent.*

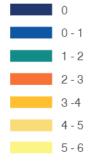


Above: North-east axonometric solar heat map, at 1 minute intervals between 9am-3pm 21 June, *Note: indicative model only by Architectus, modelled off envelopes provided off Pacific Planning, using 3.1m floor to floor heights for each level, and a flat terrain.*

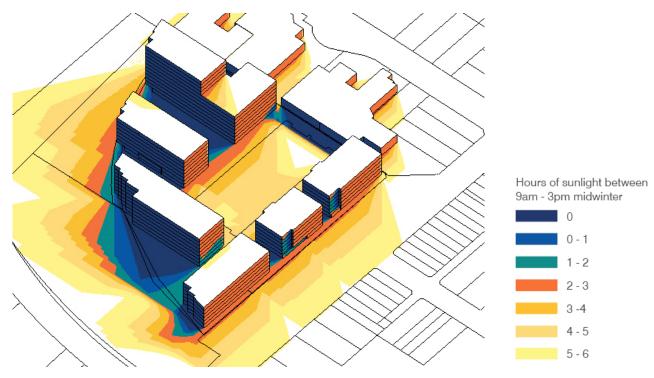
Hours of sunlight between 9am - 3pm midwinter



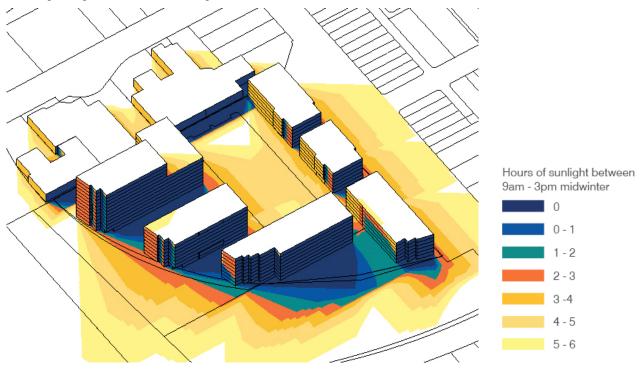
Hours of sunlight between 9am - 3pm midwinter



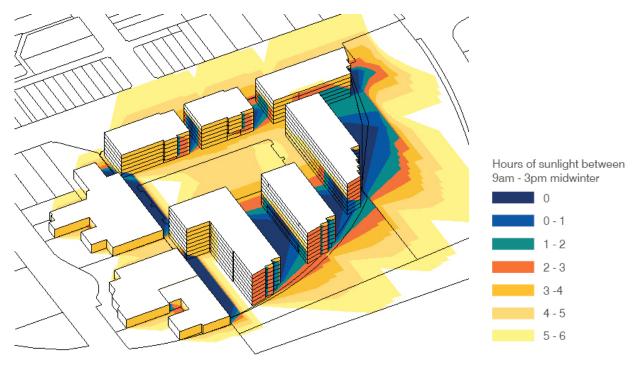
Above: North-west axonometric solar heat map, at 1 minute intervals between 9am-3pm 21 June, *Note: indicative model only by Architectus, modelled off envelopes provided off Pacific Planning, using 3.1m floor to floor heights for each level, and a flat terrain.*



Above: South-east axonometric solar heat map, at 1 minute intervals between 9am-3pm 21 June, *Note: indicative model only by Architectus, modelled off envelopes provided off Pacific Planning, using 3.1m floor to floor heights for each level, and a flat terrain.*



Above: South-west axonometric solar heat map, at 1 minute intervals between 9am-3pm 21 June, *Note: indicative model only by Architectus, modelled off envelopes provided off Pacific Planning, using 3.1m floor to floor heights for each level, and a flat terrain.*



Above: North-west axonometric solar heat map **with maximum 8 storey height across whole site**, at 1 minute intervals between 9am-3pm 21 June, *Note: indicative model only by Architectus, modelled off envelopes provided off Pacific Planning, using 3.1m floor to floor heights for each level, and a flat terrain.*