

MEETING NOTICE

A meeting of the Bayside Local Planning Panel will be held in the Committee Room, Botany Town Hall Corner of Edward Street and Botany Road, Botany on Thursday 15 August 2019 at 6.00 pm.

ON-SITE INSPECTIONS

On-site inspections will precede the meeting.

AGENDA

1 ACKNOWLEDGEMENT OF TRADITIONAL OWNERS

Bayside Council respects the traditional custodians of the land, and elders past and present, on which this meeting takes place, and acknowledges the Gadigal and Bidjigal Clans of the Eora Nation.

2 APOLOGIES

3 DISCLOSURES OF INTEREST

4 MINUTES OF PREVIOUS MEETINGS

Nil

5 REPORTS – PLANNING PROPOSALS

- 5.1 Draft Planning Proposal 2 and 4 Guess Avenue, Wolli Creek2

6 **REPORTS – DEVELOPMENT APPLICATIONS**

Nil

Members of the public, who have requested to speak at the meeting, will be invited to address the Panel by the Chairperson.

The meeting will be video recorded and live streamed to the community via Council's Facebook page.

Meredith Wallace General Manager

Item No	5.1
Subject	Draft Planning Proposal - 2 and 4 Guess Avenue, Wolli Creek
Report by	Howard Taylor, Project Officer - Planning Proposals
File	F18/24

Summary

On the 13th December 2017, Council resolved that it no longer requires No's 2 (Lot 101 DP 808944) and 4 (Lot 102 DP 808944) Guess Avenue, Wolli Creek for a public purpose.

Accordingly, Council engaged an independent Planning Consultant, File Planning and Development Pty Ltd (FPD), to prepare a Planning Proposal to amend the Land Reservation Acquisition Map and determine an appropriate zoning and development controls for the site. Technical studies have also been completed to inform the draft Planning Proposal.

An analysis of open space provision in the catchment area has identified that a component of open space should be provided on the site to implement Action 67(b) of the Eastern City District Plan which states that Councils and other relevant authorities are responsible for

- 67. Maximising the use of existing open space and protect, enhance and expand public open space by:
 - b) Investigating opportunities to provide new open space so that all residential areas are within 400m of open space and all high density residential areas (over 60 dwellings per hectare) are within 200 metres of open space.

The provision of an area of 4,000 sqm is preferable to facilitate a range of recreational activities within the space, to serve Wolli Creek.

The draft Planning Proposal recommends that:

- an area of 4000sqm (being all of Lot 102 DP 808944 (3,577sqm), and a portion of Lot 101 DP 808944 (423sqm), be retained as RE1 – Public Recreation zone, for the purpose of public open space;
- the Land Reservation Acquisition Map Layer of the Rockdale LEP 2011 continue to apply over the entirety of Lot 102 DP 808944 to facilitate the acquisition of the site for the purpose of public open space;
- a site specific amendment to the Rockdale DCP 2011 be prepared post-Gateway Determination, requiring the identified portion of Lot 101 DP 808944 to be delivered as publicly accessible open space (through subdivision or land dedication) as part of future redevelopment of Lot 101 DP 808944;
- the Land Reservation Acquisition Map be amended to remove all of the existing reservation, except for a 423sqm portion of land identified at 4 Guess Avenue (Lot 101 DP 808944); and



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- the balance of Lot 101 DP 808944 be rezoned to the adjacent land use B4 Mixed Use and the following controls be applied to the portion of land to be zoned B4 Mixed Use:
 - Height of Building 42 metres
 - Floor Space Ratio 3:1

Officer Recommendation

That the Bayside Local Planning Panel adopt the recommendations contained in the draft Planning Proposal - as prepared by FPD Pty Ltd and outlined in this report - and recommend to Council that the draft Planning Proposal for 2 and 4 Guess Avenue, Wolli Creek be forwarded to the Department of Planning, Industry and Environment for the following reasons:

- 1. The draft Planning Proposal is consistent with the priorities and objectives of the Greater Sydney Region Plan, the Eastern City District Plan and Draft Greener Places;
- 2. Achieves a planning outcome that will facilitate open space provision and high density residential development in proximity to a rail station; and
- 3. Proposes a height and floor space ratio that are consistent with the surrounding area.

Background

On the 13th December 2017, Council resolved that it no longer requires No's 2 and 4 Guess Avenue, Wolli Creek for a public purpose as follows (resolution number 2017/263):

- 1. That Council endorse the prioritisation of option 2 as noted in the body of this report (Table 8)*.
- 2. That Council is of the opinion that it no longer requires the properties for a public purpose.
- 3. That Council take steps to amend the zoning of the land and the land acquisition reservation map in the Rockdale LEP so that the relevant properties are no longer designated for acquisition for a public purpose. This would involve the preparation of a planning proposal to be provided to the Minister.
- 4. That Council acknowledge that staff continue to advance matters associated with the options outlined in the report with a further report to be submitted to Council in early 2018.
- 5. That the Mayor and General Manager be authorised to undertake any statutory obligations and priority actions arising from these matters.
- * The report containing Table 8 is a confidential document and cannot be reproduced in this report. In summary, option 2 in Table 8, recommended the potential to consider a Planning Proposal to amend the zoning of the site.

Accordingly, Council engaged an independent Planning Consultant, File Planning and Development Pty Ltd (FPD), to prepare a Planning Proposal to amend the Land Reservation Acquisition Map and determine appropriate zoning and development controls for the site. FPD have engaged a number of technical consultants to prepare the necessary technical studies to inform the draft Planning Proposal.

FPD have prepared the draft Planning Proposal (**Attachment 1**) in accordance with the Department of Industry, Planning and Environment's publication *'Planning Proposals – A Guide to Preparing Planning Proposals'*. FPD have also prepared a report for the Bayside Local Planning Panel (**Attachment 2**).

FPD prepared an independent assessment of the options for the site, and project managed other specialist consultants in the areas of:

- Urban design SJB Architects
- Open space SGS Economics and Planning
- Flooding and stormwater Northrop
- Traffic Bitzios
- Aeronautical Landrum and Brown
- Contamination Senversa
- Commercial and Retail Demand Assessment– Hill PDA

The draft Planning Proposal recommends that the site provides for public open space at the subject site, over the northern portion of the site (Lot 102) which comprises 3,577sqm of the site. This recommendation is based on consideration of open space demand to service existing and planned development within the Wolli Creek area. The assessment of open space needs has been informed by an open space study prepared by SGS Economics and Planning in accordance with the Government Architect's draft Guidelines, *Greener Places; Greener Places Urban Tree Canopy Guidelines;* and *Greener Places Open Space Recreation Guide.* SGS concluded that a component of open space should be provided on the site to meet the Government Architect draft Guideline criteria of proximity to public open space (200m walking distance), and that an area of 4,000 sqm would be preferable to achieve a diversity of recreational activities within the space to serve Wolli Creek.

The proposed open space comprises all of Lot 102 (3,577sqm) and a portion of Lot 101 (423sqm), to provide a consolidated area of open space (refer **Figure 1**).

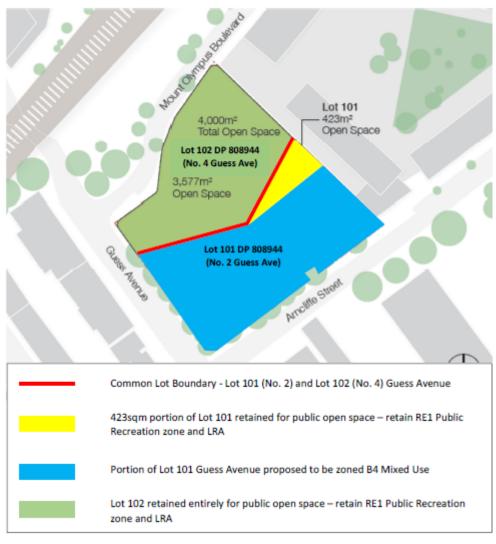


Figure 1: Intended zoning and land reservation outcome

The draft Planning Proposal recommends that a site specific amendment to the Rockdale DCP 2011 be prepared post-Gateway, requiring this portion of Lot 101 be delivered as publicly accessible open space as part of a future redevelopment of Lot 101. Furthermore, the draft Planning Proposal will need to be amended to identify the retention of a 423sqm portion of Lot 101 (as illustrated in **Figure 1**) on the Land Reservation Acquisition Map for the site, as the site specific DCP amendment is a supplementary mechanism to the LEP for achieving the intended delivery of land to be utilised for public open space.

The draft Planning Proposal also recommends that the Land Reservation Acquisition Map of the Rockdale LEP 2011 continues to apply over the entire Lot 102.

The draft Planning Proposal is supported by an Urban Design Report and Commercial and Retail Demand Assessment which demonstrates that Lot 101 could potentiate the following indicative development scheme, if Lot 101 is rezoned to B4 Mixed Use Zone (except for the 423sqm of land identified in **Figure 1**):

- two separate buildings of 12 and 6 storeys;
- 144 apartments (12,220sqm of residential floor space);

• 115sqm of commercial floor space to accommodate a retail/ café tenancy on the ground floor of the 12 storey building overlooking the park; and

• 99 car parking spaces across two basement levels. The Urban Design Report (refer **Attachment 2**) includes, but is not limited to, an analysis of:

- Site and urban context;
- Built form massing;
- Solar access and overshadowing;
- Design principles;
- Open space testing;
- Indicative building footprints;
- Landscape sections; and
- Access and movement.



Figure 2: Indicative Masterplan

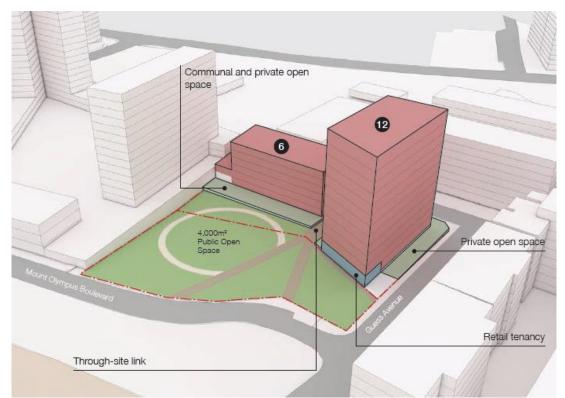


Figure 3: Urban Design Report Extract - Indicative built form massing diagram (view north-west)



Figure 4: Urban Design Report Extract - Indicative site plan and public open space diagram

To facilitate the delivery of 4,000sqm of public open space in this location, the draft Planning Proposal will need to be amended to include a requirement to provide at least 423sqm of Lot 101 as publicly accessible open space proposed to be connected to the open space recommended for Lot 102. The Wolli Creek Special Precinct within the Rockdale DCP 2011 would continue to apply, except where varied by any site specific controls.

The draft Planning Proposal would be facilitated by the following amendments to the Rockdale LEP 2011:

- Removing the Land Reservation Acquisition Map applying to Lot 101, except for the 423sqm of land identified in **Figure 1**;
- Rezone Lot 101 (except the identified 423sqm) to B4 Mixed Use;
- Apply a maximum height of buildings of 42 metres to Lot 101; and
- Apply a maximum floor space ratio of 3:1 to Lot 101.

Applicant:

Bayside Council

Owner:

- Lot 101 (No. 2 Guess Avenue): National Truck Spares (formerly 'Nippon Truck Spares'):
 - Director: Mr Nicholas Trevallion
 - Director: Mr Adrian Trevallion
 - Director: Ms Barbara Trevallion
 - Secretary: Mr Nicholas Trevallion

National Truck Spares previously initiated a request for Council to purchase Lot 101. In response Council declined the request. The land owner requested that Council's decision be reviewed by the Secretary of the Department of Finance, Services and Innovation (DFSI) in accordance with section 27A of the Land Acquisition (Just Terms Compensation) Act. The review confirmed the decision of Council to not acquire the land.

 Lot 102 (No 4 Guess Avenue): NSW Government (Property NSW).

Property NSW have made representations to Council about the draft Planning Proposal in a letter dated 22nd July 2019. The letter from Property NSW is included as **Attachment 3**, and Council's response as **Attachment 4**.

Site Description:

The subject site comprises 7,765 sqm of land at 2 and 4 Guess Avenue, Wolli Creek, legally referred to as Lots 101 and 102 (respectively) in Deposited Plan 808944, as shown in bold red in **Figure 5**:



The site is bound by Mt Olympus Boulevard to the north, Guess Avenue to the west, Arncliffe Street to the south and by high density residential development to the east.

Current Planning Controls:

The relevant *Rockdale Local Environmental Plan 2011* (Rockdale LEP 2011) extracts (refer to **Figures 6-9**, below) for the subject site and surrounding land are provided below, describing the current planning controls for height of buildings; floor space ratio, zoning and land reservation acquisition:

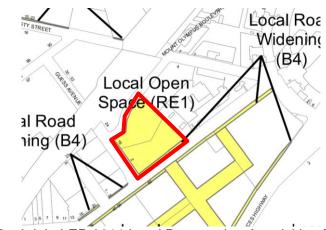


Figure 6 – Rockdale LEP 2011 Land Reservation Acquisition Map_LRA_003 (Source: www.legislation.nsw.gov.au)

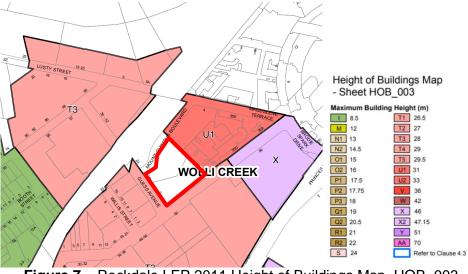
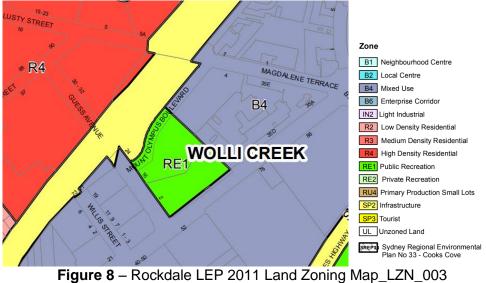
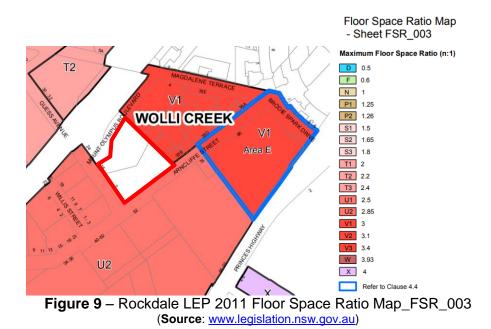


Figure 7 – Rockdale LEP 2011 Height of Buildings Map_HOB_003 (Source: www.legislation.nsw.gov.au)







Summary of Draft Planning Proposal

In summary, the draft Planning Proposal seeks to amend the following provisions in the Rockdale LEP 2011 as follows:

- Removing the Land Reservation Acquisition Map applying to Lot 101, except for the 423sqm of land identified in **Figure 1**;
- Rezone Lot 101 (except the identified 423sqm) to B4 Mixed Use;
- Apply a maximum height of buildings of 42 metres to Lot 101; and
- Apply a maximum floor space ratio of 3:1 to Lot 101.

Assessment of Draft Provisions:

The draft Planning Proposal provides an assessment of the proposed provisions and concludes that the proposed zoning, FSR, Height of Buildings and retention of the Land Reservation Acquisition Layer are the most appropriate outcomes for the site in terms of the relevant strategic planning framework and the sites specific merits.

Justification:

NSW Environmental Planning & Assessment Act 1979 (EPAA)

The NSW Department of Planning & Environment's *A Guide to Preparing Planning Proposals* - issued under s3.33 (3) of the EPAA - provides guidance and information on the process for preparing Planning Proposals. The draft Planning Proposal prepared by FPD has been prepared in accordance with the latest version of this *Guide* (dated August 2016).

Section 9.1 Ministerial Directions (formerly known as 'section 117 directions')

Section 9.1 Ministerial directions (s9.1 directions) set out what a Relevant Planning Authority (RPA) must do if a s9.1 direction applies to a Planning Proposal, and provides details on how inconsistencies with the terms of a direction *may* be justified.

FPD have identified the following Ministerial directions as being relevant to the draft Planning Proposal:

- 3.1 Residential zones
- 3.4 Integrating land use and transport
- 3.5 Development near regulated airports and Defence airfields
- 4.1 Acid Sulfate Soils
- 4.3 Flood Prone Land
- 5.1 Implementing the Metropolitan Plan
- 6.2 Reserving land for a public purpose

The draft Planning Proposal concludes that there are no inconsistencies with the terms of the relevant Ministerial directions.

State Environmental Planning Policies (SEPPs):

FPD have identified the following SEPPs as being relevant to the draft Planning Proposal:

- SEPP No 55 Remediation of Land
- SEPP No 65 Design Quality of Residential Apartment Development
- SEPP (Building Sustainability Index) 2004
- SEPP (Infrastructure) 2007

The draft Planning Proposal concludes that there are no inconsistencies with the identified SEPPs.

Strategic Planning Framework

FPD have identified the following strategic plans as being relevant to the draft Planning Proposal:

- Greater Sydney Region Plan A Metropolis of Three Cities
- Eastern City District Plan
- Draft Greener Places Policy
- Bayside Community Strategic Plan 2030
- Rockdale Residential Strategy 2007

- Rockdale Urban Strategy 2010
- Rockdale Open Space and Recreation Strategy 2010
- Wolli Creek and Bonar Street Public Domain Plan 2011

The draft Planning Proposal concludes that there are no inconsistencies with the Strategic planning framework.

Practice Note PS 06-009 Changes to the Land Acquisition Process for Reserved Land On 27 April 2006, DPIE (then Department of Planning) released a Practice Note to advise Councils, State agencies and the community of changes to the EPAA regarding the procedure for owner-initiated acquisition of land reserved for public purposes.

The draft Planning Proposal is consistent with the Practice Note, as the relevant steps have been followed since the landowner of Lot 101 initiated a request for Council to purchase Lot 101. The draft Planning Proposal is the mechanism for initiating the relevant amendments to the Land Reservation Map, Land Zoning Map, Height of Building Map and Floor Space Ratio Map.

Other Considerations

Traffic Impact Assessment

FPD engaged a Traffic Consultant to assess the likely traffic impacts of the draft Planning Proposal. The traffic consultant's report is included as an appendix to the draft Planning Proposal.

Preliminary Height Assessment

FPD engaged an Aeronautical consultant to assess the likely impacts of the draft Planning Proposal on the Obstacle Limitation Surface and the PANS-OPS. The Aeronautical consultant's report is included as an appendix to the draft Planning Proposal.

Retail and Commercial Demand Assessment

FPD engaged a Retail and Commercial consultant to inform the draft Planning Proposal. The consultant's report is included as an appendix to the draft Planning Proposal.

Attachments

- 1 Draft Planning Proposal (under separate cover) ⇒
- 2 FPD Report to the Bayside Local Planning Panel J
- 3 Letter from Property NSW <u>J</u>
- 4 Letter to Property NSW <u>1</u>



Bayside Local	Planning Panel	15/08/2019
Item No	[By Governance]	
Subject	Draft Planning Propo	sal: 2 and 4 Guess Avenue, Wolli Creek
Report by	FPD Consultant Plann	ers
File		

On 13 December 2017, Bayside Council resolved that the previously planned open space at 2 and 4 Guess Avenue, Wolli Creek was beyond its capacity to deliver and that the land was no longer required for a public purpose.

A draft Planning Proposal has been prepared on behalf of Council by FPD planning consultants to look at an appropriate future use for the site in light of the Council resolution. The draft Planning Proposal recommends progression of a Planning Proposal for the site which provides for a public open space area onsite covering the northern lot (4 Guess Avenue) and part of the southern lot (2 Guess Avenue).

This recommendation has been made after consideration of open space demand to service existing and planned development in the Wolli Creek area. The assessment of need has been informed by an open space study by SGS Economics and Planning in accordance with the Government Architects Draft Guidelines, Greener Places, Greener Places Urban Tree Canopy Guidelines and Greener Places Open Spaces for Recreation Guide. Detailed Urban design advice was also sought from highly regarded urban designers SJB Architects.

SGS concluded that a component of open space should be provided on the site to meet the Government Architect draft Guideline criteria for proximity to public open space (200m walking distance) and that an area of 4,000sgm would be preferable to achieve a diversity of recreational activities within the space.

As mentioned above the draft Planning Proposal seeks to retain the northern portion of the site as open space comprising 4,000sqm of the 7,765sqm site. This location is considered to be most desirable from an urban design and solar access perspective. The proposed 4,000sqm also exceeds the minimum criteria for local open spaces in the Government Architect NSW draft guidelines (3,000sqm) and services demand for local open space within the local area.

This land would accommodate a new local park fronting Mt Olympus Boulevard and Guess Avenue which has been located to maximise solar access. The RE1 Public Recreation zone and acquisition provisions would continue to apply to 4 Guess Avenue requiring Council to negotiate acquisition with the current landowner, Government Property NSW.

The open space comprises all of 4 Guess Avenue (3,577sqm) and a portion of 2 Guess Avenue (423sqm) to provide a consolidated area for open space. It is envisaged that the component of 2 Guess Avenue would be delivered as publicly accessible open space as part of a future redevelopment of this lot.

An indicative concept plan has been developed that identifies the potential of the remaining 3,765sqm of 2 Guess Avenue to be redeveloped to comprise:

- two separate buildings of 12 and 6 storeys respectively
- 144 apartments (12,220sqm of residential floor space)

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- 115sqm of commercial floor space to accommodate a retail / café tenancy on the ground floor of the 12 storey building overlooking the park, and
- 99 car parking spaces across two basement levels.

The Planning Proposal would be facilitated by the following amendments to the Rockdale LEP for 2 Guess Avenue:

- rezone to B4 Mixed Use
- apply a maximum height of buildings of 42m
- apply a maximum floor space ratio (FSR) of 3:1, and
- remove the obligation of Council to acquire the land.

A site-specific amendment to the Rockdale DCP is also recommended to be prepared.

This would include a requirement to provide at least 423sqm (approximately 10%) of 2 Guess Avenue as publicly accessible open space to compliment the park to be provided on 4 Guess Avenue. It would also include built form controls, design guidelines for the through site link and public domain interface, and the landscape concept plan for the proposed park.

The Wolli Creek Special Precinct within the Rockdale DCP would continue to apply, except where varied by the site specific controls.

Officer Recommendation

- 1 That the Bayside Planning Panel recommend to Council that the draft Planning Proposal for 2 and 4 Guess Avenue, Wolli Creek be forwarded to the Department of Planning, Industry and Environment for a Gateway Determination for the reasons outlined in the report, in particular:
 - The proposed open space exceeds the minimum requirement for open space in the locality,
 - the planned open space represents a good urban design and solar access outcome,
 - (iii) The proposed RE1 zoned land is within Councils financial capacity to acquire and develop as local open space, and
 - (iv) The portion of land to be zoned B4 Mixed Use is in context and of similar character with the surrounding built form in the locality.

Background

Applicant: Bayside Council

Owner:

Government Property and Nippon Trucks

Site description:

The subject site comprises 7,765 sqm of land at 2 and 4 Guess Avenue in Wolli Creek. The site has frontage to Arncliffe Street, Guess Avenue and Mt Olympus Drive. The subject parcels of land are described in the following table.

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	2 Guess Avenue	4 Guess Avenue
Title details	101/808944	102/808944
Land area	4,188sqm	3,577sqm
Ownership	Nippon Trucks	NSW Government Property
Existing and previous development	Sheds and hard stand areas.	Vacant land which has been subject of recent remediation. The site previously comprises sheds and hard stand areas.
Existing and previous uses	Truck repairs and spare parts.	Vacant. The site was previously used by Sydney Water as a depot and laboratory.
Existing vegetation	The site is largely cleared of vegetation, but has large established trees along its street frontages to Arncliffe Street and Guess Avenue.	The site is almost entirely cleared of vegetation with the exception of a single tree fronting Guess Avenue.

Report

Planning History

Wolli Creek has been undergoing a transformation over the past decade from a predominantly industrial area into an urban precinct comprising a new town centre focused around Wolli Creek Railway Station and high density residential buildings supported by new streets, parks, public open space and foreshore connections.

To support this renewal the site at 2-4 Guess Avenue was identified to be acquired by Bayside Council to accommodate a new park. This position is formalised in the *Rockdale Local Environmental Plan 2011* (Rockdale LEP) which zones the site RE1 Public Recreation and identifies Council as the relevant acquisition authority.

On the 13 December 2017, Council resolved that it no longer required 2 and 4 Guess Avenue, Wolli Creek for a public purpose. This resolution was made to address a shortfall in the local infrastructure contribution funds available for acquisition of open space within the area.

The Council resolution is outlined below (resolution number 2017/263):

That Council endorse the prioritisation of option 2 as noted in the body of this report (Note: option 2 outlined no acquisition 2-4 Guess Avenue and rezoning of the site)

That Council is of the opinion that it no longer requires the properties for a public purpose.

Item

That Council take steps to amend the zoning of the land and the land acquisition reservation map in the Rockdale LEP so that the relevant properties are no longer designated for acquisition for a public purpose. This would involve the preparation of a Planning Proposal to be provided to the Minister.

That Council acknowledge that staff continue to advance matters associated with the options outlined in the report with a further report to be submitted to Council in early 2018.

That the Mayor and General Manager be authorised to undertake any statutory obligations and priority actions arising from these matters.

This report has been prepared on behalf of Council and seeks to progress a Planning Proposal for the site having consideration to the open space demand to service existing and planned development in the Wolli Creek area.

Supporting Evidence

In the preparation of the draft Planning Proposal to look at an appropriate future use of the land, Council engaged external planning experts FPD to prepare an independent assessment of the options for the site and project manage other specialist consultants in the areas of;

- Urban design SJB Architects
- Open space SGS Economics and Planning
- Flooding and stormwater Northrop
- Traffic Bitzios
- Aeronautical Landrum and Brown
- Contamination Senversa
- Commercial and Retail Demand Assessment- Hill PDA

A draft Planning Proposal report prepared consistent with the DPE A Guide to Preparing Planning Proposals 2018 is attached to this report which contains a full assessment of the strategic and site specific merit of the proposal.

Community Engagement

Should the Planning Proposal proceed through Gateway, the Planning Proposal will be subject to community consultation in accordance with Sections 56(2)(c) of the Environmental Planning and Assessment Act 1979. The specific requirements for community consultation will be listed in the Gateway determination, including any governmental agencies that are to be consulted in relation to the Planning Proposal.

Attachments

1 Draft Planning Proposal (including appendices)

Item

15/08/2019

Planning, Industry & Environment Development and Transactions Housing and Property Division Department of Planning, Industry and Environment Level 4, 66 Harrington Street, Sydney NSW 2000

16 July 2019

Ms Meredith Wallace General Manager Bayside Council 444 – 446 Princes Highway ROCKDALE NSW 2216

By email: Meredith.Wallace@bayside.nsw.gov.au

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Dear Ms Wallace,

Proposed rezoning of 4 Guess Avenue, Wolli Creek (the Property)

We refer to the Property and Bayside Council's (Council) letter to Property NSW (PNSW) of 13 June 2019, when it formally advised that despite its previous representations, the Property's current zoning may remain as RE1 Public Recreation. Since then Council has also advised that should the existing zoning and reservation remain, Council would not necessarily propose to acquire the Property immediately.

As you are aware, on 13 December 2017, Council resolved that the Property was no longer required for a public purpose and that it would take steps to remove the land acquisition reservation and rezone the property (2017 Resolution).

Council further advised that it intended to rezone the property to B4 Mixed Use. PNSW relied on this advice and the 2017 Resolution and, in preparation for the sale of the Property, proceeded to spend significant public funds to demolish all improvements and remediate the Property to a standard suitable for residential use. The sale of the Property at the rezoned B4 Mixed Use value was intended to recover the substantial investment made in the Property, with net proceeds to be returned to government in FY2019/20.

We note that, Council has not kept PNSW advised of its changing position regarding the zoning of the Property despite being aware of the steps being taken by PNSW.

PNSW was first aware of Council's shift in position and move away from the 2017 Resolution after it pressed Council for an update through its General Manager in March 2019. PNSW was only advised in April 2019 that there may be a potential for the Property to remain zoned RE1, or that if the Property did remain RE1, that Council may not necessarily acquire the Property immediately. Had Council disclosed this position, PNSW would have considered alternatives for the Property, including a decision not to proceed with the costly demolition and remediation of the Property.

Council has advised the reason that the Property may remain zoned as RE1 is based on Council's independent planning consultant identifying that neighbouring developments did not have the

www.property.nsw.gov.au Property NSW | ABN 91 840 597 406 Place Management NSW | ABN 51 437 725 177 Teacher Housing Authority NSW | ABN 50 007 468 870 Waste Assets Management Corporation | ABN 56 784 733 957 recommended access to open space in accordance with relevant policies including the *Greater Sydney Commissions Eastern District Plan* (Plan). Action 67 of that Plan requires that high density development should be located within 200 metres of open space. It is noted that the Draft Plan was a public document when the 2017 Resolution was made by Council.

PNSW has relied on Council's advice and the 2017 Resolution with respect to the rezoning of the Property and has committed public funds for remediation and associated works to assist with its disposal on the open market.

PNSW is of the view that Council has not implemented its own lawful decisions in a timely manner and may, therefore, not be fulfilling its obligations and responsibilities under the *Local Government Act* 1993 (Act). Further, Council is aware that PNSW has spent public funds on the preparation of the Property for disposal, and while Council knew that PNSW was doing so, it failed to advise PNSW regarding the potential change in its adopted approach with respect to the Property's future zoning and potential for delay in any subsequent acquisition.

PNSW is now at risk that the planned disposal of the Property will not achieve the desired outcome for the government. Accordingly, PNSW seeks from the Council urgent confirmation that Council, acting in accordance with its obligations, including those under the Act, will undertake the necessary steps to acquire the Property without undue delay should the RE1 zoning and the reservation on the Property remain.

We understand that Council's Planning Committee is meeting in July 2019 to consider the future zoning of the Property and that there is an ordinary meeting of Council on 14 August 2019. We formally request that this letter be provided to the Bayside Local Planning Panel for their consideration prior to the meeting and that this item be put on Council's Agenda for discussion.

Please do not hesitate to contact the undersigned if you have any queries.

Yours sincerely

Leon Walker Executive Director, Development and Transactions Housing and Property Division

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22 July 2019

Our Ref: F18/24:19/218444 Contact: Michael McCabe on 0402893241

Mr Leon Walker Executive Director, Development and Transactions Property NSW PO Box N408 Grosvenor Place NSW 1220

Dear Mr Walker

Re: Proposed rezoning of 4 Guess Avenue, Wolli Creek (the Property)

I refer to your letter dated 16 July 2019 regarding the rezoning of 4 Guess Avenue, Wolli Creek.

As you are aware, Council is in the process of preparing a Planning Proposal, as per the resolution of Council dated 13 December 2017. In order to progress the Planning Proposal, Council was required to engage an independent consultant and undertake a variety of studies and investigations to inform the Planning Proposal. As a result of the findings of the studies, the independent consultant will be recommending a scheme resulting in the retention of a portion of existing RE1 zoned land. Council has no influence over the recommendations of the independent consultant.

Property NSW has been made aware of the steps involved in the Planning Proposal process. Planning Proposals are required to align with the relevant Strategic Planning Framework in place at the time of lodgement and assessment of a Planning Proposal, rather than at the time of a Council resolution. As such, the directions of the Greater Sydney Commissions *Eastern City District Plan* require consideration.

As outlined in Council's previous letter dated 13 June 2019, the independent consultants recommended scheme is being modelling for flood impact and upon completion of this, the matter will be reported to the Bayside Local Planning Panel. The target date for this meeting is now 15 August 2019, pending the receipt of the flood modelling. We anticipate Council will resolve on the Bayside Local Planning Panel recommendations at the meeting scheduled for 11 September 2019.

Should Council resolve to support the retention of the RE1 zoning on the Property, the next step would be for Council to resolve on whether to progress with the purchase of the Property. This decision of Council if required is scheduled for the meeting dated 9 October 2019.

Eastgardens Customer Service Centre Westfield Eastgardens 152 Bunnerong Road Eastgardens NSW 2036, Australia ABN 80 690 785 443 Branch 004 Rockdale Customer Service Centre 444-446 Princes Highway Rockdale NSW 2216, Australia ABN 80 690 785 443 Branch 003 DX 25308 Rockdale Phone 1300 581 299 T (02) 9562 1666 F 9562 1777 E council@bayside.nsw.gov.au W www.bayside.nsw.gov.au Postal address: PO Box 21, Rockdale NSW 2216

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Telephone Interpreter Services - 131 450 Τηλεφωνικές Υπηρεσίες Διερμηνέων بخدمة الترجمة الهاتفية 電話傳譯服務處 Служба за преведување по телефон

We will notify you of Council's September resolution which may be the trigger for you to consider and engage with Council on sale terms if Council resolved to retain the RE1 zoning.

As per your request, your letter dated 16 July 2019 will be attached to reports provided to the Bayside Local Planning Panel and Council.

Should you require any further information, please feel free to contact me.

Yours faithfully

Meredish Avallace

Meredith Wallace General Manager

15/08/2019

Item No	5.2
Subject	Planning Proposal - Rockdale Town Centre: Interchange Precinct (471-511 Princes Highway; 2-14 Tramway Arcade; and 6 & 14 Geeves Avenue, Rockdale)
Report by	John McNally, Urban Planner - Strategic Planning
File	F14/310

Summary

The Interchange Precinct incorporates the Rockdale Railway Station, Bus Interchange and privately owned land bounded by the Princes Highway to the east, Geeves Avenue to the north and west and Tramway Arcade to the south (also known as 471-511 Princes Highway, 2-14 Tramway Arcade and 6 & 14 Geeves Avenue). The privately-owned land within the precinct is the subject of this draft Planning Proposal.

A draft Planning Proposal has been submitted for land within the Interchange Precinct, which has been subject to an Independent Planning Consultant's merits-based assessment (see **Attachment 1**).

The subject draft Planning Proposal (see **Attachment 2**) applies to the privately-owned land within the Interchange Precinct and proposes:

- a 5m increase in the applicable maximum height of building (HOB) development standard in the Rockdale Local Environmental Plan 2011 (RLEP 2011) from 22m to 27m, as well as the height incentive which applies to the area, which allows an additional 12m of height for sites with an area of at least 1,500sq.m (allowed under clause 4.3 (2A)), the proposed amendment would allow for a maximum building height of 39m (approximately RL55m).
- removal of the existing maximum Floor Space Ratio control from the land, in keeping with the strategy applied throughout the remainder of the Rockdale Town Centre area.

An amendment to the Rockdale Development Control Plan 2011 (the RDCP) is also proposed and a draft site-specific Development Control Plan (see **Attachment 3**) has been submitted in support of the draft Planning Proposal. The draft DCP amendments seek to define key requirements for the development of the Precinct.

A Heritage Impact Assessment is to be undertaken for buildings known as 471-477 Princes Highway and 6-14 Geeves Avenue, Rockdale prior to the draft Planning Proposal being referred for a Gateway Determination. The outcome / recommendations of the assessment should be reflected in any revised draft forwarded for a Gateway Determination.

Officer Recommendation

That the Bayside Local Planning Panel recommends to Council that it and the Proponent finalise and update the Planning Proposal Report, the Draft DCP amendments, and relevant supporting documents as outlined above and prepare a heritage assessment of buildings at 471-477 Princes Highway and 6-14 Geeves Avenue, Rockdale prior to referral of the draft

Planning Proposal to the Department of Planning, Industry and Environment for a Gateway Determination.

Background

Draft Planning Proposal Outcomes

The Proponent has indicated that the indicative massing and built form of the draft Planning Proposal could facilitate a high-density mixed-use development of approximately 246 residential units, including 70 one-bed units, 145 two-bed units and 31 three-bed units. A future development could also provide approximately 4,015sq.m. of retail floorspace and 377sq.m. of commercial floorspace.

The proposed 4,392sq.m of retail and commercial floorspace in the indicative scheme would represent a reduction in retail/commercial floorspace from approximately 6,000sq.m. of retail/commercial floorspace that currently exists in the Precinct. This is largely due to the reduction in the overall footprint of the buildings that would be necessary to accommodate the required setbacks on the Princes Highway and Geeves Avenue frontages, and the widened through-site link required between the Princes Highway and Geeves Avenue.

Conclusion

The draft Planning Proposal has been the subject of an Independent Planning Consultant's merits-based independent assessment against the strategic and statutory planning framework as established by the *Environmental Planning and Assessment Act 1979*, relevant guidelines, Planning Circulars and Practice Notes (see **Attachment 1**). In considering their recommendations on the draft Planning Proposal, the Bayside Local Planning Panel is required to consider whether the proposed amendments to the Rockdale Local Environmental Plan 2011 have strategic and site specific merit.

In summary, the Independent Planning Consultant's merits-based assessment has identified that the draft Planning Proposal has strategic and site specific merit.

It has been a long-standing aim of Council to secure a comprehensive mixed-use redevelopment of the land and it is considered that the proposed amendments are both appropriate on the site, and in the locality, and can assist with facilitating future redevelopment of the Precinct.

Furthermore, a Heritage Impact Assessment is required of buildings at 471-477 Princes Highway and 6-14 Geeves Avenue, Rockdale prior to the draft Planning Proposal being referred for a Gateway Determination. The outcome/recommendations of the assessment should be reflected in any revised draft Planning Proposal forwarded for a Gateway Determination.

Subject to the above, it is considered that the draft Planning Proposal is consistent with the relevant strategic directions, policies and regional and local plans and strategies as demonstrated by the merits-based assessment that has been undertaken.

For these reasons, it is recommended that the Bayside Local Planning Panel formally recommends to Council that the draft Planning Proposal be forwarded to the Department of Planning, Industry and Environment for a Gateway Determination, following preparation of a

Heritage Impact Assessment and update to the draft Planning Proposal, supporting documents, and Draft DCP amendments, as outlined in this report.

Financial Implications

Not applicable

 \boxtimes

Community Engagement

Notification letters have been sent to the local community advising that the draft Planning Proposal is being presented to this meeting of the Bayside Planning Panel, including advice on the LEP Amendment/Planning Proposal process.

Attachments

- 1 Rockdale Town Centre Interchange Precinct Consultant's Report J
- 2 Draft Planning Proposal Report J
- 3 Proposed Draft DCP <u></u>
- 4 Urban Design Report J
- 5 Rockdale Town Centre Masterplan J
- 6 RTCPP Council Report & Resolution 15.10.14 J
- 7 TfNSW Comments on Transport Study Scope <u>J</u>
- 8 Transport Study <u>J</u>
- 9 Transport Study Addendum Letters <u>J</u>
- 10 Current Rockdale Town Centre DCP J

Bayside Council

Serving Our Community

Bayside Local	Planning Panel	15/08/2019
Item No	5.2	
Subject	Planning Proposal - Rockdale Town Centre: Interchan (471-511 Princes Highway; 2-14 Tramway Arcade; and Geeves Avenue, Rockdale)	
Report by File	Helena Miller, Director – MG Planning Pty Ltd F14/310	

Summary

In December 2012 the former Rockdale City Council (RCC) adopted the Rockdale Town Centre Masterplan (RTCMP). The RTCMP sets out Council's aspirations for the future of the Rockdale Town Centre and is intended to act as a guiding document for Council, business owners, private developers and the community. It identifies three distinct precincts within the Rockdale Town Centre, outlines the existing role or character of each precinct and provides guidance as to how each precinct may be developed in the future. The 'Town Centre Core' forms one such precinct identified under the RTCMP, within which the 'Rockdale Town Centre Transport Interchange Precinct' (Interchange Precinct) is one of four sub-precincts.

The Interchange Precinct incorporates the Rockdale Railway Station, Bus Interchange and privately owned land bounded by the Princes Highway to the east, Geeves Avenue to the north and west and Tramway Arcade to the south (also known as 471-511 Princes Highway, 2-14 Tramway Arcade and 6 & 14 Geeves Avenue). The privately-owned land within the precinct is the subject of this Planning Proposal.

In October 2014 Rockdale Council resolved that a Planning Proposal for the Rockdale Town Centre (RTCPP) should proceed to the NSW Department of Planning and Environment (the DPE) to be finalised. Two areas were, however, deferred from the RTCPP, including the Interchange Precinct as:

- Potential traffic impact on major intersections were identified and further studies necessary;
- Transport for NSW (TfNSW) requested that a Transport Management Accessibility Plan (TMAP) be prepared by Council for the Precinct, particularly in the light of the operation of the Rockdale Train Station and bus interchange, which are located in proximity to the Interchange Precinct.

As Council did not allocate funds for the preparation of the TMAP (in the order of \$200,000) the proponent (of the subject Planning Proposal) worked directly with TfNSW and RMS between 2016 and 2017 to agree on a scope for a Transport Study for the Interchange Precinct in lieu of the requested TMAP. Accordingly a transport study has been submitted in support of the Planning Proposal.

The subject draft Planning Proposal (see **Attachment 1**) therefore applies to the privatelyowned land within the Interchange Precinct and proposes:

 a 5m increase in the applicable maximum height of building (HOB) development standard in the Rockdale Local Environmental Plan 2011 (RLEP 2011) from 22m to 27m. Along with the height incentive which applies to the area which allows an additional 12m of

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height for sites with an area of at least 1,500sq.m (allowed under clause 4.3 (2A)), the proposed amendment would allow for a maximum building height of 39m (approximately RL55m).

 removal of the existing maximum Floor Space Ratio control from the land in keeping with the strategy applied throughout the remainder of the Rockdale Town Centre area.

An amendment to the Rockdale Development Control Plan 2011 (the RDCP) is also proposed and a draft site-specific Development Control Plan (see **Attachment 2**) has been submitted in support of the draft Planning Proposal. The current draft DCP amendments seek to lock in key requirements for the development of the Precinct including:

- An open air, pedestrianised through-site link at grade in the centre of the precinct which is 12m wide and which provides a direct link between the Rockdale bus interchange and Princes Highway;
- Active retail zones along the street frontages and the through-site link;
- A 2.5m colonnade setback along Geeves Avenue measured from the pedestrian footpath alignment;
- A 3.0m colonnade setback along the Princes Highway measured from the pedestrian footpath alignment;
- A minimum footpath setback width of 4.5m along Tramway Arcade;
- A 6 storey podium height along Princes Highway and 3 storey podium height along Geeves Avenue;
- Two 12-storey landmark tower buildings, one to the northern and the other at the southern end of the precinct;
- A built form of a maximum of 3 storeys on land known as 2-18 Tramway Arcade; and
- A built form in the centre of the precinct of 5 to 6 storeys.

The Proponent has indicated that the indicative massing and built form of the draft Planning Proposal could facilitate a high-density mixed-use development of approximately 246 residential units, including 70 one-bed units, 145 two-bed units and 31 three-bed units. A future development could also provide approximately 4,015sq.m. of retail floorspace and 377sq.m. of commercial floorspace.

The proposed 4,392sq.m of retail and commercial floorspace in the indicative scheme would represent a reduction in retail/commercial floorspace from approximately 6,000sq.m. of retail/commercial floorspace that currently exists in the Precinct. This is largely due to the reduction in the overall footprint of the buildings that would be necessary to accommodate the required setbacks on the Princes Highway and Geeves Avenue frontages, and the widened through-site link required between the Princes Highway and Geeves Avenue.

Assessment of the draft Planning Proposal and proposed DCP amendments has however identified that to ensure any future redevelopment of the Precinct delivers the sought after public benefits (in particular a widened through site link and provides for landowner equity) some significant changes are required to the proposed draft DCP amendment. These should be incorporated prior to referral of the draft Planning Proposal for a Gateway determination and should require:

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- Development of the land in a maximum of 2 stages with each stage to incorporate a minimum of 50% (6m width) of the required widened (minimum 12m width) through site link connecting Princess Highway and Geeves Avenue open to the sky with active uses fronting the link on both sides. [Note: Development of land at 2-18 Tramway Arcade is not subject to this requirement]. Revised ADG compliance information based on the 2 staged approach should also be submitted.
- Car parking shall be provided at a maximum rate consistent with the RMS Metropolitan Sub-Regional Centres parking rates for residential development, 1 space per 40m² for commercial and 1 space per 140m² for retail development.

Furthermore, a heritage assessment is to be undertaken for buildings known as 471-477 Princes Highway and 6-14 Geeves Avenue, Rockdale prior to the draft Planning Proposal being referred for a Gateway determination. The outcome / recommendations of the assessment should be reflected in any revised draft forwarded for a Gateway determination.

Officer's Recommendation

That the Bayside Local Planning Panel recommends to Council that it and the Proponent finalise and update the Planning Proposal Report, the Draft DCP amendments, and relevant supporting documents as outlined above and prepare a heritage assessment of buildings at 471-477 Princes Highway and 6-14 Geeves Avenue, Rockdale prior to referral of the draft Planning Proposal to the Department of Planning, Industry and Environment for a Gateway Determination.

Background

Applicant:

Mecone on behalf of Fivex.

Owner:

Fivex are the owners of 507 and 511 Princes Highway with a site area of approximately 1,399m². The remainder of the lots included within the area covered by the Planning Proposal are owned by multiple landowners who are not proponents of the draft Planning Proposal.

Site Description:

The draft Planning Proposal relates to the lots shown in Table 1, Map 1 and Photo 1 below:

Map Reference	Lot	DP	Address	Approximate Site Area (sq.m.)
1.	2	112857	471 Princes Highway	290
2.	1	133058	475-477 Princes Highway	403
	2	133058		
3.	1	576382	481 Princes Highway	526

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Map Reference	Lot	DP	Address	Approximate Site Area (sq.m.)
4.	1	924452	483 Princes Highway	268
5.	А	101117	485 Princes Highway	268
6.	в	101117	487 Princes Highway	263
7.	1	920674	489 Princes Highway	276
8.	12	2291	491 Princes Highway	456
	1	120810		
9.	2	530089	493 Princes Highway	134
10.		SP 3423	495 Princes Highway	249
	1	SP 3423	1/495 Princes Highway	
	2	SP 3423	2/495 Princes Highway	
	3	SP 3423	3/495 Princes Highway	
	4	SP 3423	4/495 Princes Highway	
	5	SP 3423	5/495 Princes Highway	
	6	SP 3423	6/495 Princes Highway	
	7	SP 3423	7/495 Princes Highway	
	8	SP 3423	8/495 Princes Highway	
	9	SP 3423	9/495 Princes Highway	
	10	SP 3423	10/495 Princes Highway	
	11	SP 3423	11/495 Princes Highway	
	12	SP 3423	12/495 Princes Highway	
	13	SP 3423	13/495 Princes Highway	
	14	SP 3423	14/495 Princes Highway	
11.	1	108807	501 Princes Highway	860
	7	109535		
12.	10	1189023	507 Princes Highway	618
13.	D	964518	509 Princes Highway	331
14.	11	1188474	511 Princes Highway	781
15.	11	576411	2 Tramway Arcade	40
16.	12	576411	4 Tramway Arcade	36
17.	2	534155	6 Tramway Arcade	34

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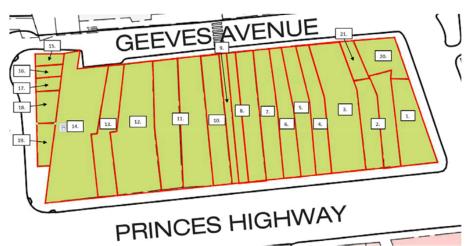
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Map Reference	Lot	DP	Address	Approximate Site Area (sq.m.)
18.	в	387939	8-12 Tramway Arcade	81
19.	с	387939	14 Tramway Arcade	56
20.	1	112857	6 Geeves Avenue	194
21.	PT 1	343365	14 Geeves Avenue	75

Table 1: Lots subject of the draft Planning Proposal

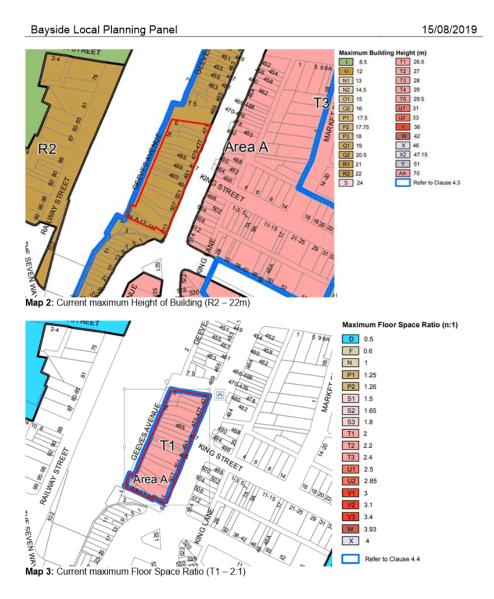


Map 1: Location of lots subject of the draft Planning Proposal

The land is currently zoned B2 Local Centre under Rockdale Local Environmental Plan 2011, and has an area of approximately 6,240sq.m. It is bounded by Geeves Avenue to the north and west, Tramway Arcade to the south and the Princes Highway to the east. The land extends approximately 140m along the Princes Highway, 126m along the western part of Geeves Avenue, 47m along the northern part of Geeves Avenue and 52m along Tramway Arcade. The Rockdale Bus Interchange is located immediately to the west on Geeves Avenue and the Rockdale Train Station further to the west.

The land consists of a number of retail and commercial premises of varying sizes. The Princes Highway frontage provides the main focus of retail and commercial activity, with some activity also present along Tramway Arcade and some parts of Geeves Avenue. The block is bisected by an arcade which runs through the site from Geeves Avenue to Princes Highway (shown as Lot 9 on **Map 1** above), generally aligned to the main pedestrian crossing connecting to King Street to the east. This is a heavily-used thoroughfare for pedestrians from the train station and bus interchange to King Street and beyond to the eastern part of the town centre. A number of businesses are located along the arcade at ground and first floor levels.

Maps 2 and 3 below illustrate the current development standards which apply to land within the site:



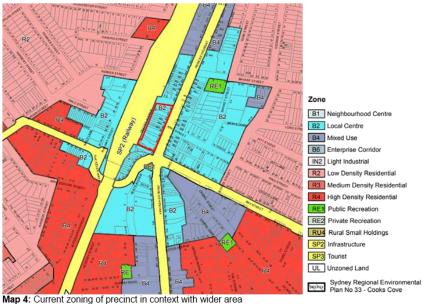
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Photo 1: Aerial photo of the lots included in the draft Planning Proposal

Site Context

The site is within the Rockdale Town Centre, with the immediate surrounding locality similarly zoned B2 Local Centre. Land use zones surrounding the town centre comprise a mix of B4 Mixed Use, R4 High Density Residential and R2 Low Density Residential zones (refer Map 4 below):



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<complex-block>

Figure 1 shows views of the site and its surrounds, and the area's predominant character and appearance (Source: Proponent's Urban Design Report - refer **Attachment 3**):

Figure 1: Views of the site and the surrounding area

Relevant Planning History

The former Rockdale City Council (RCC) adopted the Rockdale Town Centre Masterplan (RTCMP) on 5 December 2012. The RTCMP sets out Council's aspirations for the future of the Rockdale Town Centre and is intended to act as a guiding document for Council, business owners, private developers and the community. It identifies three distinct precincts within the Rockdale Town Centre, outlines the existing role or character of each precinct and provides guidance as to how each precinct may be developed in the future. The 'Town Centre Core' forms one such precinct identified under the RTCMP, within which the 'Rockdale Town Centre Transport Interchange Precinct' (Interchange Precinct) is one of four sub-precincts.

The Interchange Precinct incorporates the Rockdale Railway Station, Bus Interchange and privately owned land bounded by the Princes Highway to the east, Geeves Avenue to the north and west and Tramway Arcade to the south (also known as 471-511 Princes Highway, 2-14 Tramway Arcade and 6 & 14 Geeves Avenue). The privately owned land within the precinct is the subject of this Planning Proposal.

Following on from the preparation of the RTCMP in October 2014, RCC resolved that a Planning Proposal for the Rockdale Town Centre (RTCPP) should proceed to the NSW Department of Planning and Environment (the DPE) to be finalised. Two areas were however deferred from the RTCPP including the Interchange Precinct (incorporating the subject privately owned land).

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The Interchange Precinct was deferred from the broader RTCPP as during the consultation period a number of key challenges were identified affecting redevelopment of the Precinct, including concerns relating to traffic impact on major intersections. It was recommended that the Precinct be deferred from the RTCPP, so that further studies could be finalised in this respect. Transport for NSW (TfNSW) also requested that a Transport Management Accessibility Plan (TMAP) be prepared by Council for the precinct particularly in the light of the operation of the Rockdale Train Station and bus interchange which are located within the Precinct. Advice from TfNSW in 2014 suggested that the cost to Council of obtaining a TMAP could be approximately \$200,000. It is understood that Council was not able to access funds to prepare a TMAP and that consequently, the proponent of the subject Planning Proposal worked directly with TfNSW and RMS between 2016 and 2017 to agree on a scope for a Transport Study for the precinct in lieu of the requested TMAP (see **Attachment 6**). A Transport Study has been submitted in support of the draft Planning Proposal (see **Attachments 7 and 8**).

Report

Draft Planning Proposal

Maximum Height of Building (HOB)

The draft Planning Proposal proposes an increase in the maximum HOB development standard in the Rockdale Local Environmental Plan 2011 (RLEP 2011) from 22m to 27m across the entire Precinct including the Geeves Avenue roadway (see **Map 5** below):



Clause 4.3 (2A)(a) of RLEP 2011 allows the maximum building height to be exceeded by an additional 12m in 'Area A' (which includes the subject land) on lots with an area of at least 1,500m². This height incentive would provide for an allowable maximum building height of

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39m on the land (approximately RL55m) subject to compliance with design excellence requirements in accordable with clause 6.14.

Maximum Floor Space Ratio (FSR)

The draft Planning Proposal also proposes the removal of FSR controls across the site, in keeping with the wider strategy applied by the RTCPP throughout the Rockdale Town Centre area:



Map 6: Proposed removal of maximum FSR controls (subject site outlined in red)

A maximum FSR of 2:1 currently applies to the site (refer **Map 3** above). Clause 4.4 (2C)(a) of the RLEP 2011 currently allows an additional FSR of 1:1 on the land where a development relates to a site with an area of at least 1,500sq.m. The current draft Planning Proposal would delete the maximum FSR standard applying to the land which is consistent with the approach that has been taken for all other land within the Rockdale Town Centre Masterplan area.

Built Form

In its Planning Proposal and Urban Design Reports, the Proponent has outlined an indicative scheme for the redevelopment of the land. This has evolved over time as a result of discussions between the Proponent and Council officers.

The initial scheme submitted by the Proponent generally responded to the Rockdale Town Centre Masterplan 2012 (RTCMP 2012). The indicative concept plans for the Precinct in the RTCMP 2012 envisaged a low-height retail podium with towers rising above. This is illustrated in **Figures 2** and **3** below:



The RTCM 2012 also envisaged a pedestrian link at podium level which connected directly to Rockdale Train Station (see **Figure 4** below):

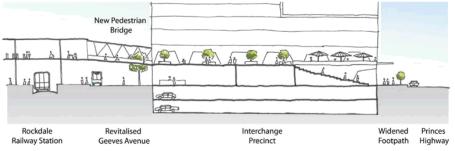


Figure 4: Section through concept scheme showing potential pedestrian link

The proponent's initial response to this concept is shown in **Figures 5-7** below (Source: Proponent's Urban Design Report - refer **Attachment 3**):

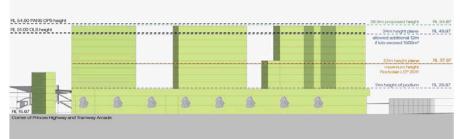


Figure 5: Initial massing diagram showing view from the east

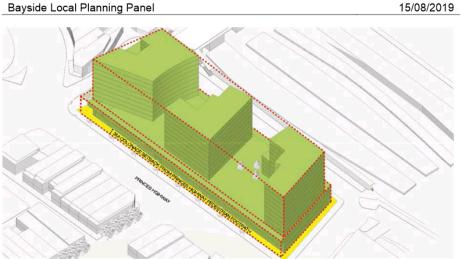


Figure 6: Initial massing diagram showing aerial view

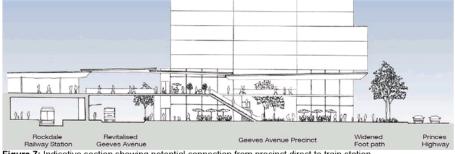


Figure 7: Indicative section showing potential connection from precinct direct to train station

It is understood that Council's officers considered these initial concept proposals and worked with the Proponent to achieve a revised scheme which is more consistent with the Rockdale Town Centre chapter of RDCP 2011 (see **Attachment 9**). Council officer's position is that the Proposal now reflects the built form and function outcomes sought in the RDCP 2011, including:

- · Primary retail located along the Princes Highway frontage;
- Contributory retail along a widened arcade/pedestrian connection through the site and the northern part of Geeves Avenue;
- Active laneways along the Geeves Avenue and Tramway Arcade frontages;
- A 3m retail level setback along the Princes Highway to provide for a colonnade;
- Dedication of 2.5m strip for local road widening along Tramway Arcade and Geeves Avenue;
- A six-storey street wall height along the Princes Highway (designated as 'Arterial Core'); and

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 A three-storey street wall height along the Geeves Avenue frontage (designated as 'Laneway').

The revised indicative scheme provides for two x 12-storey 'landmark' towers at the northern and southern ends of the block. The proposed indicative massing provided in the draft Planning Proposal provides for a high-density mixed-use development comprising:

- 246 residential units (70 x 1 bed units, 145 x 2 bed units and 31 x 3 bed units
- 4,015 m2 of retail floorspace, and
- 377 m2 of commercial floorspace.

Notably the proposed 4,392m² of retail and commercial floorspace provided for represents a reduction in existing retail/commercial floorspace from approximately 6,000 m² (approximately 1,608m²). This is largely due to a reduction in the overall building footprint as a result of required setbacks on the Princes Highway and Geeves Avenue frontages, and the widened through-site link proposed between the Princes Highway and Geeves Avenue.

The indicative scheme is illustrated in **Figures 8-12** below (Source: Proponent's Urban Design Report - refer **Attachment 3**):



Figure 8: Building heights and mass as viewed from the east

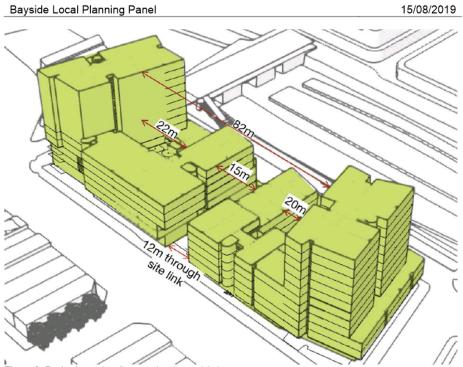
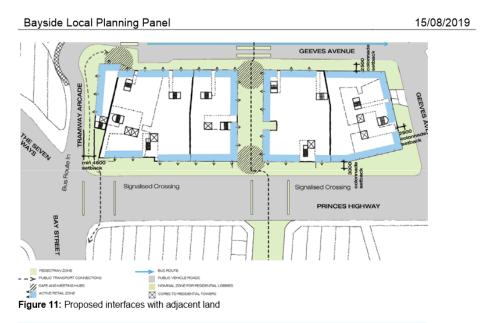


Figure 9: Revised massing diagram showing aerial view





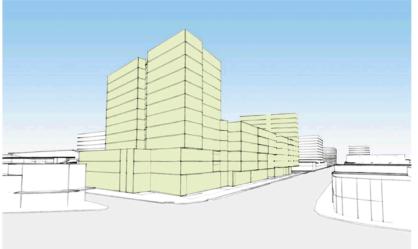


Figure 12: 3D massing visualisation of potential Princes Highway frontage (from south)

Rockdale Development Control Plan 2011 (RDCP 2011) Amendment

An amendment to RDCP 2011 (see **Attachment 2**) is also proposed as part of the draft Planning Proposal. The Draft DCP amendment seeks to insert site specific provisions for the land referred to as Rockdale Transport Interchange Precinct (Geeves Avenue Precinct) by inserting a new section into 7.5.3 (Key Precincts) of the DCP and aims to secure the following key features of the indicative scheme (see also **Figure 10** above):

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- An open air, pedestrianised through-site link is to be provided at ground floor in the centre
 of the precinct which is 12m wide and which links Rockdale bus interchange and Princes
 Highway;
- Active retail zones are to be provided along the street frontages and the through-site link;
- A 2.5m setback is to be provided along Geeves Avenue as measured from the pedestrian footpath;
- A 3.0m setback is to be provided along Princes Highway as measured from the pedestrian footpath;
- A minimum setback of 4.5m is to be provided along Tramway Arcade;
- A 6 storey podium along Princes Highway and 3 storey podium along Geeves Avenue;
- Two 12-storey landmark buildings, with one to the northern end of the precinct and the
 other to southern end of the precinct;
- The built form to 2-18 Tramway Arcade is to be 3 storeys; and
- The built form to the centre of the precinct is to be between 5 and 6 storeys.

The draft DCP amendment also details the proposed lots to be included in each stage of the redevelopment of the land as follows (see also **Figure 13** below):

- Stage 1 (southern portion of the Precinct): includes the sites 507, 509 and 513-517
 Princes Highway and 2-18 Tramway Arcade and incorporates one of the landmark
 buildings. The sites 2-18 Tramway (wedge site) are to be redeveloped separately given
 there are a number of separate landowners and it would be difficult to amalgamate with
 the remainder of the sites in Stage 1;
- Stage 2 (central portion of Precinct): includes the sites 483, 485, 487, 489, 491, 493, 495 and 501 Princes Highway (a total of 8 sites) and will incorporate a through site link; and
- **Stage 3** (northern portion of the precinct): includes the sites 471, 475-477 and 481 Princes Highway, 6 and 14 Geeves Avenue and incorporates one of the landmark building for the precinct.

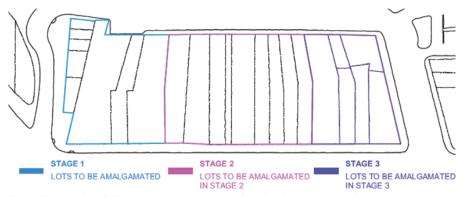


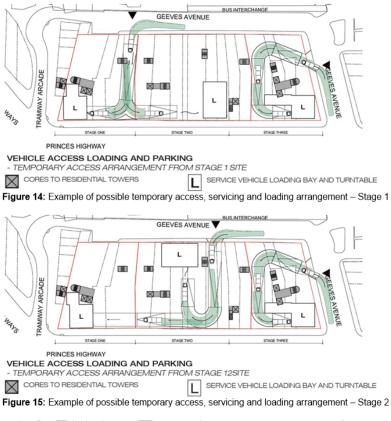
Figure 13: Image from DCP showing potential amalgamation of lots for three stages of development

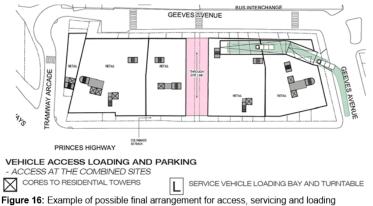
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Further commentary on the proposed staging of development is included below. The draft DCP amendment also identifies potential vehicular access arrangements based on the proposed staging and provides for a single access point upon completion of all stages. These arrangements are illustrated in **Figures 14-16** below (Source: Proponent's Draft DCP amendment).





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Staging

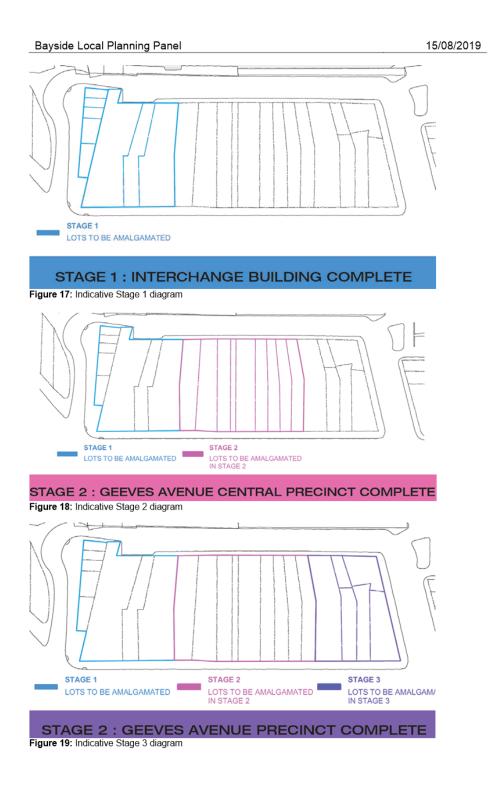
In the Urban Design Report (refer **Attachment 3**), the Proponent has indicated that the redevelopment of the land is likely to occur in three stages as shown in Figure 13 above and broken down by site below. This is largely due to ownership and site amalgamation issues. It should be noted that the proponent currently owns the properties highlighted in green in Stage 1 only totalling 1,399m².

Stage 1 –	
507 Princes Highway	618sq.m.
509 Princes Highway	331sq.m.
511 (513-517) Princes Highway	781sq.m.
2 Tramway Arcade	40sq.m.
4 Tramway Arcade	36sq.m.
6 Tramway Arcade	34sq.m
8-12 Tramway Arcade	81sq.m.
14 Tramway Arcade	56sq.m.
Total	1977sq.m.
Stage 2 –	
483 Princes Highway	268sq.m.
485 Princes Highway	268sq.m.
487 Princes Highway	263sq.m.
489 Princes Highway	276sq.m.
491 Princes Highway	456sq.m.
493 Princes Highway	134sq.m
495 Princes Highway	249sq.m.
501 Princes Highway	860sq.m.
Total	2774sq.m.

Stage 3 –	
471 Princes Highway	290sq.m.
475-477 Princes Highway	403sq.m.
481 Princes Highway	526sq.m.
6 Geeves Avenue	194sq.m.
14 Geeves Avenue	75sq.m.
Total	1488sq.m.

The draft Planning Proposal (and indicative massing proposal) however relates to the entirety of Stages 1-3 as shown in the Urban Design Report (refer **Attachment 3**) and are represented in the following indicative staging diagrams provided in the proponent's Urban Design Report:

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Assessment of the Draft Planning Proposal

Environmental Planning & Assessment Act 1979 (EPAA)

The former Department of Planning and Environment's (DPE) (now the Department of Planning, Industry and Environment) 'A *Guide to Preparing Planning Proposals'* – issued under s3.33(3) of the *Environmental Planning and Assessment Act 1979* (the Act) – provides guidance and information on the process for preparing Planning Proposals. The subject assessment of the draft Planning Proposal has been undertaken in accordance with the latest version of this *Guide* (dated December 2018).

Ministerial Directions

Directions issued under section 9.1 and the former section 117(2) of the *Environmental Planning and Assessment Act 1979* (the Act) set out requirements to be considered by a Planning Proposal Authority (PPA) in respect of a draft Planning Proposal. An assessment of the draft Planning Proposal against the applicable Ministerial Directions is provided in **Table 2** below:

Table 2: Consistency of Draft Planning Proposal with s9.1 direction

	Draft Planning Proposal with s9.1 direction	
Ministerial	Consistency of Draft Planning Proposal with	Consistent?
Direction	Ministerial Direction	
 Employment and Resources Business and Industrial Zones 	 What a PPA must do: A Planning Proposal must: a) give effect to the objectives of this direction; b) retain the areas and locations of existing business and industrial zones; c) not reduce the total potential floor space area for employment uses and related public services in business zones; d) not reduce the total potential floor space area for industrial 	Yes
	 uses in industrial zones; and e) ensure that proposed new employment areas are in accordance with a strategy that is approved by the Secretary of the Department of Planning and Environment. The objectives of this direction are to: a) encourage employment growth in suitable locations; b) protect employment land in business and industrial zones; and c) support the viability of identified centres. 	
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 27): 'The site's current B2 Local Centre zoning will remain unchanged, and the total potential floor space area for employment uses will increase. The proposal will enable development of a high quality mixed use precinct in a suitable location close to existing public transport and other infrastructure and services.	
	It is estimated that the site once developed will have the following economic impacts on an annual basis:	

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Ministerial Direction	Consistency of Draft Planning Proposal with Ministerial Direction	Consistent?
	 \$111.6 million in output; \$58.7 million contribution to Gross Regional Product; \$35 million in incomes and salaries; and 446 full time equivalent jobs, including 196 direct jobs.' Comment: The objectives of the B2 Local Centre zone under RLEP 2011 are as follows: To provide a range of retail, business, entertainment and community uses that serve the needs of people who live in, work in and visit the local area; To encourage employment opportunities in accessible locations; To maximise public transport patronage and encourage walking and cycling; To accommodate population growth through high density mixed use development that complements the role of retail, commercial, civic and cultural premises in the Rockdale town centre; and To create a lively Rockdale town centre with an amenable and pedestrian focused public domain activated by building uses that engage with the street. 	
	The draft Planning Proposal is considered to be consistent with these objectives and the requirement of the Ministerial Directions. The additional height being sought and the removal of the FSR control will allow for a comprehensive, high-density, mixed-use development of the land. The retail, commercial and civic function of the Precinct will be improved and enhanced in a location which is easily accessible by a range of public transport modes.	
	It is noted that the indicative scheme provides for a reduction in retail and commercial floorspace from approximately 6,000sqm to approximately 4,392sqm. This is however largely due to a reduction in building footprint as a result of required setbacks on the Princes Highway and Geeves Avenue, and the requirement for a widened through-site link. Accordingly it is considered appropriate in the circumstances.	
	In addition, the proposed LEP amendment is intended to facilitate a modern, mixed-use development that has the potential to significantly enhance the quality, amenity and image of the locality, act as a catalyst for further development in the town centre, as well as attracting new businesses and creating additional jobs. It is therefore consistent with the Direction.	
2. Environment and Heritage 2.3 Heritage Conservation	 What a PPA must do: A Planning Proposal must (inter alia) contain provisions that facilitate the conservation of: a) items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or place, identified in a study of the environmental heritage of the area. 	Yes but subject to a future heritage assessment

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Ministerial	Consistency of Draft Planning Proposal with	Consistent?
Direction	Ministerial Direction	Consistent
	 A Planning Proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that: a) the environmental or indigenous heritage significance of the item, area, object or place is conserved by existing or draft environmental planning instruments, legislation, or regulations that apply to the land; or b) the provisions of the Planning Proposal that are inconsistent are of minor significance. 	
	The objective of this direction is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance.	
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 9):	
	'There are no heritage items on the site nor is the site within a heritage conservation area. The proposal has no adverse impacts on any surrounding heritage item (Brick buildings, signal box and overhead booking office to Rockdale train station referenced I222 in the Rockdale LEP 2011).'	
	Comment: The proposed amendments to development standards are intended to enhance the attractiveness / viability of the land for redevelopment to provide a high-density, mixed-use development. The proposal has the potential to improve the retail, commercial and civic function of the Precinct and to provide improved accessibility for the community in the form of public domain improvements including the through site link and footpath widening.	
	The site is located in close proximity to a number of heritage items including the Rockdale Railway Station and Yard Group, Guild Theatre, St Joseph's Convent and further away the Uniting Church group in Bay Street. Council's heritage officer has provided advice that the proposal will improve Geeves Avenue and the relationship to Rockdale Railway Station and that other heritage items in the vicinity are far enough removed so as not to be impacted by the proposal. The advice further notes however that a group of buildings at 471-477 Princes Highway and 6-14 Geeves Avenue have potential heritage value. Accordingly it has been recommended that these buildings be assessed prior to any development approval. However given the subject draft Planning Proposal provides for a comprehensive redevelopment of the block it is considered appropriate that a heritage assessment should be undertaken prior to referring the matter for a Gateway approval.	
3. Housing, Infrastructure and Urban Development	What a PPA must do: A Planning Proposal must include provisions that encourage the provision of housing that will:	Yes

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Ministerial Direction	Consistency of Draft Planning Proposal with Ministerial Direction	Consistent?
3.1 Residential Zones	 a) broaden the choice of building types and locations available in the housing market; b) make more efficient use of existing infrastructure and services; 	
	c) reduce the consumption of land for housing and associated urban development on the urban fringe andd) be of good design.	
	 A Planning Proposal must, in relation to land to which this direction applies: a) contain a requirement that residential development is not permitted until land is adequately serviced (or arrangements satisfactory to the council, or other appropriate authority, have been made to service it); and b) not contain provisions which will reduce the permissible residential density of land. 	
	 The objectives of this Direction are: a) to encourage a variety and choice of housing types to provide for existing and future housing needs; b) to make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services; and c) to minimise the impact of residential development on the environment and resource lands. 	
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 28):	
	'The proposal will incorporate a variety of studio, 1, 2 and 3 bedroom units which is consistent with the minimum unit mix provisions in the Rockdale Development Control Plan 2011. The variety of unit types will provide accommodation for singles, couples and families and a portion of the units are to be allocated as affordable housing. The mixture of housing will provide for existing and future housing needs of the locality.	
	The additional housing will be opposite Rockdale Train Station and a number of bus services along Princes Highway. Furthermore, the residential accommodation will be located within the Rockdale Town Centre which is close proximity to a range of services and facilities. Therefore the proposal will make efficient use of the existing infrastructure and services.'	
	 Comment: The Ministerial Direction states that the direction applies when a PPA prepares a Planning Proposal that will affect land within: a) an existing or proposed residential zone (including the alteration of any existing residential zone boundary); or b) any other zone in which significant residential development is permitted or proposed to be permitted. 	

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Ministerial Direction	Consistency of Draft Planning Proposal with Ministerial Direction	Consistent?
	The B2 Local Centre zone allows shop-top housing to be permitted with consent in the zone. The requirements of the Direction therefore apply to the Planning Proposal. The draft Planning Proposal seeks to provide for a 5m increase in the applicable maximum HOB standard applying to the land in conjunction with the deletion of the maximum FSR standard. It will therefore allow high-density, mixed-use development on the land with a significant residential component. It is able to provide for a range of apartment sizes in a location that will make the best possible use of existing town centre infrastructure, including access to a range of public transport facilities and travel options in the locality. It is therefore considered to be consistent with the Direction.	
3. Housing, Infrastructure and Urban Development 3.4 Integrating Land Use and Travel	 What a PPA must do: A Planning Proposal must locate zones for urban purposes and include provisions that give effect to and are consistent with the aims, objectives and principles of: a) Improving Transport Choice – Guidelines for planning and development (DUAP 2001); and b) The Right Place for Business and Services – Planning Policy (DUAP 2001). The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives: a) improving access to housing, jobs and services by walking, cycling and public transport; b) increasing the choice of available transport and reducing dependence on cars; c) reducing travel demand including the number of trips generated by development and the distances travelled, especially by car; d) supporting the efficient and viable operation of public transport services; and e) providing for the efficient movement of freight. Consistency: The proposal accords with the above objectives in that it enables increased development potential in a location in close proximity to Rockdale Station and the existing services and facilities in Rockdale Station and the existing services and facilities in Rockdale Town Centre. The site is also located in close proximity to employment opportunities associated with Sydney Airport and other employment hubs including Hurstville and Sydney CBD.' 	Yes – subject to further work at DA stage
	The draft Planning Proposal seeks to encourage site amalgamation and redevelopment by increasing viability through an uplift in height and removal of the maximum FSR	

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			y of Dra Directio		anning	Prop	osal wi	th		Consistent
cc tra th Al op th de of	development standard currently applying to the site. This is considered appropriate for a site with excellent access to public transport and the existing services and facilities available within the Rockdale Town Centre. <u>Parking</u> Along with the range of public transport, walking and cycling options available to future occupiers of, and visitors to the site, the Proponent has also indicated a commitment to reducing car dependency through a reduction of car parking provision as part of any future development on site. The RDCP 2011 parking requirements for the indicative scheme use are shown below:									
					Site 1		Site 2		Site 3	
De	scription	Use	DCP parking rate	Units/ GFA	Parking	Units/ GFA	Parking	Units/ GFA	Parking	
		Studio 1 Bed	1 space/unit	25	25	19	19	26	26	
D.		2 Bed	2 spaces /	48	48	44	44	53	53	
K	-	3 Bed	unit 1 space / 5	12	24	10	20	9	18	
	-	Visitor	units	85	17	73	15 98	88	18	
-			ential Total				327			
Re	etail / Comr	nercial	1 space/40 m ² GFA	1.695	43	1,746	44	951	24	
Inc	dividual Tota				157		142		139	
Co ra th tra ca lo Av Co th	ther that tes sho e Rock ansport arking p ar, the r cal roa venue a ouncil's e subje	an re ould l dale t (rail provis numb d nes and l and l s Tra sect lo	elying on be applie Town Ce way stati sion is int ber of veh twork and Princes H	the D d giventre on ar tende hicle t d key lighw	port Cons I should a	ng rai e's ur ediate ercha ice rel assoc ions (sultan apply	tes, reduc nique loca ely adjace ange). A r liance on siated imp including t has adv the RMS	ced paration we ation we ent to preduce the propacts of Geev vised the Metro	rking vithin oublic d ivate on the es nat in politan	

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nisterial rection	Consistency of Draft Planning Proposal with Ministerial Direction										
	Parking.										
	The recomme	ended mini	imum numb	er of off	street residen	t parkin	g spa	ices is as fo	llows:		
	Metropolitan I	Regional (CBD) Centr	es:							
	 0.4 s 	paces per	1 bedroom	unit.							
	• 0.7 s	paces per	2 bedroom	unit.							
	 1.20 	spaces pe	r 3 bedroom	n unit.							
	 1 spa 	ice per 7 u	inits (visitor	parking)							
	Metropolitan	Sub-Reg	ional Centr	es:							
	 0.6 s 	paces per	1 bedroom	unit.							
	 0.9 s 	paces per	2 bedroom	unit.							
	1.40	spaces pe	r 3 bedroom	n unit.							
	 1 spa 	ice per 5 u	inits (visitor	parking)							
	Metropolitan well as acces									ployment as	
	public transpo However view that shown al in access the follow scheme:	r, Cour t the M bove s sible lo	ncil offic letropol hould b ocations	ers h itan S e app throu	ave advis Sub-Regio blied as C ughout th	sed t onal Coun ie LC	Cer cil h GA.	ntres (p nas don This wo	arking e else ould re	rates where sult in	
					Site 1			Site 2		Site 3	
	Description	Use	Parking rate	Units			nits/	Parking	Units/	Parking	
		Studio	0.6	GFA	requirem	ent (GFA	requiremen	nt GFA	requirement	
		1 Bed	spaces/unit	25	15		19	12	26	16	
	Residential	2 Bed	0.9 spaces/unit	48	44		44	40	53	48	
	No.adolinar	3 Bed	1.4 spaces /unit	12	17		10	14	9	13	
		Visitor	1 space	85	17	-	73	15	88	18	
	Residential Tota	al	per 5 units		93			81	-	95	
	Precinct Reside	ential Total				_	2	69			
	For the r developr parking r	nent, t	he prop	onen ply:	t has ind		d th	nat the f	ollowi		
	Description	Use Po	arking rate (50%	Units/	Site 1 Parking	Units/	Site	2 Parking	S Units/	Site 3 Parking	
			eduction)	GFA	requirement	GFA		quirement	GFA	requirement	
	Retail / Comm		space/80 m ² GFA	1.695	22	1.746		22	951	12	
	Precinct Retail	/Commerci	al Total				5	6			
	As show parking r require a spaces f DCP Par parking r	ates, t parkir rom the king R	he indic ng provi e 438 s Rates. If	cative ision paces the F	scheme of 325 sp s that wo RMS Met	for ti aces uld b ropol	he I s, a e re itar	Precinc reducti equired Regio	t woul on of using nal (C	d 113 (the (BD)	
	be appro				pileu, tile	, iedi	une	αραικι	iy iati	e would	

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Ministerial Direction	Consistency of Draft Planning Proposal with Ministerial Direction	Consistent?
	However, Council's Traffic and Transport Consultant has indicated that it is appropriate for a reduction in parking provision to be applied and that rather than applying a 50% reduction in the parking rate for retail/commercial floorspace (as suggested by the Proponent) a rate of 1/40m ² of GFA should be applied for commercial uses and 1/140m ² of GFA for retail uses consistent with the existing provision on site. This would equate to a total provision of 307 spaces (269 residential, 29 retail and 9 commercial spaces). It is considered that this approach represents a good balance both encouraging public transport use and providing reasonable car parking to service the development.	
	Given the site's excellent access to public transport and constrained vehicular access, it is considered that the proposed parking rates should be included in the draft DCP amendment. Final parking numbers will be determined at the future Development Application stage once a detailed architectural scheme, numbers and mix of residential units, and retail/commercial floorspace has been finalised.	
	Traffic Generation Notwithstanding the proposed reduction in parking rates, the proposed development will have an impact on the local road network as a result of additional trips associated with any future development. The initial comments from Council's Traffic and Transport Consultant on traffic generation were as follows:	
	'There are no traffic or transport issues identified with the Planning Proposal traffic impact assessment that would preclude its approval. It should be noted however that, during the sites Development Application phase, the following will require further attention:	
	 ensuring that the site access, internal parking layout and servicing areas for Site 1 are designed in accordance with the requirements prescribed in AS2890. Particular attention should be given to ensure sufficient horizontal and vertical clearances can be achieved to allow basement access to service vehicles (e.g. refuse collection, deliveries); the location of the temporary and ultimate site accesses 	
	 considers sight line requirements and reducing conflict with pedestrians; estimation of year 2031 (i.e. 10-year design horizon) design traffic volumes and modelling of scenario in SIDRA intersection; and a functional layout plan will need to be provided to ensure the proposed configuration of the Geeves Avenue approach and departure lanes to the Princes Highway/Geeves Avenue signalised intersection can be achieved. 	
	With regard to the location of temporary site accesses, the Proponent has provided context to this issue through Figures 13-16 above which illustrate the possible staging of any future development, including swept path analysis to demonstrate the possible vehicular access for HRVs that is achievable within each stage.	

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Ministerial Direction	Consistency of Draft Planning Proposal with Ministerial Direction	Consistent?
	The final access arrangements propose a single site access on Geeves Avenue at the northern end of the site to minimise possible conflict with public transport interchange users. This will necessitate the removal of six existing on-street parking spaces and two loading zones along Geeves Avenue as shown below:	
	No Parking No Parking No Parking No Parking No Parking No Parking Kerb realignment maybe required extent to be determined in design stage In addition, this junction configuration has been designed to allow more right-turning traffic to get through the intersection in the allocated green time, assisting in improving the capacity and performance of the intersection as traffic increases in the future. The final design of, and funding for, the improved intersection may need to be secured through a VPA or s94 contributions,	
	although RMS would also need to be consulted during any public exhibition of the draft Planning Proposal to discuss the acceptability/feasibility of any changes to an intersection along the Princes Highway.	
 Housing, Infrastructure and Urban Development 5 Development Near Regulated Airports and Defence Fields 	 What a PPA must do: In the preparation of a Planning Proposal that sets controls for development of land near a regulated airport, the relevant planning authority must: a) consult with the lessee/operator of that airport; b) take into consideration the operational airspace and any advice from the lessee/operator of that airport; c) for land affected by the operational airspace, prepare appropriate development standards, such as height controls; and d) not allow development types that are incompatible with the current and future operation of that airport. 	Yes – but further consultation required at Gateway stage and as part of a future DA
	 In the preparation of a Planning Proposal that sets controls for development of land near a core regulated airport, the relevant planning authority must: a) consult with the Department of the Commonwealth responsible for airports and the lessee/operator of that airport; b) for land affected by the prescribed airspace (as defined in Regulation 6(1) of the Airports (Protection of Airspace) Regulation 1996, prepare appropriate development standards, such as height controls; c) not allow development types that are incompatible with the current and future operation of that airport; and 	

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Ministerial Direction	Consistency of Draft Planning Proposal with Ministerial Direction	Consistent?
	 d) obtain permission from that Department of the Commonwealth, or their delegate, where a Planning Proposal seeks to allow, as permissible with consent, development that would constitute a controlled activity as defined in section 182 of the Airports Act 1996. This permission must be obtained prior to undertaking community consultation in satisfaction of section 57 of the Environmental Planning and Assessment Act 1979. 	
	Furthermore, a Planning Proposal must include a provision to ensure that development meets <i>Australian Standard 2021–2015,</i> <i>Acoustic- Aircraft Noise Intrusion – Building siting and</i> <i>construction</i> with respect to interior noise levels, if the proposal seeks to rezone land:	
	 a) for residential purposes or to increase residential densities in areas where the ANEF is between 20 and 25; b) for hotels, motels, offices or public buildings where the ANEF is between 25 and 30; or c) for commercial or industrial purposes where the ANEF is above 30. 	
	 The objectives of this direction are: a) to ensure the effective and safe operation of regulated airports and defence airfields; b) to ensure that their operation is not compromised by development that constitutes an obstruction, hazard or potential hazard to aircraft flying in the vicinity; and c) to ensure development, if situated on noise sensitive land, incorporates appropriate mitigation measures so that the development is not adversely affected by aircraft noise. 	
	Consistency:	
	The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 29):	
	'The proposed amendment to the building height standard for the site enables development up to an RL of 54.87 which is above the Sydney Airport Corporation Limited (SACL) OLS height of RL 51.00 but below the PANS-OPS height of RL54.9. As such, permission is required from SACL and it is anticipated that SACL will be consulted as part of statutory exhibition. It appears that development at 3-7 Keats Avenue (RL53.75) and 564 Princes Highway (RL52.75) have been able to penetrate the OLS height and is of a similar height to the proposal.	
	It is noted that the PANS-OPS however we note that there will be strict controls surrounding the heights of the cranes during construction.	
	The site is located between the 20 and 25 ANEF contours. Mitigation techniques can be addressed at the Development Application stage, in line with Clause 6.3 of the Rockdale LEP 2011.'	

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Ministerial	Consistency of Draft Planning Proposal with Consistent?		
Direction	Ministerial Direction	Consistent	
Direction			
4. Hazard and Risk 4.1 Acid Sulfate Soils	 Comment: While there is no objection in principle to the proposed maximum HOB, Sydney Airport Corporation Limited (SACL) and the Civil Aviation Safety Authority (CASA) will need to be consulted during any public exhibition of the draft Planning Proposal in respect of whether the proposed 39m (54.87m RL) height limit, which breaches the OLS, is acceptable and would or would not pose any safety concern to aircraft. Any additional consultation regarding the use of cranes required during construction will form part of the future Development Application process. As it is proposed to increase residential density on the land, any future Development Application will also need to demonstrate that residential development on the land is able to achieve Australian Standard 2021–2015, Acoustic- Aircraft Noise Interior noise levels. What a PPA must do: The relevant planning authority must consider the Acid Sulfate Soils Planning Guidelines adopted by the Director-General of the Department of Planning when preparing a Planning Proposal that applies to any land identified on the Acid Sulfate Soils Planning Maps as having a probability of acid sulfate Soils Planning Guidelines adopted by the Director-General; or (5) When a relevant planning authority is preparing a Planning Proposal to introduce provisions to regulate works in acid sulfate soils planning Guidelines adopted by the Director-General; or auth Acid Sulfate Soils Model LEP in the Acid Sulfate Soils Planning Guidelines adopted by the Director-General of the Department of Planning Maps unless the relevant planning authority must not prepare a Planning Proposal that proposes an intensification of land uses on land identified as having a probability of containing acid sulfate Soils Planning Guidelines. A relevant planning authority must not prepare a Planning Proposal that proposes an intensification of and uses on land identified as having a probability of containing acid sulfate soils relevant plan	Yes	

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Ministerial Direction	Consistency of Draft Planning Proposal with Ministerial Direction	Consistent?
	The objective of this direction is to avoid significant adverse environmental impacts from the use of land that has a probability of containing acid sulfate soils.	
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 29):	
	'The site is classified as Class 5 Acid Sulfate Soils under RLEP 2011. Clause 6.1 of Rockdale LEP 2011 specifies when an Acid Sulfate Soils Management Plan is required to be submitted for approval by Council as part of any subsequent Development Application.'	
	Comment: The subject land is currently developed for urban purposes and is classified as potentially being affected by Class 5 acid sulfate soils. Assessment of the suitability of the site for the proposed uses would be addressed in detail at the future Development Application supported by relevant information as required. No change in permissible use is proposed as part of the subject draft Planning Proposal.	
5. Regional Planning	What a PPA must do: Planning Proposals must be consistent with a Regional Plan released by the Minister for Planning.	Yes
5.10 Implementation of Regional Plans	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 30):	
	'The proposal is consistent with Greater Sydney Region Plan: A Metropolis of Three Cities (previously A Plan for Growing Sydney) in that helps achieve a competitive economy, a city of housing choice, a great place to live and a sustainable and resilient city.'	
	The objective of this direction is to give legal effect to the vision, land use strategy, goals, directions and actions contained in Regional Plans.	
	Comment: The current development standards in the RLEP 2011 already permits a high-density, mixed-use redevelopment of the subject land. The changes to the development standards proposed in the draft Planning Proposal would allow for a more-intensive mixed-use development of a town centre site close to public transport, employment and services. This is consistent with the Greater Sydney Region Plan in that is encourages the provision of more housing close to employment opportunities, services and public transport and walking and cycling options.	
6. Local Plan Making	What a PPA must do: A Planning Proposal must:	Yes

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Ministerial Direction	Consistency of Draft Planning Proposal with Ministerial Direction	Consistent?
6.1 Approval and Referral Requirements	 a) minimise the inclusion of provisions that require the concurrence, consultation or referral of Development Applications to a Minister or public authority; b) not contain provisions requiring concurrence, consultation or referral of a Minister or public authority unless the relevant planning authority has obtained the approval of: the appropriate Minister or public authority; and the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General); prior to undertaking community consultation in satisfaction of section 57 of the Act; and c) not identify development as designated development unless the relevant planning (or an officer of the Director-General of the Department of Planning (or an officer of the Director-General of the Department of Planning (or an officer of the Department of Planning (or an officer of the Department nominated by the Director-General) that the class of development is likely to have a significant impact on the environment; and has obtained the approval of the Director-General of the Department of Planning (or an officer of the Director-General of the Department of Planning (or an officer of the Director-General of the Department is likely to have a significant impact on the environment; and has obtained the approval of the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) prior to undertaking community consultation in satisfaction of section 57 of the Act. 	
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 30): 'The proposal has minimised the inclusion of provisions that require the concurrence, consultation or referral of Development Applications to a Minister or public authority. The site is not identified as designated development.'	
	The objective of this direction is to ensure that LEP provisions encourage the efficient and appropriate assessment of development.	
	Comment: The draft Planning Proposal does not seek to include any additional concurrence, consultation or referral requirements into RLEP 2011. Notwithstanding appropriate consultation will be undertaken with relevant Government Agencies as required by any Gateway Determination issued by the Department of Planning, Industry and Environment.	
7. Metropolitan Planning 7.1 Implementation of	What a PPA must do: Planning Proposals shall be consistent with: (a) the NSW Government's <i>A Plan for Growing Sydney</i> , published in December 2014.	Yes
A Plan for Growing Sydney	Consistency: The proponent has stated the following in support of the draft Planning Proposal: 'The proposal is consistent with the Greater Sydney Region Plan: A Metropolis of Three Cities (previously A Plan for Growing	

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Ministerial Direction	Consistency of Draft Planning Proposal with Ministerial Direction	Consistent?
	Sydney) in that helps achieve a competitive economy, a city of housing choice, a great place to live and a sustainable and resilient city. Refer to detailed discussion above.'	
	The objective of this direction is to give legal effect to the planning principles; directions; and priorities for subregions, strategic centres and transport gateways contained in A Plan for Growing Sydney.	
	Comment: The current development standards in the RLEP 2011 already permit a high-density, mixed-use redevelopment of the subject land. The changes to the development standards proposed in the draft Planning Proposal would allow for a more-intensive mixed-use development of a town centre site close to public transport. This is consistent with the Greater Sydney Region Plan in that is encourages the provision of higher density housing close to employment opportunities, services, public transport, walking and cycling options and will promote a diverse, inclusive and cohesive community.	

State Environmental Planning Policies (SEPPs)

An assessment of the draft Planning Proposal against the relevant SEPPS is provided in **Table 3** below:

 Table 3: Assessment of the draft Planning Proposal against the relevant SEPPS

SEPP	Compliance of Draft Planning Proposal against the relevant SEPPS	Complies?
SEPP 55 – Remediation of Land	 Object of this Policy (1) The object of this Policy is to provide for a State-wide planning approach to the remediation of contaminated land. (2) In particular, this Policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment: (a) by specifying when consent is required, and when it is not required, for a remediation work; (b) by specifying certain considerations that are relevant in rezoning land and in determining Development Applications for consent to carry out a remediation work in particular; and (c) by requiring that a remediation work meet certain standards and notification requirements. Compliance 	Yes - subject to further info at DA stage
	Planning Proposal (draft Planning Proposal report – Pg. 25):	
	'The site has been used as a mixed use development for some time. It is high unlikely the land would be subject to a level of	

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SEPP Compliance of Draft Planning Proposal with SEPP Complies? contamination that would preclude its use for residential accommodation. Further contamination investigations will be undertaken at DA stage. The Planning Proposal does not seek to hinder the application of Clause 6 of SEPP 55.* Comment: The site has not been identified as contaminated land and is identified as having only Class 5 acid sulfate soils. It is considered that the redevelopment of the land will not be hindered by contamination, however a Phase 1 contamination assessment would be required as part of any future Development Application to satisfy the requirements of SEPP 55. Yes - subject SEPP 65 - Design Quality of Residential Apartment Atms, objectives etc. Yes - subject (1) This Policy recognises that the design quality of residential apartment development is of significance for environmental planing for the State due to the economic, environmental cultural and social benefits of high quality design. Yes - subject (3) Improving the design quality of residential apartment development is on sustainable development af New South Wales: (a) to ensure that it contributes to the sustainable development of New South Wales: (b) by providing sustainable housing in social and environmental terms; (b) by being a long-term asset to its neighbourhood; (ii) by achieving the urban planning policies for its regional and local contexts; (b) to better satisfy the increasing demand, the changing social and demographic profile of the community, and the needs of the widest remunity and the ended be widest remunity and the wider community. (c			
 accommodation. Further contamination investigations will be undertaken at DA stage. The Planning Proposal does not seek to hinder the application of Clause 6 of SEPP 55." Comment: The site has not been identified as contaminated land and is identified as having only Class 5 acid sulfate soils. It is considered that the redevelopment of the land will not be hindered by contamination, however a Phase 1 contamination assessment would be required as part of any future Development Application to satisfy the requirements of SEPP 55. SEPP 65 - Design Quality of Residential Apartment Development (1) This Policy aims to improve the design quality of residential apartment development in New South Wales. (2) This Policy recognises that the design quality of residential planning for the State due to the economic, environmental, cultural and social benefits of high quality design. (3) Improving the design quality of residential apartment development at mis: (a) to ensure that it contributes to the sustainable development at miss: (b) by providing sustainable housing in social and environmental terms; (j) by providing sustainable housing in social and environmental terms; (j) to achieve better built form and aesthetics of buildings and of the streetscapes and the public spaces they define; (j) to batter satisfy the increasing demand, the changing social and demographic profile of the community, and the needs of the wides range of people from childhood to oid age, including those with disabilities; (j) to contribute to the provision of a variety of dwelling types to meet population growth; (j) to support housing affordability; and (j) to support housing affordability; and (j) to support housing affordability; and (j) to farmework for l	SEPP	Compliance of Draft Planning Proposal with SEPP	Complies?
setUp contamination, however a Phase 1 contamination assessment would be required as part of any future Development Application to satisfy the requirements of SEPP 55. SEPP 65 - Design Quality of Residential Apartment Aims, objectives etc. Yes - subject to DCP amendments apartment development in New South Wales. (2) This Policy recognises that the design quality of residential apartment development is of significance for environmental cultural and social benefits of high quality design. Yes - Subject to DCP amendments and further info re ADG compliance (3) Improving the design quality of residential apartment development aims: (a) to ensure that it contributes to the sustainable development of New South Wales: (i) by providing sustainable housing in social and environmental terms; (ii) by achieving the urban planning policies for its regional and local contexts; (b) to achieve better built form and aesthetics of buildings and of the streetscapes and the public spaces they define; (c) to better satisfy the increasing demand, the changing social and demographic profile of the community, and the needs of the widest range of people from childhood to oid age, including those with disabilities; (d) to maximise amenity, safety and security for the benefit of its occupants and the wider community; (e) to contribute to the provision of a variety of dwelling types to meet population growth; (f) to contribute to the provision of a variety of dwelling types to meet population growth; (g) to support housing affordability; and (h) to facilitate the timley and efficient assessment of applications for development to w		accommodation. Further contamination investigations will be undertaken at DA stage. The Planning Proposal does not seek to hinder the application of Clause 6 of SEPP 55.' Comment: The site has not been identified as contaminated land and is	
Design Quality of Residential Apartment Development (1) This Policy aims to improve the design quality of residential apartment development in New South Wales. (2) This Policy recognises that the design quality of residential apartment development is of significance for environmental planning for the State due to the economic, environmental, cultural and social benefits of high quality design. (3) Improving the design quality of residential apartment development aims: (a) to ensure that it contributes to the sustainable development of New South Wales: (i) by providing sustainable housing in social and environmental terms; (ii) by being a long-term asset to its neighbourhood; (iii) by being a long-term asset to its neighbourhood; (iii) by achieving the urban planning policies for its regional and local contexts; (b) to achieve better built form and aesthetics of buildings and of the streetscapes and the public spaces they define; (c) to better satisfy the increasing demand, the changing social and demographic profile of the community, and the needs of the widest range of people from childhood to old age, including those with disabilites; (d) to maximise amenity, safety and security for the benefit of its occupants and the wider community; (e) to ontribute to the provision of a variety of dwelling types to meet population growth; (j) to support housing affordability; and (h) to facilitate the timely and efficient assessment of applications for development to which this Policy applies. (4) This Policy aims to provide: (a) consistency of policy and mechanisms across the State; and		contamination, however a Phase 1 contamination assessment would be required as part of any future Development Application to	
The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – PG. 25): 'The proposal enables a mixed use development designed in accordance with the 9 design quality principles under SEPP 65 and	Design Quality of Residential Apartment	 This Policy aims to improve the design quality of residential apartment development in New South Wales. This Policy recognises that the design quality of residential apartment development is of significance for environmental planning for the State due to the economic, environmental, cultural and social benefits of high quality design. Improving the design quality of residential apartment development aims: (a) to ensure that it contributes to the sustainable development of New South Wales: (i) by providing sustainable housing in social and environmental terms; (ii) by achieving the urban planning policies for its regional and local contexts;	to DCP amendments and further info re ADG

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SEPP	Compliance of Draft Planning Proposal with SEPP	Complies?
	Apartment Design Guide (ADG). Compliance with the ADG will be	
	assessed at Development Application stage.'	
	Comment: Council staff have examined the indicative scheme submitted in	
	support of the draft Planning Proposal and, following the changes	
	described above, are satisfied that the development would be	
	capable of complying with SEPP 65 and the ADG. However, a number of outstanding concerns have been identified:	
	 The western edges of towers should be splayed to improve solar access to future developments located on the 	
	neighbouring sites to the south and residential units / areas of	
	common open space within the development. This should be	
	captured in the site specific DCP to encourage an appropriate built from response to the site;	
	2. The three stage development plan creates two developments	
	that will yield high FSR (stages 1 and 3) and one development	
	that will yield a significantly lower FSR and a far greater contribution to the public domain (stage 2). This raises	
	concerns that stage 2 would not eventuate in its currently	
	proposed form. To provide a more equitable solution and provide the best opportunity of realising the design intent of this	
	proposal it is recommended that this precinct be developed as	
	two stages that are separated at the centre of the proposed	
	laneway; 3. Furthermore, a large proportion of the units with the stage 2	
	development will be south facing and receive no direct solar	
	access, this stage would not comply with the minimum	
	requirements of the ADG (maximum 15% to receive no solar access). If the units facing the lane way are incorporated into	
	stages 1 and 2 they will equate to less than 15% of the total	
	number of units for each stage, complying with the requirements of the ADG.	
	The Proponent's response to these issues is set out below:	
	1. <u>Western edges of the towers</u> : We are happy to support this	
	amendment and believe it can be conditioned as part of the consent;	
	 <u>Development stages:</u> If the precinct is divided into two stages it would hinder the redevelopment of the entire precinct as this 	
	would require 11 landowners in both stages to amalgamate	
	which is extremely onerous. Whilst stage 2 does not	
	incorporate a tower element, it would incorporate buildings between 3, 5 and 6 storeys and result in approximately 73 units	
	and $1,749m^2$ retail GFA which result in a significant uplift than	
	what the current controls allow for. To provide certainty that the	
	precinct is to be delivered we have proposed 3 stages for the redevelopment which would only require up to a maximum of 8	
	sites to amalgamate. Furthermore, it is highlighted that the	
	Australian Post site has a 30 year lease which highly restricts	
	the amalgamation and redevelopment potential of the site. We	
	have therefore incorporated this site in stage 2 rather than stage 1 which is more likely to be redeveloped. If 2	
	development stages were proposed it is unlikely that the	

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SEPP	Compliance of Draft Planning Proposal with SEPP	Complies2
SEFF	Compliance of Drait Flamming Proposal with SEFF	Complies?
	 southern end of the precinct would be redevelopment given the 30 year lease on the Australian Post site; 3. <u>No. of units receiving no solar access</u>: As demonstrated in the table below (which is in the Urban Design Report), 3% of units receive no solar access for stage 2 and the entire precinct complies with the ADG requirement (maximum 15% of units) with 4% receiving no solar access. 	
	APARTMENT DESIGN GUIDE AND ROCKDALE DOP 2011 REQUIREMENTS	
	SOLAR STUDIES CROSS VENTILATION 21st June between 9am-3pm First 9 Storeys	
	3tras Sun 9em-3pm 2tras Sun 9em-3pm No.Sun Total no: first 9 storeys Total no: crose ventilated	
	Total 66 73 0 65 50 % 78 86 0 77%	
	PASSES. PASSES. PASSES. PASSES.	
	Total 51 60 2 73 53	
	% 70 82 3 73%	
	PASSES. PASSES. PASSES. PASSES.	
	Total 63 74 7 70 65	
	% 72 84 8 79% PASSES PASSES PASSES PASSES	
	RESULT RESULT	
	Total 180 207 9 208 158 % 73 84 4 76%	
	PASSES PASSES PASSES PASSES	
	ADG Minimum 70% of apartments get 2hrs of direct surlight nequiremente Maximum 15% of apartments get no direct surlight DCP nequiremente Minimum 70% of apartments get 3hrs of direct surlight ADG requiremente Minimum 70% of apartments get 3hrs of direct surlight	
	 Comment: It is considered that staging of the proposal is a key issue with the draft Planning Proposal and that whilst the proponent has undertaken significant work to prepare an indicative scheme staging plan, the proposed 3 staged development does not provide sufficient certainty that the key public benefit of the proposal (the widened through site link) will be delivered. Further the proposed 3 stages is inequitable with landowners within Stage 2 being required to deliver the entire through site link and with reduced development yield when compared to the northern and southern stages. This matter is addressed further below. Prior to public exhibition, amendments are required to the draft DCP submitted with the draft Planning Proposal to lock in staging of development and to prove up that any future development in accordance with the agreed staging is able to comply with the ADG. It is recommended that this work is to be undertaken prior to a request for a Gateway Determination being submitted to the DPIE. 	
SEPP (Infrastructure) 2007	 Aim of Policy The aim of this Policy is to facilitate the effective delivery of infrastructure across the State by: (a) improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services; (b) providing greater flexibility in the location of infrastructure and service facilities; 	Yes

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SEPP	Compliance of Draft Planning Proposal with SEPP	Complies?
JEFF	Compliance of Drait Flamming Floposal with SEFF	Complies
	 (c) allowing for the efficient development, redevelopment or disposal of surplus government owned land; (d) identifying the environmental assessment category into which different types of infrastructure and services development fall (including identifying certain development of minimal environmental impact as exempt development); (e) identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development; (f) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing; and (g) providing opportunities for infrastructure to demonstrate good design outcomes. 	
	Compliance The proponent has stated the following in support of the draft Planning Proposal:	
	The site has frontage to Princes Highway, a classified Road as per the Schedule of Classified Roads and Unclassified Regional Roads. Future residential development will need to achieve the objectives and conditions of cl. 101 of this SEPP, which relates to development with frontage to a classified road.	
	The site is located in close proximity to a railway line. Future residential development will have to demonstrate compliance with cl. 87 of this SEPP, which relates to the impact of rail noise or vibration on non-rail development.	
	 Comment: Clause 101 of the SEPP states the following: 1) The objectives of this clause are: a) to ensure that new development does not compromise the effective and ongoing operation and function of classified roads; and b) to prevent or reduce the potential impact of traffic noise and vehicle emission on development adjacent to classified 	
	 roads. 2) The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that: a) where practicable and safe, vehicular access to the land is provided by a road other than the classified road; and b) the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of: i. the design of the vehicular access to the land; or ii. the emission of smoke or dust from the development, or iii. the nature, volume or frequency of vehicles using the classified road to gain access to the land; and c) the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road. 	

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	Complies?
The majority of the requirements of this clause will need to be satisfied by the final design and assessed as part of any future Development Application. The appropriateness of the location for a residential use is not being considered as part of the subject draft Planning Proposal as residential development is already permitted in the B2 Local Centre zone. Clause 87 of the SEPP states the following:	
 This clause applies to development for any of the following purposes that is on land in or adjacent to a rail corridor and that the consent authority considers is likely to be adversely affected by rail noise or vibration: (a) residential accommodation, (b) a place of public worship, (c) a hospital, (d) an educational establishment or centre-based child care facility. Before determining a Development Application for development to which this clause applies, the consent authority must take into consideration any guidelines that are issued by the Secretary for the purposes of this clause and published in the Gazette. If the development is for the purposes of residential accommodation, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:	

There are no other SEPPs applicable to the draft Planning Proposal.

Sydney Regional Environmental Plans (SREPs) (Deemed SEPPs)

There are no SREPs applicable to the draft Planning Proposal.

Strategic Planning Framework

Regional, Sub-regional and District Plans and Strategies include outcomes and specific actions for a range of different matters, including housing and employment targets and identify regionally important transport networks and social infrastructure. An assessment of the draft Planning Proposal's consistency with the relevant strategic plans is provided in Table 4 below:

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Table 4: Assessment of compliance of draft Planning Proposal with Strategic Planning Framework

Strategic Plan	Consistency with Strategic Plan	Consistent?
Greater Sydney Region Plan: A Metropolis of Three Cities (previously 'A Plan for Growing Sydney')	Infrastructure and Collaboration A city supported by infrastructure Objective 1: Infrastructure supports the three cities Objective 2: Infrastructure aligns with forecast growth – growth infrastructure compact Objective 3: Infrastructure adapts to meet future needs Objective 4: Infrastructure use is optimised Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 8):	Yes
	Comment:	
	The draft Planning Proposal is considered to be consistent with the aims of the strategic plan. The changes to the development standards proposed in the draft Planning Proposal are intended to enhance the attractiveness of the land for redevelopment for a high-density, mixed-use development in a location which is highly accessible by a range of public transport modes and with excellent access to employment and services. The proposal will also optimise government investment in infrastructure and services in a location ideally suited to higher density development.	
	A Collaborative City Objective 5: Benefits of growth realised by collaboration of governments, community and business.	
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 8): 'The Planning Proposal will be prepared with the collaboration of State and local government agencies and will be notified to the	

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Strategic Plan	Consistency with Strategic Plan	Consistent?
	community. The Planning Proposal implements Council's Rockdale Town Centre Masterplan which is a Council initiative.' Comment: Should the draft Planning Proposal proceed public exhibition and consultation with relevant Government Agencies will be undertaken in accordance with any the Gateway Determination. Issues raised will be considered in finalising the Planning Proposal.	
	Liveability	Yes
	A city for people Objective 6: Services and infrastructure meet communities' changing needs Objective 7: Communities are healthy, resilient and socially connected Objective 8: Greater Sydney's communities are culturally rich with diverse neighbourhoods	
	Objective 9: Greater Sydney celebrates the arts and supports creative industries and innovation	
	Consistency: The proponent has stated the following in support of the draft Planning Proposal:	
	'Objective 6 relates to the provision of social infrastructure to reflect the needs of the community. There is an opportunity to provide affordable housing in the scheme which will be considered as part of a future Development Application and will provide housing for a wider range of community members.	
	In relation to Objective 7, the proposal will provide retail along the street frontages and to the through site links which will activate these areas and provide opportunities for social interaction. The proposal will create a walkable place with the provision of retail and commercial uses conveniently located close to residential accommodation. Bicycle parking will be provided in the scheme which will be detailed in the future Development Application. The promotion of walking and cycling will improve the health of future residents and reduce traffic congestion.	
	In relation to Objective 8, Rockdale is a culturally rich town centre and the future scheme will ensure that cultural diversity is celebrated through the provision of various retail and commercial opportunities.	
	In relation to Objective 9, there may be opportunities to provide public art and to promote a night time economy with various restaurants. These items will be explored during the future Development Application stage.'	
	Comment:	

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Strategic Plan	Consistency with Strategic Plan	Consistent?
	The draft Planning Proposal seeks additional height and the removal of the maximum FSR control to encourage redevelopment of the site and to allow for a high-density, mixed- use development of the land consistent with Council's vision for the Precinct. It will provide for the retail, commercial and civic function of the Precinct to be improved and enhanced in a location which is highly accessible by a range of public transport modes and with excellent access to services. The residential component of any future development has the capacity to provide for a range of unit sizes in a location that will make best use of existing infrastructure. It is therefore consistent with these objectives.	
	 Housing the city Objective 10: Greater housing supply Objective 11: Housing is more diverse and affordable Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 9): 'Objective 10 relates to increasing the housing supply and the Eastern City District housing targets are 46,550 between 2016-2021 and 157,500 between 2016-2036. The Planning Proposal will provide additional housing diversity and will contribute to the housing targets. In relation to Objective 11, the proposal will provide a range of housing for singles, young couples and families. There is also an opportunity to provide affordable housing which will further explored during the Development Application stage.' Comment: The proposed changes to applicable development standards are intended to enhance the attractiveness of and encourage redevelopment of the land for a high-density, mixed-use development. The residential component of any future development will contribute to housing choice and supply within the locality and has the capacity to provide for a range of unit sizes to meet the needs of the diverse local community close to a range of community services, public transport and shopping/commercial facilities. The proposal is therefore consistent with these objectives. 	Yes
	A city of great places Objective 12: Great places that bring people together Objective 13: Environmental heritage is conserved and enhanced Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 9):	Yes – subject to heritage assessment prior to referral to Gateway

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Dayside Local Fla		15/06/2019
Strategic Plan	Consistency with Strategic Plan	Consistent?
	'In relation to Objective 12, the proposal will provide retail opportunities which will bring community together. The proposed restaurants and cafes will provide a meeting point for community members, linked by an improved pedestrian environment.	
	In relation to Objective 13, there are no heritage items on the site nor is the site within a heritage conservation area. The proposal has no adverse impacts on any surrounding heritage item (Brick buildings, signal box and overhead booking office to Rockdale train station referenced I222 in the Rockdale LEP 2011).'	
	Comment: The proposed amendments to development standards are intended to enhance the attractiveness/viability of the land for redevelopment to provide a high-density, mixed-use development. The proposal has the potential to improve the retail, commercial and civic function of the Precinct and to provide improved accessibility for the community in the form of public domain improvements including the through site link and footpath widening.	
	The site is located in close proximity to a number of heritage items including the Rockdale Railway Station and Yard Group, Guild Theatre, St Joseph's Convent and further away the Uniting Church group in Bay Street. Council's heritage officer has provided advice that the proposal will improve Geeves Avenue and the relationship to Rockdale Railway Station and that other heritage items in the vicinity are far enough removed so as not to be impacted by the proposal. The advice further notes, however, that a group of buildings at 471-477 Princes Highway and 6-14 Geeves Avenue have potential heritage value. Accordingly it has been recommended that these buildings be assessed prior to any development approval.	
	However given the subject draft Planning Proposal provides for a comprehensive redevelopment of the block it is considered appropriate that a heritage assessment should be undertaken prior to referring the matter for a Gateway approval.	
	Productivity	Yes
	A well connected city Objective 14: A metropolis of three cities – integrated land use and transport creates walkable and 30-minute cities Objective 15: The Eastern, GPOP and Western Economic Corridors are better connected and more competitive Objective 16: Freight and logistics network is competitive and efficient Objective 17: Regional transport is integrated with land use	
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 9):	

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Strategic Plan	Consistency with Strategic Plan	Consistent?
	'In relation to Objective 14, the proposal will be well connected with services and facilities, which will create a walkable community. The proposal will be within 30 minutes of Hurstville and Sydney CBD.	
	Objectives 15-16 are not relevant to the Planning Proposal.	
	In relation to Objective 17, the site is accessible to Gosford, Newcastle and Wollongong via the train network which will allow for greater job opportunities and business links.'	
	Comment: The draft Planning Proposal will improve the attractiveness and viability of the precinct for redevelopment for high-density, mixed- use development in a location which is easily accessible by, and could make the optimum use of, a range of public transport modes. It will support the creation of integrated land use and transport and contribute to the creational of a walkable and 30- minute city. It will also provide future residents with access to employment opportunities through access to the rail network.	
	Jobs and skills for the city Objective 18:	Yes
	Harbour CBD is stronger and more competitive Objective 19 :	
	Greater Parramatta is stronger and better connected Objective 20: Western Sydney Airport and Badgerys Creek Aerotropolis are economic catalysts for Western Parkland City Objective 21:	
	Internationally competitive health, education, research and innovation precincts Objective 22 :	
	Investment and business activity in centres Objective 23 :	
	Industrial and urban services land is planned, protected and managed Objective 24 :	
	Economic sectors are targeted for success	
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pgs. 9-10):	
	'Objectives 18, 19, 20 and 23 are not relevant to the Planning Proposal.	
	In relation to Objective 21, the site is located within 30 minutes of a number of Health and Education Precincts and 'Biotechnology Clusters' and the proposal will provide further housing for workers.	
	In relation to Objectives 22 and 24, the proposal will provide further employment opportunities during construction and when in operation. The Planning Proposal will support the growth of Rockdale Town Centre and will increase the number of people living closer to jobs, accessible by public transport.'	
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Strategic Plan	Consistency with Strategic Plan	Consistent?
	 Comment: The RLEP 2011 objectives for B2 Local Centre zones are as follows: To provide a range of retail, business, entertainment and community uses that serve the needs of people who live in, work in and visit the local area; To encourage employment opportunities in accessible locations; To maximise public transport patronage and encourage walking and cycling; To accommodate population growth through high density mixed use development that complements the role of retail, commercial, civic and cultural premises in the Rockdale town centre; and To create a lively Rockdale town centre with an amenable and pedestrian focused public domain activated by building uses that engage with the street. The draft Planning Proposal is considered to be consistent with these objectives and therefore the similar objectives of the Greater Sydney Region Plan. The additional height being sought and the removal of the maximum FSR control is intended to increase the attractiveness/viability of the land for redevelopment for high-density, mixed-use development. The retail and commercial functions of the Precinct will be improved and enhanced in a location which is highly accessible by a range of public transport modes. Furthermore, the proposal will increase the ability of workers, residents and commuters to move freely to, from and around both the locality and the wider area and to access a range of job opportunities. 	
	Sustainability A City in Landscape Objective 25: The coast and waterways are protected and healthier Objective 26: A cool and green parkland city in the South Creek corridor Objective 27: Biodiversity is protected, urban bushland and remnant vegetation is enhanced Objective 28: Scenic and cultural landscapes are protected Objective 29: Environmental, social and economic values in rural areas are maintained and enhanced Objective 30: Urban tree canopy cover is increased Objective 31: Public open space is accessible, protected and enhanced Objective 32: The Green Grid links parks, open spaces, bushland and walking and cycling paths Consistency:	Yes – subject to further detail at the DA stage

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Strategic Plan	Consistency with Strategic Plan	Consistent?
	The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 10):	
	'Objectives 25-29, 31 and 32 are not relevant to the Planning Proposal.	
	In relation to Objective 30, the proposal will incorporate garden courtyards above the podium level which will provide open space for future residents and soften the building envelope. There is an opportunity to increase the planting along the street frontages which will be explored further at the Development Application stage.	
	Furthermore, the proposal will improve the public domain and the pedestrian environment by increasing the setback of the building along the pedestrian footpath.'	
	Comment: Any future development facilitated by the LEP amendment will have the potential to present a significantly improved interface with the surrounding area and a much more inviting and attractive public domain. The final design of any future development will be subject to a Development Application which will be assessed against the appropriate LEP and DCP standards and guidelines to achieve the best possible hard and soft landscaping within and around the development.	
	Any proposed development will also be required to exhibit Design Excellence, and should be reviewed by Council's Design Review Panel given the significance of the site as a landmark site in the town centre immediately adjacent to the railway station (refer further discussion below). In this regard it is noted that Council has recently (12 June 2019) amended its Design Excellence Guidelines to require that Design Excellence expertise is included within the design group for a Design Review Panel.	
	An efficient city Objective 33: A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change	Yes – subject to further detail at the DA stage.
	Objective 34: Energy and water flows are captured, used and re-used Objective 35: More waste is re-used and recycled to support the development of a circular economy	
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pgs. 10-11):	
	'In relation to objective 33, the proposal will create a transit orientated development which integrates employment (with retail uses), housing and public transport which reduces the need to travel by car. The proposal will also incorporate sustainable construction methods and energy efficient design measures within the building which will be explored further as part of the DA process.	

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Strategic Plan	Consistency with Strategic Plan	Consistent?
	In relation to Objectives 34 and 35, the proposal will facilitate the redevelopment of the site as a mixed use development and sustainability practices will be secured at the detailed design stage and examined as part of a future Development Application. Furthermore, the proposal will create a transit orientated development with increased densities in proximity to Rockdale station and bus interchange which will reduce the need of vehicle use thereby improving the environment.'	
	Comment: The proposed draft Planning Proposal will improve the attractiveness and viability of the precinct for redevelopment for high-density, mixed-use development in a location which is easily accessible by, and could make the optimum use of, a range of public transport modes thereby creating a transit oriented development.	
	Along with the range of public transport, walking and cycling options available to future residents and visitors, the Proponent has also indicated a commitment to reducing car dependency through a reduction of car parking provision on any future development on the land. Other sustainability measures can be addressed at the DA stage.	
Eastern City	Infrastructure and Collaboration	Yes
District Plan (March 2018)	<i>Planning Priority E1</i> Planning for a city supported by infrastructure Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 14): 'The Planning Proposal will provide additional housing and retail floor space within close proximity to Rockdale station and bus interchange, which will optimise the existing public transport infrastructure.'	
	Comment: The draft Planning Proposal will provide for a high density mixed use development in a location that will make best use of existing infrastructure and services and that will be highly accessible to public transport.	
	<i>Planning Priority E2</i> Working through collaboration Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 14):	
	'The Planning Proposal will allow for the delivery of further housing and jobs to be prepared in collaboration with the State and Local Government and the community.'	
	Comment: The draft Planning Proposal will provide for a high density transit- oriented mixed-use development in a location that will make best use of existing infrastructure and services and which will be highly	

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Strategic Plan	Consistency with Strategic Plan	Consistent?
	accessible to public transport consistent with State and local government policy and community aspirations.	
	Liveability <i>Planning Priority E3</i> Providing services and social infrastructure to meet people's changing needs	Yes
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 14):	
	'There is an opportunity to provide affordable housing in the scheme which will be considered as part of a future Development Application and will provide housing for a wider range of community members.'	
	Comment: The draft Planning Proposal will provide for a high density mixed use development in a location that will make best use of existing infrastructure and services (including social services) and that will be highly accessible to public transport. It will provide an improved public domain and through site connections to improve the amenity of the centre for the benefit of the community. Further the proponent has noted that affordable housing provision will be considered at the Development Application stage.	
	<i>Planning Priority E4</i> Fostering healthy, creative, culturally rich and socially connected communities	Yes – subject to further detail at the DA stage
	Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 14): 'The proposal will activate the street frontages and through site links which will provide opportunities for social interaction. The proposal will create a walkable place with the provision of retail and commercial uses conveniently located close to residential accommodation. Bicycle parking will be provided in the scheme which will be detailed in the future Development Application. The promotion of walking and cycling will improve the health of future residents and reduce traffic congestion.'	
	Comment: The draft Planning Proposal will provide for a high density mixed use development in a location that will make best use of existing infrastructure and services and that will be highly accessible to public transport. Subject to compliance with relevant DCP controls at the DA stage it has the potential to contribute to the provision of healthy, creative, culturally rich and socially connected communities though improvements to the public domain and connectivity as well as inclusion of new retail facilities to meet the needs of the community and to encourage community interaction.	
	Planning Priority E5	Yes

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Strategic Plan	Consistency with Strategic Plan	Consistent?
	Providing housing supply, choice and affordability, with access to jobs and services Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pgs. 14-15): 'The draft District Plan has a housing target for Bayside Council of an additional 10, 150 dwellings between 2016-2021. The proposal enables increased housing supply and choice and will feature a range of apartment sizes and types. The proposal also helps foster a design-led approach to development that recognises the site's strategic location and provides for an agglomeration of people and activity. The Greater Sydney Commission's testing reaffirms that generally a range of 5-10% of new floor space is viable for affordable housing and are to work with the DP&E to develop mechanisms required for delivery of the proposed Affordable Rental Housing Target. The provision of affordable housing will be further discussed with Council to ensure an appropriate level of affordable housing is delivered across the broader precinct.'	
	Comment: The draft Planning Proposal is consistent with this priority and will contribute to housing supply, choice and affordability in a location which is highly accessible to jobs and services.	
	Planning Priority E6 Creating and renewing great places and local centres, and respecting the District's heritage Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 15): 'Rockdale is identified as a 'local centre' which has an 800m walking catchment. Local centres are to be the focal point of neighbourhoods and where they are a focus of public transport they are an important part of a 30 minute city. The proposal will renew the Rockdale Transport Interchange site which will prioritise a friendly public realm and walkability with the provision of the through site link and pedestrian bridge and ground floor retail.' Comment: The draft Planning Proposal is consistent with this priority and will assist to improve the attractiveness and viability of the precinct for redevelopment for a high density mixed use development whilst respecting local heritage. It will provide for public domain improvements and subject to future detail at the DA stage will provide a landmark development that will improve the quality, amenity and image of the Town Centre in accordance with Council's vision as outlined in RTCMP.	Yes – subject to further detail at the DA stage
	Productivity Planning Priority E10 Delivering integrated land use and transport planning and a 30- minute city	Yes
	Consistency:	

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Strategic Plan	Consistency with Strategic Plan	Consistent?	
	The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 15): 'The proposal encourages the well-planned and efficient growth of Rockdale Town Centre by enabling development of a mixed use precinct adjacent to Rockdale Station, located on the Illawarra Line. This will contribute to the local retail economy and bolster the economy of the broader Central District. Future residents will be located within walking distance of local businesses and within 30 minutes train travel of jobs located within the major employment hubs, including Sydney CBD and Hurstville.		
	The Planning Proposal will deliver integrated land use and transport planning, by locating well-designed housing in close proximity to the station and facilitating improved pedestrian linkages from the train station/bus interchange to Princes Highway, as well as safer environment for pedestrians and buses.' Comment: The draft Planning Proposal is consistent with this priority and will		
	provide for integrated land use and transport planning thereby supporting and reinforcing the concept of a 30-minute city.		
	Sustainability Planning Priority E17 Increasing urban tree canopy cover and delivering Green Grid connections Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Priority seek to expand the urban tree canopy in the public realm and refine the detailed design and delivery of the green grid opportunities. Princes Highway is identified as an 'Other Green Grid Opportunities' connection. There is an opportunity to increase the planting along Princes Highway which will contribute to the green grid and be consistent with the planning priority. The proposed planting will be explored further at the Development Application stage.' Comment: The draft Planning Proposal is generally consistent with this priority and will provide the opportunity for increased planting along the Princes Highway to contribute to the Green Grid, subject to any future DA.	Yes – subject to further detail at the DA stage	
	Planning Priority E19 Reducing carbon emissions and managing energy, water and waste efficiently Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 16): 'The proposal will have no adverse impacts on the natural environment, as this is already an urbanised setting. It is anticipated that future development at the site will integrate water	Yes – subject to further detail at the DA stage	

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Strategic Plan	Strategic Plan Consistency with Strategic Plan			
Strategic Flan		Consistent?		
	sensitive urban design measures as needed. The proposal promotes environmental efficiency by increasing development potential in an existing centre with good infrastructure. The sustainability measures are to be further considered during the detailed design phase.'			
	Comment: The draft Planning Proposal is generally consistent with this priority and will provide the opportunity for reduced carbon emissions through reduced parking provision, making best use of existing infrastructure and the provision of a development with a high reliance on public transport subject to any future DA.			
	Planning Priority E20 Adapting to the impacts of urban and natural hazards and climate change Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 16): 'Objective 37 of the Planning Principle looks at ensuring exposure to natural and urban hazards is reduced. The site abuts Princes Highway and the railway line and falls with the 20 and 25 ANEF contours, thus there will be potential noise and air pollution impacts from these urban hazards. The future Development Application for the site will outline mitigation measures to reduce the noise and air pollution impacts to the future residents.'	Yes – subject to further detail at the DA stage		
	Comment: The draft Planning Proposal is generally consistent with this priority and will provide further detail in relation to sustainability measures, measures to address noise and air pollution etc. at the future DA stage.			
Future Transport Strategy 2056	Performance Focus Deliver transport initiatives that improve the liveability of places	Yes		
	Measures and Indicators <u>Liveability of places</u> – Increase the number of people able to access centres by walking, cycling and using public transport. Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 12): 'The proposal will create a mixed use precinct which will improve			
	the liveability of Rockdale town centre by providing a mixture of retail and commercial uses which will be accessible by public transport, cycling or walking.'			
	Comment: The proposed draft Planning Proposal will improve the attractiveness and viability of the precinct for redevelopment for high-density, mixed-use development in a location which is easily accessible by, and could make the optimum use of, a range of public transport modes thereby creating a transit oriented development. The proposal will therefore increase the number of people able to access the Rockdale Town Centre by walking and will support public transport usage.			

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Strategic Plan	Consistency with Strategic Plan	Consistent?
NSW State	Strategic directions	Yes
Infrastructure	The Strategy sets six cross-sectoral strategic	165
Strategy 2018-	directions, each designed to achieve 'more with less'	
2038	from the State's large infrastructure program and asset	
	base:	
	 Continuously improve the integration of land and infrastructure planning; 	
	 Plan, prioritise and deliver an infrastructure program that 	
	represents the best possible investment and use of public funds;	
	 Optimise the management, performance and use of the State's assets; 	
	4. Ensure NSW's existing and future infrastructure is resilient to	
	natural hazards and human-related threats;	
	 Improve state-wide connectivity and realise the benefits of technology; and 	
	 Drive high quality consumer-centric services and expand 	
	innovative service delivery models in infrastructure sectors.	
	Consistency:	
	The proponent has stated the following in support of the draft	
	Planning Proposal (draft Planning Proposal Report – Pg. 13):	
	One of the infrastructure responses in the Strategy, seeks to	
	improve intracity walking and cycling infrastructure. The existing	
	pedestrian arcade is poorly utilised as it is not situated close to	
	the train station entry/exit point and does not align with King	
	Street (across Princes Highway). Furthermore, the footpath along Geeves Avenue is confined given it is narrow and often	
	pedestrians cut across Tramway Arcade or Geeves Avenue to	
	reach their destination.	
	The proposal will create a through site link for pedestrians	
	accessing Princes Highway which is generous in width, open to the air and activated by retail opportunities. Furthermore, the	
	proposal will increase the width of the footpaths to Geeves	
	Avenue (by 2.5m) and Princes Highway (3m). These measures	
	will improve pedestrian access through the site and connections	
	between the train station/bus interchange and the Rockdale Town Centre.	
	Furthermore, the proposal will incorporate bicycle parking which	
	will promote cycling within the locality. The provision of bicycle	
	parking will be considered further in a future Development	
	Application for the site.'	
	Comment:	
	The draft Planning Proposal is considered to be consistent with	
	the relevant strategic directions of the State Infrastructure Strategy and will provide new housing, employment and retail	
	space within close proximity of existing infrastructure to optimise	
	use and reduce travel demand.	

Local Strategic Planning Framework

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An assessment of the draft Planning Proposal's consistency with the relevant local strategic plans is provided in Tables 5 and 6 below:

Table 5: Assessment of draft Planning Proposal against Bayside Community Strategic Plan 2018-2030 Bayside Community Strategic Plan 2018-2030

Theme One – Bayside will be a vibrant place	How We Will Get There	Proponent's Statement of Consistency (Draft Planning Proposal Report – Pgs. 20-22)
Strategic Direction – Our places are people- focussed	Local areas are activated with cafes, restaurants and cultural events	The ground floor retail component will activate the street frontages and the through site link. There will be opportunities to incorporate cafes, restaurants and potential cultural events.
	Places have their own village atmosphere and sense of identity	The proposal enables development of a high quality mixed use precinct which will contribute to the vibrancy of Rockdale Town Centre. There may be opportunities to promote a night time economy with various restaurants.
	My community and council work in partnership to deliver better local outcomes	The proposal will create a better local outcome by providing further retail floor space which is highly accessible.
	The public spaces I use are innovative and put people first	The proposal will be pedestrian friendly and put people first by creating a through site link and widening the footpaths.

Comment:

The RLEP 2011 objectives for B2 Local Centre zones are as follows:

- To provide a range of retail, business, entertainment and community uses that serve the needs of people who live in, work in and visit the local area;
- To encourage employment opportunities in accessible locations;
- To maximise public transport patronage and encourage walking and cycling;
- To accommodate population growth through high density mixed use development that complements the role of retail, commercial, civic and cultural premises in the Rockdale town centre; and
- To create a lively Rockdale town centre with an amenable and pedestrian focused public domain activated by building uses that engage with the street.

The draft Planning Proposal is considered to be consistent with these objectives and the requirement of the Ministerial Directions. The additional height being sought and the removal of the FSR control will allow for a high-density, transit oriented mixed-use redevelopment of the land. The retail, commercial and civic function of the land will be improved and enhanced in a location which is highly accessible by a range of public transport modes. The proposal will also provide additional employment opportunities both during construction and at the operational phase.

Strategic Direction – Our places connect people	is located in open	The proposal enables development in close proximity to services and facilities in Rockdale Town Centre, which will promote walking and	
	space where possible	cycling.	

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Bayside Community Strategic Plan 2018-2030				
Bayonae community offac	Bayside Community Strategic Fian 2010-2030			
	Our heritage and history is valued and respected	There are no heritage items on the site, and the proposal has no adverse impacts on any surrounding heritage item (Brick buildings, signal box and overhead booking office to Rockdale train station referenced I222 in the Rockdale LEP 2011).		
Strategic Direction – Our places are acceptable to all	Open space is accessible and provides a range of active and passive recreation opportunities to match our growing community	The proposal does not incorporate open space however the site is in close proximity to a number of parks in the locality including Hogben Park and McCarthy Reserve.		
	Bayside provides safe and engaging spaces, places and interactions	The proposal enables development that accords with the principles of Crime Prevention Through Environmental Design (CPTED). This will be achieved through facilitating passive surveillance by increasing residential units and retail shops that overlook the public domain and avoid enclaves where offenders can hide and entrap victims. Clear sight lines will be established to avoid areas where graffiti or vandalism could occur. CPTED measures to be implemented in the scheme will be further investigated at the DA stage.		
	People who need to can access affordable housing	The proposal provides for increased housing supply and there is an opportunity to provide affordable housing which will be explored at the DA stage. The development will provide a range of apartment types suited to the needs of the community.		
Comment: The proposed 5m increase in maximum HOB, along with the removal of the maximum FSR standard on the land, will increase the attractiveness and viability of the precinct for redevelopment and will allow for a high-density, mixed-use development on the land with a significant residential component. The future development has the capacity to provide for a range of apartment sizes in a location that will make the best possible use of town centre infrastructure and services. It will also provide for improvements to the public domain and connectivity of the precinct and will provide for new businesses that will service the local community and provide for community interaction. The proposal will provide for a more-intensive mixed-use development of a town centre site within an area of high pedestrian activity, affording a high level of natural surveillance and safety. The provision of affordable housing will also be investigated at the DA stage. The draft Planning Proposal is therefore consistent with the above strategic directions.				
Strategic Direction – My place will be special to me	Local developments reflect innovative, good design and incorporate open	The residential accommodation will incorporate private open space and communal open space for future residents which will be consistent with the Apartment Design Guide		

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Bayside Community Strategic Plan 2018-2030		
	space and consider vertical families Bayside will be a 30 minute City – residents work locally or work off-site – no- one has to travel for more than 30 minutes to work	requirements and be considered as part of the future DA. Future residents will be located within walking distance of local businesses and within 30 minutes train travel of jobs located within the major employment hubs, including Sydney CBD and Hurstville.
	Traffic and parking issues are a thing of the past	Traffic impacts are discussed in detail in Part 3 – Justification of the report. The site is highly accessible to public transport services and the development proposes a range of car parking spaces including between 325 and 383 spaces with a reduced retail/commercial rate. Overall, the operation of the surrounding existing intersections is unlikely to be substantially impacted, subject to minor traffic improvements.
	Road, rates and rubbish are not forgotten	The proposal enables development that contributes to the cleanliness of Rockdale through improved on-site waste management.
	Gateway sites are welcoming and attractive	The proposal provides for increased density and building height, which will enable the site to function as a gateway building. The future scheme will need to be reviewed by the Design Review Panel under Clause 6.14 of the Rockdale LEP 2011 (where sites are amalgamated) which will ensure the future development will be of a high architectural quality and attractive.
on the land, is intended to in and will allow for a high-den component. The future deve location that will make the b	crease the attractiveness sity, mixed-use developm lopment has the capacity est possible use of town of	with the removal of the maximum FSR standard s and viability of the precinct for redevelopment eent on the land with a significant residential to provide for a range of apartment sizes in a centre infrastructure and services. It will also onnectivity of the precinct and will provide for

location that will make the best possible use of town centre infrastructure and services. It will also provide for improvements to the public domain and connectivity of the precinct and will provide for new businesses that will service the local community and provide for community interaction. The proposal will provide for more-intensive mixed-use development of a town centre site within an area of high pedestrian activity, affording a high level of natural surveillance and safety. The provision of affordable housing will also be investigated at the DA stage.

The indicative scheme submitted by the Proponent in support of the draft Planning Proposal is capable of being broadly compliant with the ADG subject to additional work which will also need to be reflected in a draft DCP. The draft Planning Proposal is therefore consistent with the above strategic directions.

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Theme Two – In 2030 Our People Will Be Connected in a Smart City	How We Will Get There	Proponent's Statement of Consistency (Draft Planning Proposal Report – Pgs. 22-23)
Strategic Direction – We are unified and excited about our future	We are proud of where we live	The proposal enables development of a high quality mixed use precinct which will contribute to the vibrancy of Rockdale Town Centre.
Strategic Direction – The community is valued	We are a healthy community with access to active recreation and health education	The proposal will promote cycling and walking and will improve the health and wellbeing of future residents.
	All segments of our community are catered for – children, families, young people and seniors	The development will provide a range of apartment types suited to the needs of the community.
	Opportunities for passive and active activities are available to community members, including people with pets	The proposal will incorporate private open space and communal open space and will be within close proximity to a number of parks.
	The value of pets in the community is recognised and they are welcomed across the city	Pets will be welcome within the development.
Strategic Direction – We treat each other with dignity and respect	We can participate in cultural and arts events which reflect and involve the community	There may be an opportunity to include cultural and art events within the ground floor retail component which will encourage community participation.
	Cultural diversity is reflected and celebrated in the City's activities	There may be an opportunity to include cultural and art events within the ground floor retail component which will celebrate Rockdale's multiculturalism.

The proposed changes to the development standards will allow for a high quality, high-density, mixed-use development of the land. The retail, commercial and civic function of the Precinct will be improved and enhanced and a range of residential units sizes are able to be provided in a location that will make the best possible use of town centre infrastructure, including a range of public transport facilities and travel options in the locality. The draft Planning Proposal is therefore consistent with the above strategic directions.

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Bayside Community Strategic Plan 2018-2030			
Theme Three – In 2030 bayside will be green, leafy and sustainable	How We Will Get There	Proponent's Statement of Consistency (Draft Planning Proposal Report – Pgs. 23-24)	
Strategic Direction – Our waste is well managed	I can reduce my waste through recycling and community education	The development will incorporate appropriate waste management including recycling in the future building for the residential and retail uses.	
Strategic Direction – We are prepared for climate change	We understand climate change and are prepared for the impacts	The proposal will enable development capable of employing sustainable construction and design practices.	
	Our City is prepared for/able to cope with severe weather events	The building will be constructed to ensure is able to cope with severe weather events.	
	Our streetscapes are green and welcoming	There is an opportunity to increase the planting along the street frontages which will be explored further at the Development Application stage.	
Strategic Direction – We increase our use of renewable energy	Our City promotes the use of renewable energy through community education	The redevelopment of the site will incorporate sustainability measures which will be addressed at the DA stage.	
Strategic Direction – Waterways and green corridors are regenerated and preserved	Water is recycled and re-used	The redevelopment of the site will incorporate sustainability measures where possible which will be addressed at the DA stage.	
	We have an enhanced green grid/tree canopy	There is an opportunity to increase the planting along the street frontages which will contribute to the green grid and be consistent with the planning priority. It is noted that the site is identified as an 'Other Green Grid Opportunities' site in the Eastern City District Plan. The proposed planting will be explored further at the Development Application stage.	
	e assessed as part of ar	will need to be satisfied by the final design of ny future DA, and through conditions attached to	
Theme Four – In 2030 we will be a prosperous community	How We Will Get There	Proponent's Statement of Consistency (Draft Planning Proposal Report – Pgs. 24-25)	
Strategic Direction – Local housing, employment and business opportunities area generated	Bayside will be a 30 minute City – residents work local or work off-site – no- one has to travel for	Future residents will be located within walking distance of local businesses and within 30 minutes train travel of jobs located within the major employment hubs, including Sydney CBD and Hurstville.	

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consistent with the above strategic directions.

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Bayside Community Strategic Plan 2018-2030			
	more than 30 minutes to work		
	People who need to can access affordable housing	There is an opportunity to provide affordable housing which will further explored during the Development Application stage.	
Strategic Direction – The transport system works	We can easily travel around the LGA – traffic problems/gridlock are a thing of the past	The proposal will reduce the amount of car parking associated with the development which will reduce traffic gridlock and traffic will be able to easily travel around the site.	
	We can easily travel to work by accessible, reliable public transport	The proposal will create a walkable environment which is in close proximity to the Rockdale bus interchange and train station.	
Strategic Direction – We are prepared for a sharing economy	Innovative businesses are supported to locate in Bayside	Innovative businesses will be supported in the future retail tenancies.	
precinct for redevelopment a significant residential com public domain and the conn access to public transport. I range of public transport fac the use of active transport parking provision is to be im	and will allow for a high-d ponent. The future develor ectivity of the precinct, and t will make the best possi- ilities and travel options i ptions including public tra- plemented to reduce car surrounding road network.	I increase the attractiveness and viability of the ensity, mixed-use development on the land with opment will provide for improvements to the id will ensure future residents have excellent ble use of town centre infrastructure, including a n the locality and is consistent with encouraging insport, walking and cycling. Further a reduced dependency and minimise the impact of any . The draft Planning Proposal is therefore	

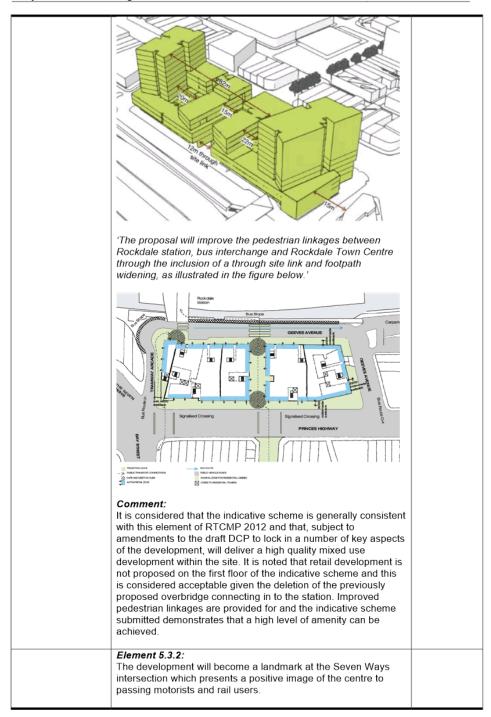
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Table 6: Assessment of	draft Planning Proposal against Rockdale Town Centre Masterplan 2012	
Rockdale Town Centre Masterplan 2012	The Masterplan sets out the future direction for the Rockdale Town Centre and the path to achieving it. It covers all aspects of the physical environment of the Centre as well as its cultural, civic, and economic aspects. The Masterplan is a guiding document for Council, business owners, private developers and the community.	Yes – subject to further draft DCP amendments
	The Masterplan has identified the redevelopment and revitalisation of the Precinct as critical in order to establish a positive image for the Town Centre and provide more convenient pedestrian movement between the station. The following Structure Plan elements are set out for the Precinct:	
	Element 5.3.1: High quality mixed use development consisting of a podium containing retail uses on the ground and first floor, which fronts the Princes Highway and the new improved pedestrian linkages, and residential towers above, designed to achieve high levels of amenity and provide modern apartment living in the heart of the Centre. Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pgs. 16- 18):	
	'The proposal enables redevelopment of the site to create a high quality mixed use development. The proposal will include a 3 and 6 storey podium with garden courtyards above for residential open space and above the podium levels will be various towers (with a total height of 5, 6 and 12 storeys). The ground floor will incorporate retail opportunities while residential accommodation will be provided from Level 1 and above. The proposal will not incorporate retail uses on the first floor given the pedestrian bridge has been removed from the scheme (as requested by Council).	
	The shape and orientation of the towers have been considered to ensure high levels of amenity are achieved in accordance with the SEPP 65 design principles and Apartment Design Guide (ADG) design criteria. As demonstrated in the figure below the proposal will achieve sufficient separation distances in between the three towers as per the ADG.'	

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 Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 18): The proposal provides for increased density and building height and will create two landmark buildings with one to the Seven Ways intersection. The future scheme will need to be reviewed by the Design Review Panel under Clause 6.14(5)(a)(i) of the Rockdale LEP 2011 will ensure the future development will exhibit design excellence and be of a high architectural quality.' Comment: It is agreed that the draft Planning Proposal will provide for the future development of a landmark building at the Seven Ways intersection and that this provides an opportunity to deliver a positive image to the centre. However given the significance of the site it is considered that the achievement of design excellence is critical. A design excellence competition is not required under RLEP 2011 for buildings less than 40m in height however prior to October 2018 a competition would have been required for the subject proposal. In October 2018, the DPIE amended the LEP and changed the threshold for a design competition. The proposal will, however, be required to be reviewed by the Design Review Panel in accordance with clause 6.14. In this regard it is noted that Council has recently (12 June 2019) amended its Design Excellence Guidelines to require that Design Excellence expertise is included within the design group for a Design Review Panel. It is therefore considered that appropriate measures are in place to ensure that design excellence is achieved in any future DAs applying to the site. 	
 Element 5.3.3: Provide an improved and enlarged through site pedestrian link which connects the bus interchange with the Princes Highway at the pedestrian traffic signals. Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 18): 'As shown in figure 4 above, the proposal enables redevelopment of the site with an improved and enlarged pedestrian through site link connecting the bus interchange with Princes Highway/King Street at the pedestrian traffic signals. The through site link will be bounded by retail uses which will activate the link and will be open to the air.' Comment: The draft Planning Proposal, supported by draft DCP amendments, provides for a future development which would incorporate an enlarged through-site link (12m wide, with active frontages and open to the air), connecting the bus interchange with the Princes Highway at the pedestrian traffic signals. However given site amalgamation issues it is considered that the proposed 3-staged development of the Steven. Furthermore, with reduced heights proposed in the centre of the site (Stage 2 	

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proposed as a maximum of 5-6 storeys) it inequitably distributes the burden of the through site link delivery with Stages 1 and 3 having much less development yield but a higher requirement for land dedication / public benefit. Accordingly it is recommended that the proposed staging be amended to require the development of the precinct to be undertaken in two stages, with each stage providing an equal contribution to the delivery of the enlarged through-site link (50%, or width of 6m each). It will also ensure that, if only part of the site is developed, a minimum width of 6m will be delivered. This requirement is therefore recommended to be inserted into the draft DCP amendment.	
 Element 5.3.4: Facilitate the upgrade and expansion of the bus interchange, and provide a setback to Geeves Avenue to achieve the required space. Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pgs. 18-19): 'As shown in the figure below, the proposal enables redevelopment of the site with a 2.5m setback which is to be dedicated to Council' 	
<i>Element 5.3.5:</i> Direct level access for pedestrians provided from the railway station concourse into the redevelopment, which connects to the Seven Ways intersection and the improved through site pedestrian link. All this will be activated by retail uses. Consistency: The proponent has stated the following in support of the draft Planning Proposal (draft Planning Proposal Report – Pg. 19): 'It is reiterated that correspondence from Council (dated 12 June 2018) recommended that the pedestrian bridge be deleted from the scheme and another material public benefit or VPA option be provided in the Planning Proposal. Furthermore, the proposal will widen the footpath along Tramway Arcade to improve the	

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permeability from the railway station to Seven Ways intersection. It is anticipated that the building along Tramway Arcade (including 2-18 Tramway Arcade) will incorporate ground floor retail which activate this street.'	
Comment: It is noted that Council has advised the Proponent that the pedestrian bridge previously proposed to connect the railway station concourse to the precinct over Geeves Avenue was to be deleted from the scheme. It is understood that this was decided following consideration that such a bridge would have the potential to reduce street activation.	
It is agreed that this would be the case and that the bridge is not an ideal solution. The indicative scheme provides for a high level of streetscape activation and this would be reinforced by proposed DCP controls.	
The enlarged through site link would be delivered as part of any future site redevelopment in accordance with the proposed DCP (refer comments above in relation to staging).	
Summary: In summary, while the draft Planning Proposal only seeks to alter the development standards with which a future development proposal must accord, the indicative scheme submitted demonstrates that a comprehensive, mixed-use use redevelopment of the Precinct can be achieved, largely in accordance with the RTCMP 2012 and the ADG subject to the implementation of proposed DCP controls and amendments as recommended above.	

Conclusion

The draft Planning Proposal has been the subject of a merit assessment against the strategic and statutory planning framework as established by the *Environmental Planning and Assessment Act 1979*, relevant guidelines, Planning Circulars and Practice Notes. In considering whether or not to progress the draft Planning Proposal, Council is required to consider if the proposed changes to the Rockdale Local Environmental Plan 2011 have strategic and site specific merit.

In summary, the subject assessment has identified that the draft Planning Proposal which seeks to amend the maximum height of building control from 22m to 27m and delete the maximum FSR control on the land has strategic and site specific merit. It has been a long-standing aim of Council to secure a comprehensive mixed-use redevelopment of the land and it is considered that the proposed amendments are both appropriate on the site and in the locality and will facilitate the future redevelopment of the Precinct.

It is however considered that to ensure any future redevelopment of the Precinct delivers the sought after public benefits (in particular an enlarged through site link) and provides for landowner equity, some significant changes are required to the proposed draft DCP amendment. These should be incorporated prior to referral of the draft Planning Proposal for a Gateway determination and should require:

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- Development of the Precinct in a maximum of 2 stages with each stage to incorporate a minimum of 50% (6m width) of the required enlarged (minimum 12m width) through site link connecting Princess Highway and Geeves Avenue open to the sky with active uses fronting the link on both sides. Revised ADG compliance information based on the 2-staged approach should also be submitted.
- Car parking provision within the precinct shall be provided for at a maximum rate consistent with the RMS Metropolitan Sub-Regional Centres parking rates for residential development, 1 space per 40m² for commercial and 1 space per 140m² for retail development.

Furthermore, a heritage assessment is required of buildings at 471-477 Princes Highway and 6-14 Geeves Avenue, Rockdale prior to the draft Planning Proposal being referred for a Gateway determination. The outcome/recommendations of the assessment should be reflected in any revised draft Planning Proposal forwarded for a Gateway determination. Subject to the above, it is considered that the draft Planning Proposal is consistent with the relevant strategic directions, policies and regional and local plans and strategies as demonstrated by the merit assessment undertaken.

For these reasons, it is recommended that the Bayside Local Planning Panel formally recommends to Council that the draft Planning Proposal be forwarded to the Department of Planning and Environment for a Gateway Determination following amendment of the Draft DCP amendments as outlined.

Financial Implications

Not applicable

 \boxtimes

Community Engagement

Notification letters have been sent to the local community advising that the draft Planning Proposal is being presented to this meeting of the Bayside Planning Panel, including advice on the LEP Amendment/Planning Proposal process.

Planning Proposal

Rockdale Local Environmental Plan 2011 Rockdale Transport Interchange Precinct



21 December 2018

Planning Proposal – Rockdale Transport Interchange Precinct

Contents

- Part 1 A statement of the objectives or intended outcomes of the proposed LEP
- Part 2 An explanation of the provisions that are to be included in the proposed LEP
- **Part 3 -** The justification for those objectives, outcomes and provisions and the process for their implementation
- **Part 4 -** Maps, where relevant, to identify the intent of the planning proposal and the area to which it applies
- Part 5 Details of the community consultation that is to be undertaken on the planning proposal
- Part 6 Project timeline

Table of revisions

Version 1	Draft 9 June 2017
Version 2	1 November 2017
Version 3	27 August 2018
Version 4	9 October 2018
Version 5	21 December 2018

1

Record number (trim file)

Introduction

This planning proposal explains the intended effect of and justification for the proposed amendment to *Rockdale Local Environmental Plan 2011 (Rockdale LEP 2011).* It has been prepared in accordance with Section 3.33 of the *Environmental Planning and Assessment Act 1979* and the relevant Department of Planning and Environment guides, including 'A Guide to Preparing Local Environment Plans' and 'A Guide to Preparing Planning Proposals'.

Subject site

This planning proposal seeks to amend the planning controls for the Transport Interchange Precinct within the Rockdale Town Centre (refer to Figure 1).



Figure 1: Subject site

Background

This planning proposal is a result of the Rockdale Town Centre Masterplan, adopted by the former Rockdale City Council on 5 December 2012. The masterplan identifies key precincts that have redevelopment potential, are in need of revitalisation, and would have the greatest impact on improving the vibrancy of the town centre.

The masterplan identifies the Transport Interchange Precinct as a particularly important precinct. As stated in the masterplan, 'the redevelopment and revitalisation of this precinct is critical in order to establish a positive image for the centre and provide more convenient pedestrian movement between the station'.

A number of actions resulting from the masterplan have already been implemented through an amendment to the planning controls through the Rockdale Town Centre Planning Proposal. The key precincts identified in the masterplan incorporated site specific controls in Section 7.5.3 of the Rockdale DCP 2011 with the exception of the

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Transport Interchange Precinct. Due to the importance this precinct plays in realising the overall vision of the town centre, it was deferred so that further discussions with landowners and relevant State agencies could be conducted to ensure a positive outcome.

A key reason for deferring this precinct from the Rockdale Town Centre Planning Proposal was to prepare a Transport Management Accessibility Plan (TMAP) to address the concerns of Transport for NSW (TfNSW) in regard to the functioning of Rockdale train station and bus interchange.

Given the uncertainty around the timing of the preparation of the TMAP, one of the major landowners in the Transport Interchange Precinct decided to fund the preparation of the necessary transport study to address the concerns of TfNSW. TfNSW confirmed that a 'Transport Study' prepared in support of a planning proposal for the Transport Interchange Precinct would satisfy the requirements of a TMAP. TfNSW subsequently agreed the scope of works for the Transport Study, which accompanies this planning proposal.

This planning proposal provides a mechanism for facilitating redevelopment of the precinct into a high quality mixed use area with active street frontages, ground level retail and residential towers, which will contribute to the revitalisation of the town centre in accordance with the masterplan.

Rockdale Town Centre Masterplan (Masterplan)

The Rockdale Town Centre Masterplan (which was adopted by Council on 5 December 2015) identifies the site as the Transport Interchange Precinct, which has 'the potential to form a landmark for the Rockdale Town Centre'. One of the provisions in the Masterplan was to provide a pedestrian bridge over Geeves Avenue which connected Rockdale train station to the site. However, correspondence from Council (dated 12 June 2018) recommended that the pedestrian bridge be deleted from the scheme. Council considered the pedestrian bridge to have a greater private benefit than a community net benefit when considering the controls in Chapter 7.5 Rockdale Town Centre in the Rockdale Development Control Plan (DCP) 2011.

The Masterplan identifies the southern and western elevations of the site as 'active laneways' and page 7/43 of the DCP identifies the standards associated with that street role, and includes activation by retail and business premises. Council considers that a pedestrian bridge over the site would detract from the activation of the laneway, by removing pedestrians at ground level. Furthermore, Council considered there would be little public benefit in duplicating a pedestrian link given there is an existing through site link adjacent to the Commonwealth Bank.

Accordingly, the subject Planning Proposal does not incorporate a pedestrian bridge over Geeves Avenue and is consistent with the through site links identified in the Masterplan. Refer to Part 3 A1 for further discussion.

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The proposal includes a number of community benefits including:

- Providing a transit orientated development which integrates retail and housing with public transport;
- Improved permeability through and around the site with footpath widening and one through site link which connects the railway/bus interchange with Princes Highway;
- Activation of the ground floor with additional retail opportunities which will create areas for greater social interaction;
- Increase employment opportunities during construction and when the retail component is in operation; and
- Increase residential accommodation in the locality with the opportunity to provide affordable housing.

Evolution of the massing for the precinct

A significant number of massing options have been considered between 2014-2018 by Eeles Trelease which are illustrated on page 22 of the Urban Design Report. Council recently provided a 'preferred response' to the future Interchange Precinct which was part of their review of the Rockdale Town Centre Masterplan. Council's preferred response, Masterplan and Development Control Plan have all been taken into consideration when developing the massing for the precinct.

Previous schemes have incorporated three towers however this has recently been amended to two towers (with one to the north and the other to the south). The two towers will act as book ends for the precinct and improve amenity to the centre to the precinct and through site link (which is open to the sky). A pedestrian overbridge was previously proposed, however Council requested for this to be removed from the scheme. The street wall heights have been amended to be consistent with the DCP controls with 6 storeys to Princes Highway and 3 storeys to Geeves Avenue.

Part 1 - Objectives or Intended Outcomes

The objectives of the planning proposal are to:

- Provide flexibility and incentive for redevelopment of the precinct by increasing the maximum base building height control and removing the maximum FSR control for the land.
- Increase the base height control in the Rockdale LEP 2011 by 5m (from 22m to 27m) which will increase the maximum achievable height for the site to 39m (27m base height + 12m additional height subject to the Design Review Panel reviewing the proposal and the site being greater than 1,500m²).
- Remove the FSR control for the site in the Rockdale LEP 2011 to align with the approach taken in the Rockdale Town Centre. The built form is to be controlled by the height control and building envelope controls in the site specific DCP.

4

- Enable redevelopment of the precinct which includes:
 - A six storey podium along Princes Highway and a three storey podium along Geeves Avenue;
 - Create landmark buildings to the northern and southern ends for the precinct which will present a positive image of Rockdale Centre to

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passing motorists and rail users and facilitate high quality architectural design; and

- Improve the existing through site link by opening it up to the air and increasing its width.
- Increase housing supply and choice within walking distance of Rockdale Station, which will provide residents with easy access to major employment hubs including Sydney CBD and Hurstville, and will contribute to the State government's vision of a '30-minute city'.
- Renewal of the Transport Interchange Precinct and improvement to public domain along Princes Highway, Geeves Avenue and Tramway Avenue.
- Deliver a transit-orientated development in association with the Rockdale train station and bus interchange.

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Part 2 - Explanation of Provisions

The proposed outcomes will be achieved by amending *Rockdale LEP 2011* as follows:

A Map

It is proposed to amend the *Rockdale LEP 2011* Height of Buildings Map (Sheet HOB_004) and Floor Space Ratio Map (Sheet FSR_004) as per Table 1 below.

Table 1 - Prope	osed Map Amendments	
Map Tile No.	Amendment	Explanation
HOB_004	 Increase the maximum base HOB control from 22m to 27m for the entire site. Retain 'Area A' designation for the entire site which allows for an additional 12m of additional height, under Clause 4.3(2A)(a), subject to the Design Review Panel reviewing the scheme under Clause 6.14(5)(a)(i). 	Enables two landmark buildings that capitalises on the sites location at the 'Seven Ways' intersection and Rockdale Transport Interchange, including a through site link connecting the train station with Princes Highway. The proposal seeks to increase the base HOB control from 22m to 27m. Clause 4.3(2A)(a) will be retained, which allows an additional 12m for buildings in 'Area A' on sites greater than 1,500m ² subject to the Design Review Panel reviewing the scheme as per Clause 6.14(5)(a)(i). The maximum achievable height for the site will be 39m (27m base height, plus an additional 12m as per Clause 4.3(2A)(a)). The proposal will increase the overall achievable building height by 5m, from 34m to 39m. Note: The concept scheme submitted with this proposal assumes utilisation of this additional height and proposes a height of 38.9m (or RL54.87).
FSR_004	 Remove the maximum 2:1 base FSR control for the entire site. Remove the 'Area A' designation for the entire site which allows an additional FSR of 1:1, as per Clause 4.4(2C)(a). 	Enables development with a density compatible with surrounding development and suitable to the site's landmark and highly accessible location. Aligns with the approach taken for other key precincts in Rockdale Town Centre under the already implemented Rockdale Town Centre planning proposal (PP_2013_ROCKD_001_ 00). Built form will instead be controlled by the HOB standard and the building envelope controls in the Rockdale DCP 2011, as well as the Department of Planning and Environment's <i>Apartment Design</i> <i>Guide</i> .

B Other Provisions

It is proposed to amend Clause 4.4 Floor space ratio of the *Rockdale LEP* 2011 by repealing subclause 2C(a), which allows additional 1:1 FSR for development on lots within 'Area A' with an area of at least 1,500m². This subclause would no longer be necessary with the amendments to the FSR Map explained above.

[Insert record number (and Trim file)]

Part 3 – Justification

A Need for the planning proposal

A1 Is the planning proposal a result of any strategic study or report?

The planning proposal implements the Rockdale Town Centre Masterplan, adopted by Council on 5 December 2012. The Masterplan identifies the site as the Transport Interchange Precinct, which has 'the potential to form a landmark for the Rockdale Town Centre'. The desired future character for the precinct under the masterplan is summarised as follows:

- Mixed Use development with ground floor retail and residential above;
- Landmark built form visible to passing motorists and rail users;
- Direct level pedestrian access from the railway station concourse into the development;
- Upgraded and expanded through link between the bus interchange and Princes Highway; and
- Expanded bus interchange.

The planning proposal implements new development controls for a key 'missing' piece of the Rockdale Town Centre Masterplan, supported by a Transport Study addressing the concerns of TfNSW.

It is reiterated that correspondence from Council recommended that the pedestrian bridge from the railway station concourse identified in the Masterplan be removed from the scheme. The proposal includes a number of other community benefits and discussions are to be held with Council to identify if further public benefits are required.

A2 Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way? The Rockdale Town Centre Masterplan proposes height and density increases for land in the Transport Interchange Precinct. Given that height and density are controlled by *Rockdale LEP 2011*, a planning proposal is the best means for achieving this outcome.

B Relationship to strategic planning framework

B1 Is the planning proposal consistent with the objectives and actions contained within the applicable regional, sub-regional or district plan or strategy (including any exhibited draft plans or strategies)?

Greater Sydney Region Plan: A Metropolis of Three Cities

7

The Greater Sydney Regional Plan: A Metropolis of Three Cities was released in March 2018 and sets out a vision, objectives, strategies and

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actions for a metropolis of three cities across Greater Sydney. The Plan replaced the previous *A Plan for Growing Sydney*. The Plan outlines 10 overarching directions which aim to provide interconnected infrastructure, productivity, liveability and sustainability benefits to all residents. The planning proposal's consistency with the 10 directions is discussed below:

Table 2 - Consistency with Greater Sydney Region Plan: A Metropolis of Three Cities

Directions	Objectives Consistency			
Infrastructure and collaboration				
1. A city supported by infrastructure	Objective 1: Infrastructure supports the three cities Objective 2: Infrastructure aligns with forecast growth – growth infrastructure compact Objective 3: Infrastructure adapts to meet future needs Objective 4: Infrastructure use is optimised	Objectives 1-3 are not relevant to the planning proposal given they relate to the provision of new infrastructure. In relation to Objective 4, the planning proposal will optimise public transport use given it is located directly to the east of Rockdale train station and bus interchange. The development will maximise the use of existing public transport assets and will reduce the need for additional infrastructure. Furthermore, the proposal will co-locate a mix of land uses (including residential, commercial and retail) which ensure the efficient use of the site and reduce the need for travelling.		
2. A collaborative city	Objective 5: Benefits of growth realised by collaboration of governments, community and business	The planning proposal will be prepared with the collaboration of State and local government agencies and will be notified to the community. The planning proposal implements Council's Rockdale Town Centre Masterplan which is a Council initiative.		
Liveability				
3. A city for people	Objective 6: Services and infrastructure meet communities' changing needs Objective 7: Communities are healthy, resilient and socially connected Objective 8: Greater Sydney's communities are culturally rich with diverse neighbourhoods Objective 9: Greater Sydney celebrates the arts and supports creative industries and innovation	Objective 6 relates to the provision of social infrastructure to reflect the needs of the community. There is an opportunity to provide affordable housing in the scheme which will be considered as part of a future Development Application and will provide housing for a wider range of community members. In relation to Objective 7, the proposal will provide retail along the street frontages and to the through site links which will activate these areas and provide opportunities for social interaction. The proposal will create a walkable place with the provision of retail and commercial uses conveniently located close to residential accommodation. Bicycle parking will be provided in the scheme which will be detailed in the future Development Application. The promotion of walking and cycling will improve the health of future residents and reduce traffic congestion.		

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Directions	Objectives	Consistency
		scheme will ensure that cultural diversity is celebrated through the provision of various retail and commercial opportunities.
		In relation to Objective 9, there may be opportunities to provide public art and to promote a night time economy with various restaurants. These items will be explored during the future Development Application stage.
4. Housing the city	Objective 10: Greater housing supply Objective 11: Housing is more diverse and affordable	Objective 10 relates to increasing the housing supply and the Eastern City District housing targets are 46,550 between 2016-2021 and 157,500 between 2016-2036. The planning proposal will provide additional housing diversity and will contribute to the housing targets.
		provide a range of housing for singles, young couples and families. There is also an opportunity to provide affordable housing which will further explored during the Development Application stage.
5. A city of great places	Objective 12: Great places that bring people together Objective 13: Environmental heritage is conserved and enhanced	In relation to Objective 12, the proposal will provide retail opportunities which will bring community together. The proposed restaurants and cafes will provide a meeting point for community members, linked by an improved pedestrian environment.
		In relation to Objective 13, there are no heritage items on the site nor is the site within a heritage conservation area. The proposal has no adverse impacts on any surrounding heritage item (Brick buildings, signal box and overhead booking office to Rockdale train station referenced I222 in the Rockdale LEP 2011).
Productivity		
6. A well connected city	Objective 14: A metropolis of three cities – integrated land use and transport creates walkable and 30-minute cities Objective 15:	In relation to Objective 14, the proposal will be well connected with services and facilities, which will create a walkable community. The proposal will be within 30 minutes of Hurstville and Sydney CBD.
	The Eastern, GPOP and Western Economic Corridors are better connected and more	Objectives 15-16 are not relevant to the planning proposal.
	competitive Objective 16: Freight and logistics network is competitive and efficient Objective 17: Regional transport is integrated with land use	In relation to Objective 17, the site is accessible to Gosford, Newcastle and Wollongong via the train network which will allow for greater job opportunities and business links.
7. Jobs and skills for the	Objective 18: Harbour CBD is stronger and	Objectives 18, 19, 20 and 23 are not relevant to the planning proposal.

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Directions	Objectives	Consistency
city	more competitive Objective 19: Greater Parramatta is stronger and better connected Objective 20: Western Sydney Airport and Badgerys Creek Aerotropolis are economic catalysts for Western Parkland City Objective 21: Internationally competitive health, education, research and innovation precincts Objective 22: Investment and business activity in centres Objective 23: Industrial and urban services land is planned, protected and managed Objective 24: Economic sectors are targeted for success	In relation to Objective 21, the site is located within 30 minutes of a number of Health and Education Precincts and 'Biotechnology Clusters' and the proposal will provide further housing for workers. In relation to Objectives 22 and 24, the proposal will provide further employment opportunities during construction and when in operation. The planning proposal will support the growth of Rockdale Town Centre and will increase the number of people living closer to jobs, accessible by public transport.
Sustainability		
8. A city in landscape	Objective 25: The coast and waterways are protected and healthier Objective 26: A cool and green parkland city in the South Creek corridor Objective 27: Biodiversity is protected, urban bushland and remnant vegetation is enhanced Objective 28: Scenic and cultural landscapes are protected Objective 29: Environmental, social and economic values in rural areas are maintained and enhanced Objective 30: Urban tree canopy cover is increased Objective 31: Public open space is accessible, protected and enhanced Objective 32: The Green Grid links parks, open spaces, bushland and walking and cycling paths	Objectives 25-29, 31 and 32 are not relevant to the planning proposal. In relation to Objective 30, the proposal will incorporate garden courtyards above the podium level which will provide open space for future residents and soften the building envelope. There is an opportunity to increase the planting along the street frontages which will be explored further at the Development Application stage. Furthermore, the proposal will improve the public domain and the pedestrian environment by increasing the setback of the building along the pedestrian footpath.
9. An efficient city	Objective 33: A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change	In relation to objective 33, the proposal will create a transit orientated development which integrates employment (with retail uses), housing and public transport which reduces

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Directions	Objectives	Consistency
	Objective 34: Energy and water flows are captured, used and re-used Objective 35: More waste is re-used and recycled to support the development of a circular economy	the need to travel by car. The proposal will also incorporate sustainable construction methods and energy efficient design measures within the building which will be explored further as part of the DA process. In relation to Objectives 34 and 35, the proposal will facilitate the redevelopment of the site as a mixed use development and sustainability practices will be secured at the detailed design stage and examined as part of a future Development Application. Furthermore, the proposal will create a transit orientated development with increased densities in proximity to Rockdale station and bus interchange which will reduce the need of vehicle use thereby improving the environment.
10. A resilient city	Objective 36: People and places adapt to climate change and future shocks and stresses Objective 37: Exposure to natural and urban hazards is reduced Objective 38: Heatwaves and extreme heat are managed	Objectives 36-38 are not relevant to the planning proposal.

Premier's Priorities

The 'Premier's Priorities' have been recently released and essentially supersedes the previous NSW 2021. The 'Premier's Priorities' set out 12 priorities which reflect a whole-of-government approach to tackling important issues for the people of NSW, from helping vulnerable children and raising the performance of school students, to improving housing affordability and building local infrastructure. The proposal is consistent with the priority 'making housing more affordable' as discussed further in the table below.

Table 3 - Consistency with the 'Premier's Priorities'

Priority	What the NSW government are doing?	Consistency
Making housing more affordable	 The Premier has a commitment to deliver an average 61,000 housing completions per year, which will be achieved through two targets: 90 per cent of housing approvals determined within 40 days by 2019 State-led rezoning for 10,000 additional dwellings on average per year in appropriate areas to 	Whilst the site does not fall within a Planned Precinct, the Planning Proposal will contribute approximately 244 residential units which will contribute to the governments housing targets.

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[Insert record number (and Trim file)]

Priority	What the NSW government are doing?	Consistency
	2021.	
	Planned precincts will be expanded to fast track the delivery of new homes which will accelerate the rezoning of land to support new and more diverse developments.	

Future Transport Strategy 2056

The Future Transport Strategy 2056 (Strategy) is an update of the 2012 Long Term Transport Master Plan for NSW. It is a 40 year strategy, supported by plans for regional NSW and for Greater Sydney. It outlines a vision, strategic directions and customer outcomes, with infrastructure and services plans underpinning the delivery of these directions across the state.

The vision is built on six outcomes and the proposal is consistent with the outcome 'successful places' refer to table 4 below for further discussion.

Table 4 - Consistency with the NSW 2021

Future Transport Statewide Outcomes	Performance focus	Measures and indicators	Consistency
Successful Places	Deliver transport initiatives that improve the liveability of places	Liveability of places Increase the number of people able to access centres by walking, cycling and using public transport	The proposal will create a mixed use precinct will improve the liveability of Rockdale town centre by providing a mixture of retail and commercial uses which will be accessible by public transport, cycling or walking.

NSW State Infrastructure Strategy 2018-2038

The NSW State Infrastructure Strategy 2018-2038 (SIS) sets out the government's priorities for the next 20 years and combined with the Future Transport Strategy 2056, the Greater Sydney Region Plan and the Regional Development Framework, brings together infrastructure investment and land-use planning for our cities and regions. Building Momentum State Infrastructure Strategy 2018-2038 looks beyond the current projects and identifies policies and strategies needed to provide the infrastructure that meets the needs of a growing population and a growing economy.

The Strategy is set out in three parts: Strategic Directions, Geographic Infrastructure Directions, and Sectors. Under the Geographic Infrastructure Directions, Rockdale is identified within the proposed F6

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extension as illustrated in the figure below. The subject site will benefit from the F6 extension as it will improve connections to the south and transport connectivity.

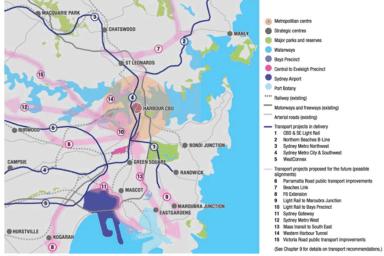


Figure 2: Eastern Harbour City (movement)

One of the infrastructure responses in the Strategy, seeks to improve intracity walking and cycling infrastructure. The existing pedestrian arcade is poorly utilised as it is not situated close to the train station entry/exit point and does not align with King Street (across Princes Highway). Furthermore, the footpath along Geeves Avenue is confined given it is narrow and often pedestrians cut across Tramway Arcade or Geeves Avenue to reach their destination.

The proposal will create a through site link for pedestrians accessing Princes Highway which is generous in width, open to the air and activated by retail opportunities. Furthermore, the proposal will increase the width of the footpaths to Geeves Avenue (by 2.5m) and Princes Highway (3m). These measures will improve pedestrian access through the site and connections between the train station/bus interchange and the Rockdale Town Centre.

Furthermore, the proposal will incorporate bicycle parking which will promote cycling within the locality. The provision of bicycle parking will be considered further in a future Development Application for the site.

Eastern City District Plan (March 2018)

The Eastern City District Plan identifies a range of planning priorities for the District, in line with the four categories identified in the *Greater Sydney Region Plan 2056*:

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- Infrastructure and collaboration;
- Liveability;
- Productivity; and
- Sustainability.

The planning proposal's consistency with the priorities in the draft District Plan are discussed in further detail below.

Infrastructure and collaboration

Planning Priority E1. Planning for a city supported by infrastructure

The planning proposal will provide additional housing and retail floor space within close proximity to Rockdale station and bus interchange, which will optimise the existing public transport infrastructure.

Planning Priority E2. Working through collaboration

The planning proposal will allow for the delivery of further housing and jobs to be prepared in collaboration with the State and Local Government and the community. Liveability

Planning Priority E3. Providing services and social infrastructure to meet people's changing needs

There is an opportunity to provide affordable housing in the scheme which will be considered as part of a future Development Application and will provide housing for a wider range of community members.

Planning Priority E4. Fostering healthy, creative, culturally rich and socially connected communities

The proposal will activate the street frontages and through site links which will provide opportunities for social interaction. The proposal will create a walkable place with the provision of retail and commercial uses conveniently located close to residential accommodation. Bicycle parking will be provided in the scheme which will be detailed in the future Development Application. The promotion of walking and cycling will improve the health of future residents and reduce traffic congestion.

Planning Priority E5. Providing housing supply, choice and affordability, with access to jobs and services

The draft District Plan has a housing target for Bayside Council of an additional 10,150 dwellings between 2016-2021. The proposal enables increased housing supply and choice and will feature a range of apartment sizes and types. The proposal also helps foster a design-led approach to development that recognises the site's strategic location and provides for an agglomeration of people and activity. The Greater

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Sydney Commission's testing reaffirms that generally a range of 5-10% of new floor space is viable for affordable housing and are to work with the DP&E to develop mechanisms required for delivery of the proposed Affordable Rental Housing Target. The provision of affordable housing will be further discussed with Council to ensure an appropriate level of affordable housing is delivered across the broader precinct.

Planning Priority E6. Creating and renewing great places and local centres, and respecting the District's heritage

Rockdale is identified as a 'local centre' which has an 800m walking catchment. Local centres are to be the focal point of neighbourhoods and where they are a focus of public transport they are an important part of a 30 minute city. The proposal will renew the Rockdale Transport Interchange site which will prioritise a friendly public realm and walkability with the provision of the through site link and pedestrian bridge and ground floor retail.

Productivity

Planning Priority E10. Delivering integrated land use and transport planning and a 30-minute city

The proposal encourages the well-planned and efficient growth of Rockdale Town Centre by enabling development of a mixed use precinct adjacent to Rockdale Station, located on the Illawarra Line. This will contribute to the local retail economy and bolster the economy of the broader Central District. Future residents will be located within walking distance of local businesses and within 30 minutes train travel of jobs located within the major employment hubs, including Sydney CBD and Hurstville.

The planning proposal will deliver integrated land use and transport planning, by locating well-designed housing in close proximity to the station and facilitating improved pedestrian linkages from the train station/bus interchange to Princes Highway, as well as safer environment for pedestrians and buses.

Sustainability

Planning Priority E17 Increasing urban tree canopy cover and delivering Green Grid connections

Some of the actions in this Planning Priority seek to expand the urban tree canopy in the public realm and refine the detailed design and delivery of the green grid opportunities. Princes Highway is identified as an 'Other Green Grid Opportunities' connection. There is an opportunity to increase the planting along Princes Highway which will contribute to the green grid and be consistent with the planning priority. The

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proposed planting will be explored further at the Development Application stage.

Planning Priority E19. Reducing carbon emissions and managing energy, water and waste efficiently

The proposal will have no adverse impacts on the natural environment, as this is already an urbanised setting. It is anticipated that future development at the site will integrate water sensitive urban design measures as needed. The proposal promotes environmental efficiency by increasing development potential in an existing centre with good infrastructure. The sustainability measures are to be further considered during the detailed design phase.

Planning Priority E20 Adapting to the impacts of urban and natural hazards and climate change

Objective 37 of the Planning Principle looks at ensuring exposure to natural and urban hazards is reduced. The site abuts Princes Highway and the railway line and falls with the 20 and 25 ANEF contours, thus there will be potential noise and air pollution impacts from these urban hazards. The future Development Application for the site will outline mitigation measures to reduce the noise and air pollution impacts to the future residents.

B2 Is the planning proposal consistent with the local council's Community Strategic Plan or other local strategic plan?

Rockdale Town Centre Masterplan (2012)

The Rockdale Town Centre Masterplan identifies the site as the Transport Interchange Precinct. The masterplan provides a number of structure plan elements for achieving the vision for this precinct. The proposal's consistency with these elements is outlined below.

 Element 5.3.1: High quality mixed use development consisting of a podium containing retail uses on the ground and first floor, which fronts the Princes Highway and the new improved pedestrian linkages, and residential towers above, designed to achieve high levels of amenity and provide modern apartment living in the heart of the Centre.

The proposal enables redevelopment of the site to create a high quality mixed use development. The proposal will include a 3 and 6 storey podium with garden courtyards above for residential open space and above the podium levels will be various towers (with a total height of 5, 6 and 12 storeys). The ground floor will incorporate retail opportunities while residential accommodation will be provided from Level 1 and above. The proposal will not incorporate retail uses on the first floor given the pedestrian bridge has been removed from the scheme (as requested by Council).

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The shape and orientation of the towers have been considered to ensure high levels of amenity are achieved in accordance with the SEPP 65 design principles and Apartment Design Guide (ADG) design criteria. As demonstrated in the figure below the proposal will achieve sufficient separation distances in between the three towers as per the ADG.

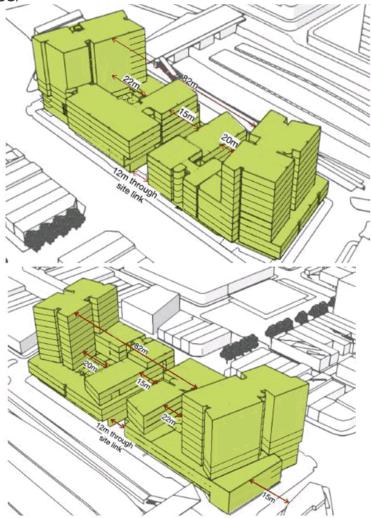


Figure 3: Building separation distances between the residential towers

The proposal will improve the pedestrian linkages between Rockdale station, bus interchange and Rockdale Town Centre through the inclusion of a through site link and footpath widening, as illustrated in the figure below.

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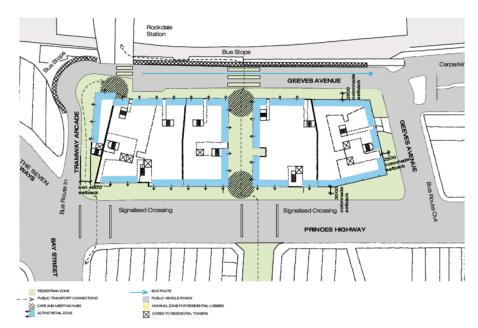


Figure 4: Proposed pedestrian linkage and footpath widening

• Element 5.3.2: The development will become a landmark at the Seven Ways intersection which presents a positive image of the centre to passing motorists and rail users.

The proposal provides for increased density and building height and will create two landmark buildings with one to the Seven Ways intersection. The future scheme will need to be reviewed by the Design Review Panel under Clause 6.14(5)(a)(i) of the Rockdale LEP 2011 will ensure the future development will exhibit design excellence and be of a high architectural quality.

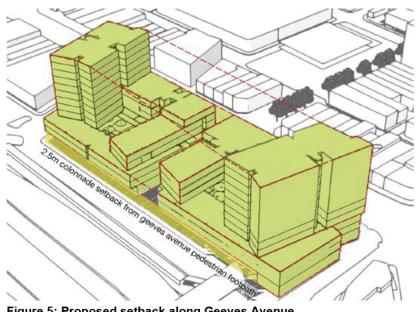
• Element 5.3.33: Provide an improved and enlarged through site pedestrian link which connects the bus interchange with the Princes Highway at the pedestrian traffic signals.

As shown in figure 4 above, the proposal enables redevelopment of the site with an improved and enlarged pedestrian through site link connecting the bus interchange with Princes Highway/King Street at the pedestrian traffic signals. The through site link will be bounded by retail uses which will activate the link and will be open to the air.

 Element 5.3.4: Facilitate the upgrade and expansion of the bus interchange, and provide a setback to Geeves Avenue to achieve the required space.

As shown in the figure below, the proposal enables redevelopment of the site with a 2.5m setback which is to be dedicated to Council

[Insert record number (and Trim file)]



along Geeves Avenue to allow for future expansion of the bus interchange.

Figure 5: Proposed setback along Geeves Avenue

Element 5.3.5: Direct level access for pedestrians provided from the railway station concourse into the redevelopment, which connects to the Seven Ways intersection and the improved through site pedestrian link. All this will be activated by retail uses.

It is reiterated that correspondence from Council (dated 12 June 2018) recommended that the pedestrian bridge be deleted from the scheme and another material public benefit or VPA option be provided in the Planning Proposal. Furthermore, the proposal will widen the footpath along Tramway Arcade to improve the permeability from the railway station to Seven Ways intersection. It is anticipated that the building along Tramway Arcade (including 2-18 Tramway Arcade) will incorporate ground floor retail which activate this street.

The proposed amendment to the Rockdale LEP is generally consistent with the Rockdale Masterplan.

Bayside Community Strategic Plan 2018-2030

The Bayside Community Strategic Plan 2018-2030 (which superseded the Rockdale City Community Strategic Plan) sits at the top of Council's planning framework and sets the strategic direction for Council's Delivery Program and Operational Plans. The themes and directions

[Insert record number (and Trim file)]

outlined in this plan will inform Council's Delivery Program which sets out the outcomes Council will work towards during the current term of office, and the annual Operational Plans that describe Council's activities towards achieving those outcomes.

Table 5 below identifies how the Planning Proposal is consistent with the themes.

Theme One – Bayside will be a vibrant place	How We Will Get There	Consistency
Strategic Direction – Our places are people- focussed	Local areas are activated with cafes, restaurants and cultural events	The ground floor retail component will activate the street frontages and the through site link. There will be opportunities to incorporate cafes, restaurants and potential cultural events.
	Places have their own village atmosphere and sense of identity	The proposal enables development of a high quality mixed use precinct which will contribute to the vibrancy of Rockdale Town Centre. There may be opportunities to promote a night time economy with various restaurants.
	My community and council work in partnership to deliver better local outcomes	The proposal will create a better local outcome by providing further retail floor space which is highly accessible.
	The public spaces I use are innovative and put people first	The proposal will be pedestrian friendly and put people first by creating a through site link and widening the footpaths.
	There is an appropriate and community-owned response to threats	Not applicable.
Strategic Direction – Our places connect people	Walking and cycling is easy in the City and is located in open space where possible	The proposal enables development in close proximity to services and facilities in Rockdale Town Centre, which will promote walking and cycling.
	We are one community with shared objectives and desires	Not applicable.
	Our heritage and history is valued and respected	There are no heritage items on the site, and the proposal has no adverse impacts on any surrounding heritage item (Brick buildings, signal box and overhead booking office to Rockdale train station referenced I222 in the Rockdale LEP 2011).
Strategic Direction – Our places are acceptable to all	Open space is accessible and provides a range of active and passive recreation opportunities to match our growing community	The proposal does not incorporate open space however the site is in close proximity to a number of parks in the locality including Hogben Park and McCarthy

 Table 5 – Consistency with Bayside Community Strategic Plan 2018-2030

[Insert record number (and Trim file)]

		Reserve.
	SMART Cities – making life better through smart use of technologies	Not applicable.
	Assets meet community expectations	Not applicable.
	Bayside provides safe and engaging spaces, places and interactions	The proposal enables development that accords with the principles of Crime Prevention Through Environmental Design (CPTED). This will be achieved through facilitating passive surveillance by increasing residential units and retail shops that overlook the public domain and avoid enclaves where offenders can hide and entrap victims. Clear sight lines will be established to avoid areas where graffiti or vandalism could occur. CPTED measures to be implemented in the scheme will be further investigated at the DA stage.
	People who need to can access affordable housing	The proposal provides for increased housing supply and there is an opportunity to provide affordable housing which will be explored at the DA stage. The development will provide a range of apartment types suited to the needs of the community.
	We welcome visitors and tourists to our City	Not applicable.
Strategic Direction – My place will be special to me	Local developments reflect innovative, good design and incorporate open space and consider vertical families	The residential accommodation will incorporate private open space and communal open space for future residents which will be consistent with the Apartment Design Guide requirements and be considered as part of the future DA.
	Bayside will be a 30 minute City – residents work locally or work off-site – no-one has to travel for more than 30 minutes to work	Future residents will be located within walking distance of local businesses and within 30 minutes train travel of jobs located within the major employment hubs, including Sydney CBD and Hurstville.
	Traffic and parking issues are a thing of the past	Traffic impacts are discussed in detail in Part 3 – Justification of the report. The site is highly accessible to public transport services and the development proposes a range of car parking spaces including between 325 and 383 spaces with a reduced retail/commercial rate. Overall, the operation of the surrounding existing intersections is unlikely to be substantially impacted, subject

		to minor traffic improvements.
	Road, rates and rubbish are	The proposal enables
	not forgotten	development that contributes to the cleanliness of Rockdale through improved on-site waste management.
	Gateway sites are welcoming and attractive	The proposal provides for increased density and building height, which will enable the site to function as a gateway building. The future scheme will need to be reviewed by the Design Review Panel under Clause 6.14 of the Rockdale LEP 2011 (where sites are amalgamated) which will ensure the future development will be of a high architectural quality and attractive.
Theme Two – In 2030 our people will be connected in a smart City	How We Will Get There	Consistency
Strategic Direction – We benefit from technology	Council engages with us and decision making is transparent and data driven	Not applicable.
	We can access information and services online and through social media	Not applicable.
	We are a digital community	Not applicable.
	Technological change has been harnessed and we are sharing the benefits	Not applicable.
Strategic Direction – We are unified and excited about our future	Community leadership is developed and supported	Not applicable.
	We are all included and have a part to play in the City	Not applicable.
	The City is run by, with and for the people	Not applicable.
	We are proud of where we live	The proposal enables development of a high quality mixed use precinct which will contribute to the vibrancy of Rockdale Town Centre.
Strategic Direction – The community is valued	Aboriginal culture and history is recognised and celebrated	Not applicable.
	We are a healthy community with access to active recreation and health education	The proposal will promote cycling and walking and will improve the health and well being of future residents.
	All segments of our community are catered for – children, families, young people and seniors	The development will provide a range of apartment types suited to the needs of the community.
	Opportunities for passive and active activities are available to community members, including people with pets	The proposal will incorporate private open space and communal open space and will be within close proximity to a number of

		parks.
	The value of pets in the community is recognised and they are welcomed across the city	Pets will be welcome within the development.
Strategic Direction – We treat each other with dignity and respect	We can participate in cultural and arts events which reflect and involve the community	There may be an opportunity to include cultural and art events within the ground floor retail component which will encourage community participation.
	Flexible care/support arrangements for seniors, children and people with disabilities are available across the LGA	Not applicable.
	Cultural diversity is reflected and celebrated in the City's activities	There may be an opportunity to include cultural and art events within the ground floor retail component which will celebrate Rockdale's mutliculturism.
	Our public buildings are important community hubs and are well maintained and accessible	Not applicable.
Theme Three – In 2030 bayside will be green, leafy and sustainable	How We Will Get There	Consistency
Strategic Direction – Our waste is well managed	I can reduce my waste through recycling and community education	The development will incorporate appropriate waste management including recycling in the future building for the residential and retail uses.
	Illegal dumping is a thing of the past	Appropriate management of waste will be undertaken during the construction phase and no illegal dumping will be undertaken.
Strategic Direction – We are prepared for climate change	We understand climate change and are prepared for the impacts	The proposal will enable development capable of employing sustainable construction and design practices.
	Our City is prepared for/able to cope with severe weather events	The building will be constructed to ensure is a able to cope with severe weather events.
	Our streetscapes are green and welcoming	There is an opportunity to increase the planting along the street frontages which will be explored further at the Development Application stage.
Strategic Direction – We increase our use of renewable energy	Our City promotes the use of renewable energy through community education	The redevelopment of the site will incorporate sustainability measures which will be addressed at the DA stage.
	Our City models use of renewable energy and reports gains benefits to the community	Not applicable.
Strategic Direction – Waterways and green	Water is recycled and re- used	The redevelopment of the site will incorporate sustainability

corridors are regenerated and preserved		measures where possible which will be addressed at the DA stage.
	The community is involved in the preservation of our natural areas	Not applicable.
	We have an enhanced green grid/tree canopy	There is an opportunity to increase the planting along the street frontages which will contribute to the green grid and be consistent with the planning priority. It is noted that the site is identified as an 'Other Green Grid Opportunities' site in the Eastern City District Plan. The proposed planting will be explored further at the Development Application stage.
Theme Four – In 2030 we will be a prosperous community	How We Will Get There	Consistency
Strategic Direction – Opportunities for economic development are recognised	Major employers support/partner with local small business	Not applicable.
	We are an international hub for transport and logistics- related business	Not applicable.
	Industrial lands and employment lands are preserved – partnering with major employers to support local jobs	Not applicable.
Strategic Direction – Local housing, employment and business opportunities area generated	Bayside will be a 30 minute City – residents work local or work off-site – no-one has to travel for more than 30 minutes to work	Future residents will be located within walking distance of local businesses and within 30 minutes train travel of jobs located within the major employment hubs, including Sydney CBD and Hurstville.
	Council is a major employer, supports local apprenticeships and cadetships	Not applicable.
	People who need to can access affordable housing	There is an opportunity to provide affordable housing which will further explored during the Development Application stage.
Strategic Direction – The transport system works	We can easily travel around the LGA – traffic problems/gridlock are a thing of the past	The proposal will reduce the amount of car parking associated with the development which will reduce traffic gridlock and traffic will be able to easily travel around the site.
	We can easily travel to work by accessible, reliable public transport	The proposal will create a walkable environment which is in close proximity to the Rockdale bus interchange and train station.
Strategic Direction – We are prepared for a sharing economy	Innovative businesses are supported to locate in Bayside	Innovative businesses will be supported in the future retail tenancies.

Local Plans and regulations have kept pace with the	Not applicable.
sharing economy	

B3 Is the planning proposal consistent with applicable State Environmental Planning Policies (SEPPs)?

Consistency with the State Environmental Planning Policies is provided in Table 6, below.

No.	Title	Consistency with Planning Proposal
1	Development Standards	Repealed by RLEP 2011
14	Coastal Wetlands	Not applicable
15	Rural Landsharing Communities	Not applicable
19	Bushland in Urban Areas	Not applicable
21	Caravan Parks	Not applicable
22	Shops and Commercial Premises	Repealed
26	Littoral Rainforests	Not applicable
29	Western Sydney Recreation Area	Not applicable
30	Intensive Aquaculture	Not applicable
32	Urban Consolidation (Redevelopment of Urban Land)	Repealed
33	Hazardous and Offensive Development	Not applicable
36	Manufactured Home Estates	Not applicable
39	Spit Island Bird Habitat	Not applicable
44	Koala Habitat Protection	Not applicable
47	Moore Park Showground	Not applicable
50	Canal Estate Development	Not applicable
52	Farm Dams and Other Works in Land and Water Management Plan Areas	Not applicable
55	Remediation of Land	The site has been used as a mixed use development for some time. It is high unlikely the land would be subject to a level of contamination that would preclude its use for residential accommodation. Further contamination investigations will be undertaken at DA stage. The planning proposal does not seek to hinder the application of Clause 6 of SEPP 55.
59	Central Western Sydney Regional Open Space and Residential	Not applicable
60	Exempt and Complying Development	Repealed by RLEP 2011
62	Sustainable Aquaculture	Not applicable
64	Advertising and Signage	Not applicable
65	Design Quality of Residential Flat Development	 The proposal enables a mixed use development designed in accordance with the 9 design quality principles under SEPP 65 and capable of capable of capable of complying with the provisions of the Apartment Design Guide (ADG). Compliance with the ADG will be assessed at development application stage.
70	Affordable Housing (Revised Schemes)	To be addressed at the development application stage if affordable housing is

Table 6 - Consistency with State Environmental Planning Policies

[Insert record number (and Trim file)]

		proposed.
71	Coastal Protection	Not applicable
	(Affordable Rental Housing) 2009	To be addressed at the development application stage if affordable housing is proposed.
	(Building Sustainability Index: BASIX) 2004	To be addressed at the development application stage.
	(Exempt and Complying Development Codes) 2008	The proposal does not hinder the application of this SEPP.
	(Housing for Seniors or People with a Disability) 2004	The proposal does not hinder the application of this SEPP.
	(Infrastructure) 2007	 The site has frontage to Princes Highway, a classified Road as per the Schedule of Classified Roads and Unclassified Regional Roads. Future residential development will need to achieve the objectives and conditions of cl. 101 of this SEPP, which relates to development with frontage to a classified road. The site is located in close proximity to a railway line. Future residential development will have to demonstrate compliance with cl. 87 of this SEPP, which relates to the impact of rail noise or vibration on non-rail development.
	(Kosciuszko National park Alpine Resorts) 2007	Not applicable
	(Kurnell Peninsula) 1989	Not applicable
	(State Significant Precincts) 2005	Not applicable
	(Mining, Petroleum Production and Extractive Industries) 2007	Not applicable
	(Miscellaneous Consent Provisions) 2007	Not applicable
	(Penrith Lakes Scheme) 1989	Not applicable
	(Rural Lands) 2008	Not applicable
	(SEPP 53 Transitional Provisions) 2011	Not applicable
	(State and Regional Development) 2011	Not applicable
	(Sydney Drinking Water Catchment) 2011	Not applicable
	(Sydney Region Growth Centres) 2006	Not applicable
	(Three Ports) 2013	Not applicable
	(Urban Renewal) 2010	Not applicable
	(Western Sydney Employment Area) 2009	Not applicable
	(Western Sydney Parklands) 2009	Not applicable

See Table 7 below which reviews the consistency with the formerly named State Regional Environmental Plans, now identified as deemed SEPPs.

Table 7 - Consistency with deemed State Environmental Planning Policies

No.	Title	Consistency with Planning Proposal
8	(Central Coast Plateau Areas)	Not applicable
9	Extractive Industry (No.2 – 1995)	Not applicable
16	Walsh Bay	Not applicable
18	Public Transport Corridors	Not applicable

[Insert record number (and Trim file)]

19	Rouse Hill Development Area	Not applicable
20	Hawkesbury-Nepean River (No.2 – 1997)	Not applicable
24	Homebush Bay Area	Not applicable
26	City West	Not applicable
30	St Marys	Not applicable
33	Cooks Cove	Not applicable
	(Sydney Harbour Catchment) 2005	Not applicable

B4 Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

See Table 8 below which reviews the consistency with the Ministerial Directions for LEPs under section 9.1 of the *Environmental Planning and Assessment Act* 1979.

Table 8 - Consistency with applicable Ministerial Directions

No	ployment and Resources	Consistency with Planning Proposal
No. 1.1	Title Business and Industrial Zones	 Consistency with Planning Proposal The objectives of this direction are to: a) encourage employment growth in suitable locations, b) protect employment land in business and industrial zones, and c) support the viability of identified The site's current B2 Local Centre zoning will remain unchanged, and the total potential floor space area for employment uses will increase. The proposal will enable development of a high quality mixed use precinct in a suitable location close to existing public transport and other infrastructure and services.
		It is estimated that the site once developed will have the following economic impacts on an annual basis: \$111.6 million in output. \$58.7 million contribution to Gross Regional Product. \$35 million in incomes and salaries. 446 full time equivalent jobs, including 196 direct jobs.
1.2	Rural Zones	Not applicable
1.3	Mining, Petroleum Production & Extractive Industries	Not applicable
1.4	Oyster Aquaculture	Not applicable
1.5	Rural Lands	Not applicable
2 Env	vironment and Heritage	
No.	Title	Consistency with Planning Proposal
2.1	Environmental Protection Zones	Not applicable
2.2	Coastal Protection	Not applicable
2.3	Heritage Conservation	Not applicable
2.4	Recreation Vehicle Areas	Not applicable

No. Title

[Insert record number (and Trim file)]

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Consistency with Planning Proposal

3.1	Residential Zones	Objectives (1) The objectives of this direction are: (a) to encourage a variety and choice of housing types to provide for existing and future housing needs, (b) to make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services, and (c) to minimise the impact of residential development on the environment and resource lands. The proposal will incorporate a variety of studio, 1, 2 and 3 bedroom units which is consistent with the minimum unit mix provisions in the Rockdale Development Control Plan 2011. The variety of unit types will provide accommodation for singles, couples and families and a portion of the units are to be allocated as affordable housing. The mixture of housing will provide for existing and future housing needs of the locality. The additional housing will be opposite Rockdale Train Station and a number of bus services along Princes Highway. Furthermore, the residential accommodation will be located within the Rockdale Town Centre which is close proximity to a range of services and facilities. Therefore the proposal will make efficient use of the existing infrastructure and services.
3.2	Caravan Parks and Manufactured Home Estates	Not applicable
3.3	Home Occupations	Not applicable
3.4	Integrating land use and Transport	 The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives: a) improving access to housing, jobs and services by walking, cycling and public transport, and b) increasing the choice of available transport and reducing dependence on cars, and c) reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and d) supporting the efficient and viable operation of public transport services, and e) providing for the efficient movement of freight. The proposal accords with the above objectives in that it enables increased development potential in a location in close proximity to Rockdale Station and the existing services and facilities in Rockdale Town Centre. The site is also located in close proximity to myloyment opportunities associated with Sydney Airport and other employment hubs including Hurstville and Sydney CBD.

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3.5	Development near Licensed Aerodromes	 The objectives of this direction are: a) to ensure the effective and safe operation of aerodromes, and b) to ensure that their operation is not compromised by development that constitutes an obstruction, hazard or potential hazard to aircraft flying in the vicinity, and c) to ensure development for residential purposes or human occupation, if situated on land within the Australian Noise Exposure Forecast (ANEF) contours of between 20 and 25, incorporates appropriate mitigation measures so that the development is not adversely affected by aircraft noise. The proposed amendment to the building height standard for the site enables development up to an RL of 54.87 which is above the Sydney Airport Corporation Limited (SACL) OLS height of RL 51.00 but below the PANS-OPS height of RL 54.9. As such, permission is required from SACL and it is anticipated that SACL will be consulted as part of statutory exhibition. It appears that development at 3-7 Keats Avenue (RL53.75) and 564 Princes Highway (RL52.75) have been able to penetrate the OLS height and is of a similar height to the proposal. It is noted that the PANS-OPS however we note that there will be strict controls surrounding the heights of the cranes during construction. The site is located between the 20 and 25 ANEF contours. Mitigation techniques can be addressed at the development application stage, in line with Clause 6.3 of the Rockdale LEP 2011.
3.6	Shooting ranges	Not applicable
		for approache
	ard and Risk	Consistency with Diaming Proposal
No. 4.1	Title Acid Sulfate Soils	Consistency with Planning Proposal The objective of this direction is to avoid significant
4.1	Acid Sullate Solis	adverse environmental impacts from the use of land that has a probability of containing acid sulfate soils.
		The site is classified as Class 5 Acid Sulfate Soils under <i>RLEP 2011</i> . Clause 6.1 of Rockdale LEP 2011 specifies when an Acid Sulfate Soils Management Plan is required to be submitted for approval by Council as part of any subsequent development application.
4.2	Mine Subsidence and Unstable Land	Not applicable
4.3	Flood Prone Land	Not applicable
4.4	Planning for Bushfire Protection	Not applicable
5. Reg	ional Planning	
No.	Title	Consistency with Planning Proposal
5.1	Implementation of Regional Strategies	Not applicable
5.2	Sydney Drinking Water Catchments	Not applicable
5.3	Farmland of State and Regional Significance	Not applicable

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	on the NSW Far North Coast	
5.4	Commercial and Retail Development along the Pacific Highway, North Coast	Not applicable
5.5	Development on the vicinity of Ellalong	Not applicable
5.6	Sydney to Canberra Corridor	Not applicable
5.7	Central Coast	Not applicable
5.8	Second Sydney Airport: Badgerys Creek	Not applicable
5.9	North West Rail Link Corridor Strategy	Not applicable
6. Loca	al Plan Making	
No.	Title	Consistency with Planning Proposal
6.1	Approval and Referral Requirements	The objective of this direction is to ensure that LEP provisions encourage the efficient and appropriate assessment of development.
		The proposal has minimised the inclusion of provisions that require the concurrence, consultation or referral of development applications to a Minister or public authority.
		The site is not identified as designated development.
6.2	Reserving land for Public Purposes	 The objectives of this direction are: a) to facilitate the provision of public services and facilities by reserving land for public purposes, and b) to facilitate the removal of reservations of land for public purposes where the land is no longer required for acquisition.
		The proposal does not alter existing zonings for reservations of land.
6.3	Site Specific Provisions	The objective of this direction is to discourage unnecessarily restrictive site specific planning controls.
		The proposal does not alter the permitted uses on the site or apply any development standards in addition to those already contained in RLEP 2011.
7. Metr	opolitan Planning	
No.	Title	Consistency with Planning Proposal
7.1	Implementation of A Plan for Growing Sydney	The objective of this direction is to give legal effect to the planning principles; directions; and priorities for subregions, strategic centres and transport gateways contained in A Plan for Growing Sydney.
		The proposal is consistent with Greater Sydney Region Plan: A Metropolis of Three Cities (previously A Plan for Growing Sydney) in that helps achieve a competitive economy, a city of housing choice, a great place to live and a sustainable and resilient city. Refer to detailed discussion above.

C Environmental, social and economic impact

C1 Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The proposal relates to Rockdale Town Centre, which is already significantly developed and some distance from any natural areas. The proposal will therefore not adversely affect critical habitat or threatened species, populations or ecological communities, or their habitats.

C2 Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

Built Form

Rockdale Town Centre is experiencing significant urban renewal, with multiple large mixed use developments approved or currently under assessment in close proximity to the site, as shown in the following Figure 6. For example, 564 Princes Highway was recently approved with a maximum height of 52.75m and 433-439 Princes Highway was granted deferred commencement with a maximum height of 51.6m. The proposal is considered to be consistent with the development occurring in the Rockdale town centre and is not out of context.

The planning proposal enables a built form that accords with this changing urban context. Eeles Trelease has prepared an Urban Context Report to accompany the proposal, refer to **Appendix 1**. The report analyses the site context, offers a design response and proposes a concept scheme for the site.



Exceeds RL Height Restriction of 34m

Base Map Ref: Google Earth

	ADDRESS	DA NUMBER	STOREYS	HEIGHT (m)/	STATUS (AS OF 11/4/17)
1	GEEVES AVE PRECINCT 471 - 611 PRINCES HOLHNAY - interdue, multi-residential development - allocated residential sports - allocated commercial tenancies - 35 Sm hught	-	12	38.9 / 54.87	
2	D04 PRINCES HIGHWAY - mead use, mult-residential development - resential approximation - retail space allocated - 38.75m height	2012/293	11	38.75 / 52.75	APPROVED
3	433 - 439 PRINCES HIGHWAY - mixed use, multi-residential development - 86 residential spartments - 3 commercial tenancies - 36.4m height	2015/322	12	30.4 / 51.0	DEFERRED COMMENCEMENT
4	401 PRINCES HIGHWAY - mked use, multi-residental development - 39 residental apartments - 2 commercial tenancies	2018/150	7	-/-	APPROVED
5	397 PRINCES HIGHWAY - mixed use, multi-residential development - 92 residential spartments - 3 commercial tenancies - 34.54m height	2016/420	11	34.54 / 49.32	APPROVED
6	376 - 384 PRINCES HIGHWAY - mixed use, multi-residential development - 36 readential apartments - 2 commercial tenancies - 27.5m height	2016/108	9	27.5 / 42.2	APPROVED
7	385 - 395 PRINCES HIGHWAY - mixed use, multi-residental development - 60 readential apartments - 1 commercial tenancies - 27.5m height	2016/117	9	27.5 / 42.4	APPROVED
8	398 - 412 PRINCES HIGHWAY - mixed use, multi-residental development - 72 residential apartments - 4 commercial tenancies - 29.2m height	2016/343	9	29.2 / 42.98	APPROVED
9	27 - 31 BRYANT STREET - multi-residental development - 60 residential opartments - 27.45m height	2017/54	9	27.45 / 48.05	DEFERRED COMMENCEMENT
10	75-85 RALWAY STREET - mixed use, mult residential development - mixedmits apace allocated - retail space allocated - zitm height		8	28/-	PASSED WITH CONDITIONS
=	EXISTING 6 - 12 STOREY BUILDINGS 3 - 7 KEATS AVENUE		12	-/ 53.75	BUILT
	- 12 storeys		-		
	- 12 storeys MULTIPLE LOCATIONS - 6-12 storeys - varies		6-12	VARIES	BUILT

Figure 6: Development applications and proposals within Rockdale Town Centre

The proposed building envelope is generally consistent with the building envelope identified in the Rockdale Development Control Plan 2011 (RDCP 2011) and Council's preferred response as discussed in the meeting on 15 November 2018. The proposal will incorporate a 6 storey podium along Princes Highway with a ground floor 3m colonnade and 3m upper level setback. The proposal will incorporate a 3 storey podium along Geeves Avenue, a 2.5m dedicated setback along Geeves Avenue (western boundary) and a 3m upper level setback.

The proposal will incorporate two landmark buildings (12 storeys) at the either end of the precinct and will include an open air through site link which will connect Geeves Avenue, Princes Highway and King Street Place. The site along Tramway Arcade (2-18 Tramway Arcade) is to incorporate a 3 storey development which will incorporate ground floor retail and commercial above which could be used for creative uses or we-work office spaces. The proposal seeks to widen the footpath along Tramway Arcade to improve pedestrian access between the Rockdale Station and Seven Ways. Refer to **Appendix 5** for the draft Site Specific DCP provisions.

Figures 7 and 8 illustrate the proposed site plan and building envelope. The indicative scheme prepared by Eeles Trelease will include the following:

[Insert record number (and Trim file)]

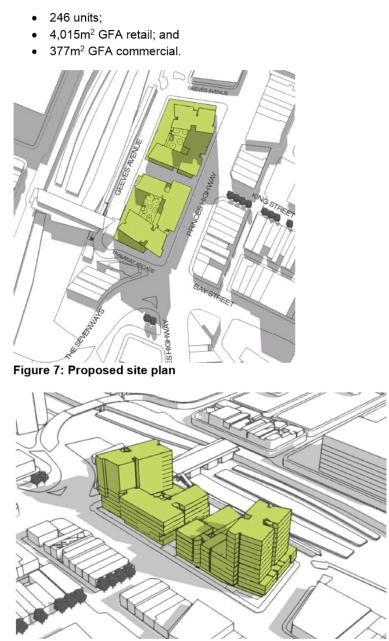


Figure 8: Proposed building envelope

The design concept has carefully considered the interplay between the site and surrounding land use mix, developing an architectural response

[Insert record number (and Trim file)]



that makes effective use of the built form, solar access, views, connectivity, public domain to deliver two landmark developments.

Figure 9: Visualisations along Princes Highway

The ground plane is activated through retail, the widening of the footpaths and the through site link which will connect the site with the the transport interchange, railway station and the surrounding Town Centre.

The 6 storey podium along Princes Highway will create a strong street edge whilst the two landmark buildings will create visual interest and book ends to the precinct. The built form along Geeves Avenue is reduced in scale with a 3 storey podium and various taller elements being 5, 6 and 12 storeys. Above the 3 storey podium will be landscaped areas for communal open space for future residents.

The proposed residential accommodation will comply with the key Apartment Design Guide (ADG) design criteria including solar access, cross ventilation, building separation distances and building depth. The scheme demonstrates that the site can be developed under the planning proposal with a built form featuring high residential amenity, improved public domain and minimised environmental impacts.

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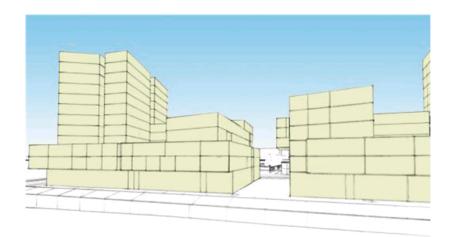


Figure 10: Visualisation – view from west through link

Overshadowing

The shape of the towers, the orientation of their facades and positioning relative to one another provide for positive solar access. The building height has been limited along Tramway Arcade to minimise overshadowing to surrounding properties and within the subject precinct.

Figures 11-13 below provide shadow diagrams for 9am, 12pm and 3pm at mid-winter and compares the difference in overshadowing associated with the additional 5m in height for the Planning Proposal. The red line indicates the building height without the additional 5m in height.

As seen in the diagrams, the proposed amendments will allow for a built form with no unacceptable overshadowing impacts. Specifically:

- The additional 5m in height (for the Planning Proposal) will not create significant additional overshadowing than the scheme with a maximum overall height of 34m (without the additional 5m height);
- There will be no overshadowing impacts on surrounding low density residential areas;
- The properties across Princes Highway and Tramway Arcade incorporate a mixture of retail and commercial. The proposal will create additional overshadowing to the properties across Princes Highway at 3pm mid winter and across Tramway Arcade at 9am mid winter however the tower form of the development means that the shadow moves quickly.

[Insert record number (and Trim file)]

- The proposal will overshadow the King Street pedestrianised through site link at 3pm mid winter however the proposal will generally maintain solar access around midday and partially at 9am.
- Overshadowing is consistent with the site's location within an existing urban context and will occur largely over business-zoned land.
- Podium level communal open space areas and apartments are able to achieve solar access in accordance with ADG criteria.

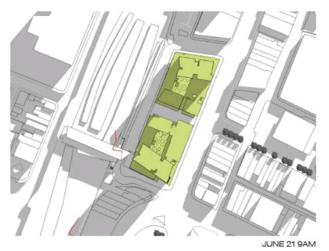


Figure 11: Solar analysis June 21 9am

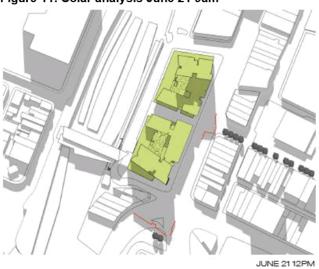


Figure 12: Solar analysis June 21 12pm



Figure 13: Solar analysis June 21 3pm

Development staging

The concept scheme envisions a single precinct development (refer to the figure below) with three distinct portions capable of being developed separately:

• Stage 1: includes the sites 507, 509 and 513-517 Princes Highway and 2-18 Tramway Arcade and incorporates one of the landmark buildings for the precinct. It is highlighted that the sites 2-18 Tramway are to be redeveloped separately given there are a number of separate landowners and it would be difficult to amalgamate with the remainder of the sites in Stage 1.

The sites 2-18 Tramway Arcade can be redeveloped separately as a 3 storey mixed use development with ground floor retail and commercial to the upper levels.

- Stage 2: includes the sites sites 483, 485, 487, 489, 491, 493, 495 and 501 Princes Highway which will be in the centre of the precinct and incorporate the through site link:
- **Stage 3:** includes the sites 471, 475-477 and 481 Princes Highway, 6 and 14 Geeves Avenue and incorporates one of the landmark building for the precinct.

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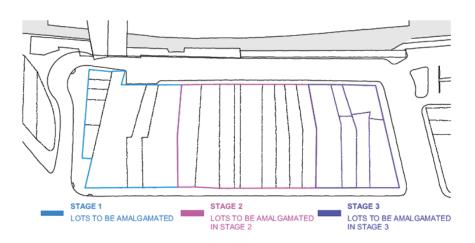


Figure 14: Amalgamation patterns

It is anticipated that each of the stages will be subject to a separate development application with the exception of Stage 1 which will be two development applications. It is likely that Stage 1 – sites 507, 509 and 513-517 Princes Highway will be the first to be redeveloped. While the development of the precinct will require a certain degree of coordination between landowners, the concept scheme allows a number of landowners to come together and develop their lots independently, yet ensures a single integrated development in accordance with the Rockdale Town Centre Masterplan.

It is noted that each site would achieve the minimum $1,500m^2$ site area required for achieving the additional 12m height under Clause 4.3 (2A) of the LEP 2011.

Traffic and Parking

A Transport Study (31 October 2017) and two addendum letters (1 March 2018 and 17 December 2018) have been prepared by GTA to accompany the proposal (**Appendix 2**) which considers the existing traffic and parking conditions, suitability of the proposed parking, traffic generation and impact of the planning proposal on the surrounding road network.

Traffic generation

Traffic generation estimates for the land uses that form the planning proposal are based on the Roads and Maritime Guide to Traffic Generating Developments 2002 and Roads and Maritime Technical Direction 2013/04a (TDT 2013/4a). Under the planning proposal controls the site is expected to generate up to 126 vehicle movements in AM peak hour and 117 vehicle movements in PM peak hour. This

[Insert record number (and Trim file)]

increase in traffic is considered minimal and is unlikely to have a substantial impact on the operation of the existing intersections.

A 2021 base model has been analysed and shows that the intersection of Geeves Avenue/Princes Highway in the PM peak and the intersection of Princes Highway/ Bay Street/Seven Ways/Tramway Arcade in both AM and PM peaks would be operating near capacity.

GTA has also undertaken further traffic modelling and by 2031 the existing road network will be operating near over capacity without the development, adding any development will further impact the network.

Table 2 in the GTA addendum letter (1 March 2018) indicates that in the PM peak particularly the intersection of Princes Highway/Geeves Avenue adjacent to the development will be operating near or at capacity in 2031. During AM peak the intersection of Princes Highway/Bay Street/The Seven Ways/Tramway Arcade will be operating over capacity. As the road network is operating near or over capacity without the development, adding any development traffic impacts the operation.

However, the NSW Government is progressing the development of the F6 Extension Stage 1, which will provide connection from Southern Sydney to the wider Sydney network and improve travel times and ease congestion on the local road network. Stage 1 will assist in the reduction of traffic congestion particularly on the Princes Highway through Arncliffe, Rockdale, Banksia and the Grand Parade, Brighton Le Sands. Based on this it is expected that by 2031 traffic volumes on the Princes Highway will have reduced and therefore the road network surrounding the site will be improved from that projected in the modelling results.

In considering cumulative impacts for potential developments also accessing Geeves Avenue, based on the traffic report by Varga Traffic Planning Pty Ltd for 433-439 Princes Highway, there is not expected to be any net increase in traffic from the planning proposal at this site. It has therefore also been assumed that the development of the sites from 441-467 Princes Highway would not result in any net increase in traffic generation through the intersection of Geeves Avenue and the Princes Highway.

Overall, the operation of the surrounding existing intersections are unlikely to be substantially impacted, however the Transport Study suggests minor improvements to the lane configuration on the Geeves Avenue approach to the Princes Highway for efficient intersection operation. The proposal includes the removal of six (time restricted) on street car parking spaces and two loading zones along Geeves Avenue which would improve the overall performance of the Geeves Avenue and Princes Highway intersection and would improve sight lines to the ultimate access point along Greeves Avenue.

[Insert record number (and Trim file)]

Car parking

The residential parking rates have been calculated considering Council's DCP and RMS Metropolitan Sub-Regional Centre rates and the proposal would result in a range of residential parking spaces of between 269 (under the RMS rates) and 327 (under the DCP).

In relation to the retail/commercial car parking, the Transport Report and addendum letters recommend the removal or reduction of the parking requirement due to its proximity to the station and bus interchange. The existing retail/commercial within the site only provides minimal parking with around 25 parking spaces allocated to around 3,500m² which equates to a rate of around one parking space to 140m².

Due to the sites location it is anticipated that the retail component would most likely service walk by trips rather than being a destination retail area. Therefore, is it recommended that the parking provision rate for the retail/commercial component be reduced or even removed. For the proposal a 50% reduction has been applied resulting in rate of 1 space per 80m² of GFA and would result in 56 spaces across the precinct for the retail/commercial component.

Vehicle access

The recommended access point for ultimate development in the precinct consists of a single two-way driveway from Geeves Avenue at the northern end of the site (Stage 3). This access would connect through to a centralised loading dock and parking areas for the entire precinct. If Stages 1 or 2 are to be redeveloped first only one temporary access point is to be provided along western end of Geeves Avenue for both the stages with a connection at basement level for the other stage. Once Stage 3 is redeveloped, the temporary access point will be removed and only one access point will be proposed along the northern edge of Geeves Avenue. The temporary access point for Stages 1 and 2 would be adjacent to the bus interchange but is not expected to

negatively impact the operation of the interchange or pedestrian flow to

Pedestrian access

the train station.

Analysis of the pedestrian surveys show that there is a high demand for pedestrian access from the Rockdale Station through Tramway Arcade to the Princes Highway. The proposal will create a better pedestrian environment by widening the through site link and ensuring it aligns with key destinations including King Street. Furthermore, the proposal will facilitate a better experience for pedestrians with the widening of the footpaths.

[Insert record number (and Trim file)]

Aeronautical

Rockdale is located within close proximity to Sydney's Kingsford Smith Airport. To ensure the safe operation of aircrafts, limitations have been placed on the heights of buildings within designated flight paths.

The site is subject to an Obstacle Limitation Surface (OLS) - Inner Horizontal Surface of 51m Australian Height Datum (AHD) and Air Navigation Services - Aircraft Operations Surface (PANS-OPS) of 54.9m AHD.

Additionally, development with a height of 15.24m AHD or greater must be referred to Sydney Airport Corporation Limited (SACL).

The planning proposal seeks to amend the Rockdale LEP 2011, to allow for the construction of a mixed use development to a maximum height of RL54.9 (or 39m). The concept scheme as detailed in the Urban Design Report assumes utilisation of this additional height and proposes a height of 38.9m (or RL54.87).

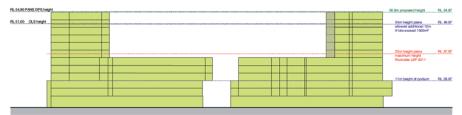


Figure 15: OLS and PANS-OPS

While the proposed maximum height of buildings will sit above the OLS, there are a number of proposed residential developments within the Rockdale Town Centre which have penetrated the OLS. For instance, 564 Princes Highway (RL52.75) and 3-7 Keats Avenue (RL of 53.75) have been able to penetrate the OLS height and is of a similar height to the proposal.

Given the proposal will penetrate the OLS, permission is required from SACL and it is anticipated that SACL will be consulted as part of statutory exhibition.

It is noted that the PANS-OPS however we note that there will be strict controls surrounding the heights of the cranes during construction.

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C3 How has the planning proposal adequately addressed any social and economic effects?

Economic Impacts

An Economic Assessment has been prepared by AEC to accompany the proposal, refer to **Appendix 3**. The assessment has identified the following key economic impacts associated with the proposal:

- The construction phase associated with the development is expected to support the following economic activity within the Bayside LGA through direct and flow-on impacts:
 - \$121.5 million in additional output.
 - \$44.6 million in contribution to Gross Regional Product (GRP).
 - \$27.6 million in incomes and salaries.
 - 354 full time equivalent jobs, including 99 direct jobs.
- Once established and achieving steady state operations, the precinct is expected to continue to make a significant contribution to the local economy. Ongoing operations are estimated to support the following (direct and flow-on) economic activity on an ongoing annual basis:
 - \$111.6 million in output.
 - \$58.7 million contribution to Gross Regional Product.
 - \$35 million in incomes and salaries.
 - 446 full time equivalent jobs, including 196 direct jobs.

By retaining the B2 Local Centre zone the retail component at the Rockdale Transport Interchange, the proposal will increase the operational jobs from 196 to 446 and will create 354 jobs during construction (note this is based on 4,425 sqm of retail floorspace and 968 sqm of commercial floorspace).

Social Impacts

The proposal will have positive social impacts in that it will:

- Support the integration of land use and transport planning resulting in positive public benefit;
- Enable improvements of the public domain with a high quality mixed use precinct with extensive ground level activation, a pedestrian through link and widening of the footpaths;
- Improve the quality of built form along Geeves Avenue and Princes Highway by encouraging construction of new mixed use development with active frontages and with residential amenity consistent with SEPP 65;
- Increase pedestrian activity in Rockdale Town Centre and improve the vitality and vibrancy of the Centre while creating

[Insert record number (and Trim file)]

opportunities for new development utilising the principles of Crime Prevention Through Environmental Design;

- Increase employment opportunities with the creation of additional retail and commercial floor space;
- Increase housing choice for the area with the potential to provide affordable housing; and
- Set a suitable building envelope, which will allow further consideration of overshadowing and amenity impacts as part of the future detailed design and development of the site to ensure the development does not unreasonably overshadow neighbours.

D1 Is there adequate public infrastructure for the planning proposal?

The site is located in an existing urban area with good access to public transport and other infrastructure. The site is strategic in nature and a holistic approach to site planning and development is required to ensure proper integration of land use and transport.

It is proposed that the ongoing dialogue is maintained with Transport for NSW and Roads and Maritime Services throughout the course of the plan making process to ensure suitable outcome is achieved within the 'transport interchange precinct'.

In general, the planning proposal will result in the provision of new public infrastructure including a through site link and public domain upgrades. It is anticipated that other improvements to infrastructure can be dealt with as part of future development application process through developer contributions.

D2 What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway determination?

The views of Transport for NSW and Roads and Maritime Services have been obtained throughout the course of this process, to seek advice, feedback and review to ensure traffic and transport issues have been adequately addressed (refer to **Appendix 4**).

At this stage, the views of other State and Commonwealth public authorities have not been obtained. Following a Gateway determination further consultation will be undertaken with relevant State or Commonwealth authorities.

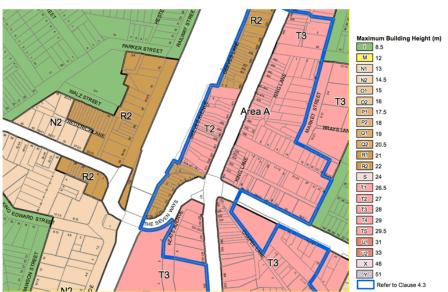
43

Part 4 – Mapping

Refer to Table 7 for an outline of the changes to the LEP maps and Figures 15 and 16 which illustrate the proposed amendments. Specifically, the Height of Buildings Map and Floor Space Ratio Map are proposed to be modified by this planning proposal, refer to **Appendix 6** for complete maps.

Table 9 - Proposed Map Amendments

Map Tile No.	Existing	Proposed
HOB_004	Base HOB of 22m and designated in 'Area A'	Increase the base HOB to 27m and retain 'Area A' designation.
FSR_004	Base FSR of 2:1 and designated in 'Area A'	Remove the base FSR and 'Area A' designation.



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Figure 16: Proposed Height of Buildings Map



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Figure 17: Proposed Floor Space Ratio Map

Part 5 - Community Consultation

The Planning Proposal will be placed on public exhibition in accordance with the Gateway Determination, should the Department of Planning and Environment support the proposal.

A comprehensive engagement strategy will be prepared by Council which would include the following mechanisms:

- Advertisement in a local newspaper St George and Sutherland Leader.
- Notification letters to relevant State Agencies and other authorities nominated by the Department.
- Notification (via letter) to land holders of properties within and adjoining the Planning Proposal area.
- Advertise and exhibit the Planning Proposal on Council's website.
- Exhibit the Planning Proposal at Bayside Council's Customer Services Centre, Rockdale Customer Service Centre, 444 - 446 Princes Highway, Rockdale.
- Undertake any other consultation methods appropriate for the proposal.

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Part 6 – Project Timeline

Table 8 below provides a proposed timeframe for the project.

Table 10 – Approximate Project Timeline

Task	Timing
Date of Gateway determination	December 2018 (4-6 weeks after submission to DP&E)
Anticipated timeframe for the completion of required technical information	N/A
Timeframe for government agency consultation (pre and post exhibition as required by Gateway determination)	8 weeks (estimated)
Commencement and completion dates for public exhibition period	TBA (28 days)
Dates for public hearing (if required)	TBA
Timeframe for consideration of submissions	4 weeks (estimated)
Timeframe for the consideration of a PP following exhibition	4 weeks (estimated)
Consideration of PP by Council (Council Meeting)	February 2019
Date of submission to the department to finalise the LEP	March 2019
Anticipated date RPA will make the plan (if delegated) or Anticipated date RPA will forward to the department for notification	June 2019
Anticipated publication date	June 2019

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7.5.3 Key Precincts

Rockdale Transport Interchange Precinct (Geeves Avenue Precinct)

The Rockdale Transport Interchange Precinct (Geeves Avenue Precinct) is defined as 471 - 513 Princes Highway, 6 and 14 Geeves Avenue and 2-16 and 5 Tramway Arcade, Rockdale and as illustrated in figure 1 below - street role diagram.

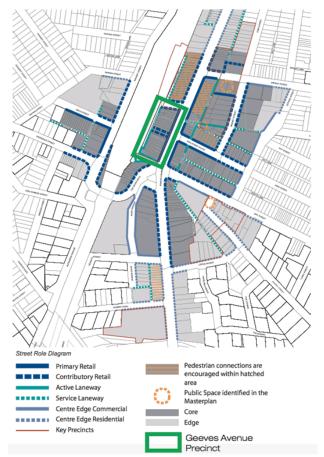


Figure 1: Street role diagram

- 1. An open air pedestrianised through site link is to be provided at ground floor to the centre of the precinct which is 12m wide and links Rockdale bus interchange and Princes Highway, as illustrated in figure 2 below indicative design.
- 2. Active retail zones are to be provided along the street frontages and through site link, as illustrated in figure 2 indicative design.
- 3. The indicative pedestrian access points are illustrated in figure 2 below indicative design.

- 4. The following setbacks are to be incorporated (refer to figure 2 below for further detail):
 - A 2.5m setback is to be provided along Geeves Avenue as measured from the pedestrian footpath;
 - b. A 3m setback is to be provided along Princes Highway as measured from the pedestrian footpath; and
 - c. A minimum setback of 4.5m is to be provided along Tramway Arcade.

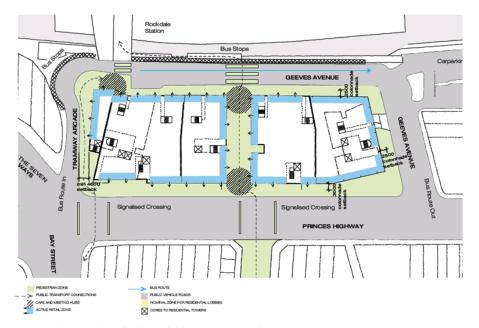


Figure 2: Indicative design for the Rockdale Transport Interchange Precinct

- 5. The recommended amalgamation patterns for the precinct are outlined below and illustrated in figure 3 below:
 - a. Stage 1 (southern portion of the precinct): includes the sites 507, 509 and 513-517 Princes Highway and 2-18 Tramway Arcade and incorporates one of the landmark buildings. The sites 2-18 Tramway (wedge site) are to be redeveloped separately given there are a number of separate landowners and it would be difficult to amalgamate with the remainder of the sites in Stage 1;
 - b. Stage 2 (central portion of precinct): includes the sites 483, 485, 487, 489, 491, 493, 495 and 501 Princes Highway (a total of 8 sites) will incorporate a through site link; and
 - c. Stage 3 (northern portion of the precinct): includes the sites 471, 475-477 and 481 Princes Highway, 6 and 14 Geeves Avenue and incorporates one of the landmark building for the precinct.

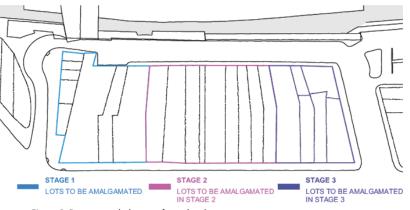


Figure 3: Recommended stages for redevelopment

- 6. The massing for the precinct is to be consistent with figures 4-7 below and incorporates the following:
 - a. A 6 storey podium along Princes Highway and 3 storey podium along Geeves Avenue;
 - b. Two 12-storey landmark buildings, with one to the northern end of the precinct and the other to southern end of the precinct;
 - c. The built form to 2-18 Tramway Arcade is to be 3 storeys; and
 - d. The built form to the centre of the precinct is to be between 5 and 6 storeys.



Figure 4: Indicative massing for the precinct

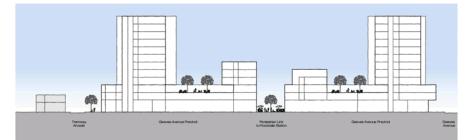


Figure 5: Indicative long section

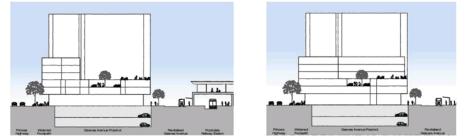
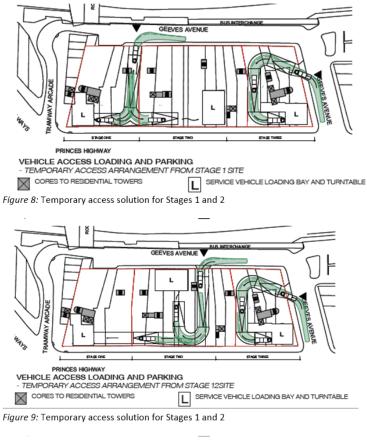


Figure 6: Indicative cross sections



Figure 7: Indicative 3D massings

7. The indicative temporary and final vehicle access points are detailed in figures 8-10 below. There is to be only one temporary access point along the western edge of Geeves Avenue for Stages 1 and 2 whilst a basement connection will connect the stages (refer to figures 8 and 9). Once the entire precinct is redeveloped, there is to be only one vehicle access point along the northern edge of Geeves Avenue (refer to figure 10).



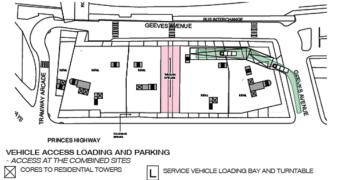


Figure 10: Final access solution once entire precinct is redeveloped

Urban Design Report for Geeves Avenue Precinct

No. 471-511 Princes Highway, Rockdale

02 December 2016 Revised: 03 March 2017 Revised: 29 March 2017 Issued for pre-lodgement review: 05 May 2017 Re-Issued for pre-lodgement review: 26 May 2017 Re-Issued for pre-lodgement review: 08 June 2017 Issued for Planner's Review: 14 September 2017 Issued for Planner's Review: 26 September 2017 Issued for Planner's Review: 11 October 2017 Issue to Council: 07 November 2017 Issue to Planner: 21 March 2018 Issue for Planner's Review: 25 July 2018 Issue for Planner's Review: 06 August 2018 Issue for Planner's Review: 24 August 2018 Issue to Council: 28 August 2018 Issue to Council: 12 October 2018 Issue for Planner's Review: 18 December 2018 Issue to Council: 21 December 2018

Eeles Trelease pty Itd architects

Document Size: A3

No. 471 - 511 Princes Highway, Rockdale

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OVERVIEW : REGIONAL AND LOCAL Eeles Trelease pty ltd

No. 471 - 511 Princes Highway, Rockdale

1. OVERVIEW: REGIONAL AND LOCAL

INTRODUCTION

Rockdale Town Centre is located within 12km of the Sydney CBD on a major railway and arterial road, the Princes Highway.

The community's vision for the centre is for it to evolve into a 'great place to shop, work, visit and live'.

The analysis and options in this report are undertaken in the context of the current planning controls and strategies, which include:

- Rockdale Local Environmental Plan 2011 - Rockdale Development Control Plan 2011
- Rockdale Town Centre Masterplan 2012 - Rockdale Town Centre Public Domain Plan 2012

The analysis includes an assessment of the Geeves Avenue Precinct and the condition of its immediate surrounds, a review and commentary on the current controls, and an analysis of nearby developments that are of a similar scale. A base case was tested against the Rockdale DCP outcomes. An improved preferred option is presented in this report. The objective is to deliver a better designed form within the Rockdale Town Centre that will foster a strong sense of community, and create a vibrant place to live and viai.



Ref: Rockdale Town Centre Masterplan, p7

No. 471 - 511 Princes Highway, Rockdale

LOCAL CONTEXT

The heart of the Rockdale Town Centre is located around the Rockdale Railway Station. The core is comprised of retail, commercial, light industry, civic centre and high density residential.

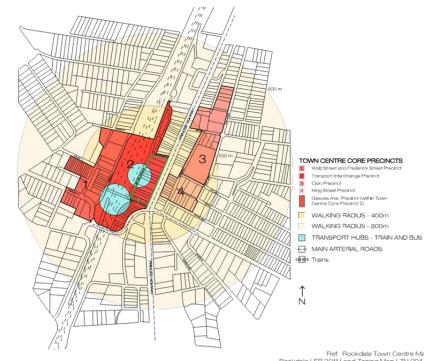
There are four distinct precincts within the core that make up the centre: Walz and Frederick Streets Precinct; Transport Interchange Precinct; Civic Precinct and King Street Precinct.

The main arterial roads are Princes Highway and Bay Street, which turns into The Seven Ways.

The Transport Interchange Precinct is a highly significant area within the Rockdale Town Centre. It is nominated as a 'core' area in the Rockdale Town Masterplan and requires the highest level of 'architectural and urban design' as addressed under the proposed Rockdale Town Centre Public Domain Plan.

The Transport Interchange Precinct is integral in connecting the areas between the Princes Highway, the Bus Interchange, and the Railway Concourse. It fronts The Seven Ways, the most prominent intersection in Rockdale's Town Centre and has the potential to be the centrepiece of the Town Centre.

Within the Transport Interchange Precinct, the major privately held site is that which links together the elements of the Princes Highway, Seven Ways, Bus Interchange and Railway Concourse. This site is referred to In this document as the Geeves Avenue Precinct. The Geeves Avenue Precinct, comprising 471-511 Princes Highway, enables a high degree of interconnectivity between the elements, and gives prominence to the corner of the Precinct at which they are located. Developing the Geeves Avenue Precinct will create a focal point to the Town Centre and allow for an appropriate urban response to marry the public and private facilities.



Ref. Rockdale Town Centre Masterplan 2012; Rockdale LEP 2011 Land Zoning Map LZN 004, October 2016

OVERVIEW : REGIONAL AND LOCAL Eeles Trelease pty ltd

SITE CONTEXT

The Geeves Avenue Precinct sits within the Transport Interchange Precinct. This precinct includes the bus interchange and railway station (T4 Illawarra Line), a commuter car park, and a block of narrow retail shops fronting the Princes Highway with rear access on Geeves Avenue.

The Geeves Avenue Precinct is bounded by Geeves Avenue, Tramway Arcade and Princes Highway, and is partially situated on The Seven Ways intersection. It features a variety of 1-3 storey buildings with an existing subdivision pattern of small, skinny lots. Inhabiting these lots are a mix of retail shops and services for the Rockdale population. These shops have rear access from Geeves Avenue for loading, parking and waste removal. In the middle of these lots is a pedestrian arcade that connects the train station and bus interchange with shops on the Princes Highway and King St Mall. In the arcade, there are more small retail shops and services.

West of the railway station is the Walz Street and Frederick Street Precinct, which offers further retail and services to Rockdale. To the north-east of the Geeves Avenue Precinct is the Civic Precinct, where Rockdale's administration buildings are located, including the Town Hall and Council Chambers. Located to the east of the Geeves Avenue Precinct is the King Street Precinct, a lively retail hub with numerous cafes and restaurants.

CONSTRAINTS

At present, the Interchange Precinct provides an undesirable pedestrian experience.

- There is poor way-finding; pedestrians have trouble orientating themselves in the area.
- Vehicles take priority in this area. There is consistent loud noise and congestion along the Princes Highway, making it unpleasant to be in the retail area.
- Vehicle and pedestrian movements conflict along Geeves Avenue due to narrow paths and inconvenient crossing locations.
- There is no easy, safe link between other town centre core precincts, the The lots are small and narrow, with varying building sizes and purposes.

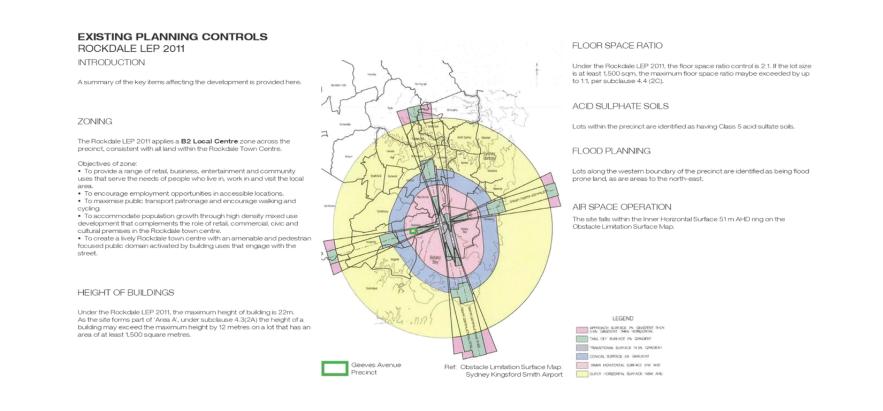


Masterplan 2012

Mary

of Tramway Arcade





OVERVIEW : REGIONAL AND LOCAL Eeles Trelease pty ltd

EXISTING PLANNING CONTROLS ROCKDALE DCP 2011

7.5 ROCKDALE TOWN CENTRE PRECINCT

SETBACKS New buildings are to respond to the existing streetscape and adjacent buildings.

For the Interchange Precinct (Princes Highway West between Tramway Arcade and Geeves Avenue) a 3m retail level setback for a colonnade is required.

A setback of 2.5m is required at Tramway Arcade and Geeves Avenue for local road widening.

All development is to be built to the side boundary and adjoining developments at the street edge. Portions of the building away from the street edge may be setback from the side boundary. Setbacks must allow for building separation to be achieved.

CHARACTER

The DCP requires buildings fronting the Princes Highway to be single composition, with well-defined elements and features, so as to contribute positively to the arterial core.

Envelope requirements and setbacks are proposed for these buildings. However, they anticipate individual developments along the Princes Highway, rather than the development of the Geeves Avenue Precinct as a whole. The building envelope developed for this precinct is described in The Proposal section of the report.

It is noted that continuous weather protection should be applied to all development, and the design of the street wall buildings should compliment the proportion and scale of the neighbouring street wall buildings.



ACTIVE STREET FRONTAGES

Building uses fronting the public domain at ground level are to promote active frontages where possible. Lots within the precinct must have a primary retail edge fronting Princes Highway, with active laneways along Tramway Arcade and Geeves Avenue (adjacent to the bus interchange) and contributory retail fronting Geves Avenue to the north.

Note also the desire to create contributory retail along a through site link connecting the bus interchange to the King Street Precinct.

Descriptions of each role is described below.

Street role	Description	Standard
Primary Retail		 Minimum 80% of the ground floor frontage to be activated by retail and business premises
	High activity with continuous	 Residential lobbies can occupy no more than 20% of the total ground floor frontage
	ground floor retailing	 No ground floor residential permitted
	recencig	 No vehicle access permitted
		 No service access permitted
		 Ground floor frontage to be activated by retail and business premises
		 Residential lobbies permitted off Street frontage
Contributory	High activity with continuous active	 No ground floor residential permitted (Except for properties under Schedule 1 in the RLEP 2011)
POPSAN	frontages	 No vehicle access permitted unless the development has no other street frontage
		 No service access permitted unless the development has no other street frontage
	Vibrant space activated by	 Ground floor frontage to be activated by retail and business premises
Active	the op-location	 Residential lobbles should be accessed off active laneways
Laneway	of pedestrian	 No ground floor residential permitted
	activity and	 Vehicle access permitted
	service functions	 Service access permitted

Ref: Rockdale DCP 2011, 7.5 p43

OVERVIEW : REGIONAL AND LOCAL Eeles Trelease pty ltd

COUNCIL MASSING STUDIES



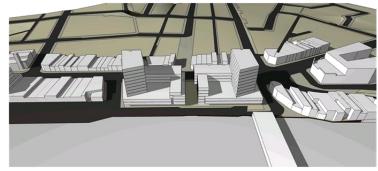
8

OVERVIEW : REGIONAL AND LOCAL

Eeles Trelease pty Itd



VIEW FROM PRINCES HIGHWAY (SOUTH)



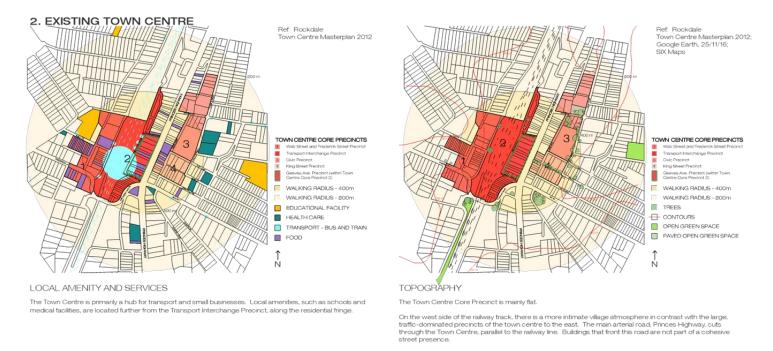
VIEW FROM ROCKDALE STATION (WEST)

Council's ongoing review of the Rockdale Town Centre Masterplan has produced revisions to the built form outcomes for the interchange precinct.

These drawings, provided by council, demonstrate the preferred built form for the precinct.

These preferred massing options have been used as a guide for the development of the envelope.

OVERVIEW : REGIONAL AND LOCAL Eeles Trelease pty itd



Trees and street planting is at a minimum. The region may benefit from increased planting.

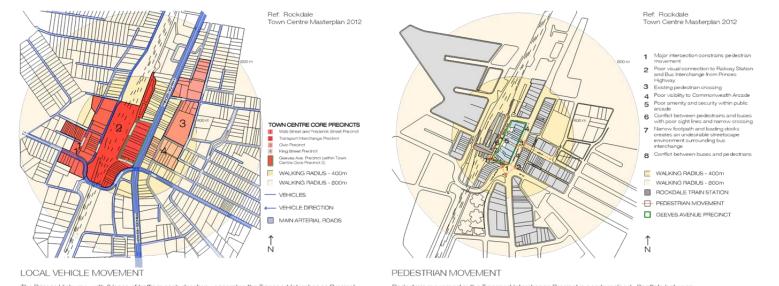
OPEN GREEN SPACE

There is minimal open green space within the Town Centre and its surrounds. Open space that is publicly accessible closest to the town centre is either paved with tree planters and seats, or attached to public buildings with gravel ground covering and large tree canopies. On the town edge, the nearest green spaces are skinny, grassed areas with trees along the train corridor, and an oval. These spaces are unpleasant, stark and incorporate other activity that make them incompatible with the qualities associated with open green space.

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EXISTING TOWN CENTRE

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The Princes Highway - with 3 lanes of traffic in each direction - separates the Transport Interchange Precinct from the Civic Precinct and King Street Precinct. Consequently, the main commercial hub of Rockdale's Town Centre is divided.

Residential streets and roads connect to the main roads of the Princes Highway. Bay Street and the Seven Ways. The Civic Precinct and King Street Precinct have one-way lanes that are accessed mainly by service vechicles and pedestrians. The main congestion point occurs at the junction between Princes Highway, Bay Street and the Seven Ways. This intersection is the entry point for buses into Tramway Arcade. Pedestrain movement in the Transport Interchange Precinct is poorly realised. Conflicts between pedestrains and traffic exist on Geeves Avenue, Tramway Arcade and The Seven Ways. Vehicle use is heavy on the Princes Highway and is prioritised. Pedestrians are forced to use lengthy and inconvenient crossings to reach destinations away from the east side of the railway station. Pedestrians are confined to a narrow pathway along Geeves Avenue. Often they will walk along the road to take a "short cut" to the pedestrian arcade or cut across Tramway Arcade to reach the major crossing at the beginning of The Seven Ways.

The pedestrian arcade is poorly utilised as it is not situated close to the train station entry and exit point, and does not align perfectly with the crossing provided on Princes Highway to King Street.

At the bus interchange on Geeves Avenue, there is inadequate surveillence and poor way finding, and an unsafe character.

The pedestrian access at the intersection between Princes Highway, The Seven Ways and Bay Street is slow and congested. The traffic lights at this intersection do not allow a period for all traffic to be stopped for pedestrian's to freely cross the intersection in any direction.

EXISTING TOWN CENTRE

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NEIGHBOURING DEVELOPMENTS AND HEIGHTS

Under the Rockdale LEP 2011, the Transport Interchange Precinct has a maximum height of 22 metres with a bonus height of 12 metres for sites greater than 1500m². That provides for a height of 34 metres across the Geeves Avenue Precinct.

The Masterplan document notes that Sydney Airport Corporation Limited (SACL) has nominated AHD 51.0 as the height limit for for Obstacle Limitation Surface (OLS). AHD 51.0 nominally corresponds to a height of 35 metres at the Geeves Avenue Precinct.

This report identifies numerous issues regarding height, which are addressed by the proposal, including: The Masterplan notes that 'a significant proportion of the Town Centre core area comprises small lot

- subdivisions...,' making the amalgamation of small sites to become a single 1500m² site unlikely without an integrated plan for the whole precinct.
 The Transport interchange Precinct has been selected as an opportunity for a 'landmark' development. This can only be achieved by providing additional height bonus across an achievable site area.

There are buildings in the immediate vicinity of the Transport Interchange Precinct which are 10 -12 stories, or nominally 35 - 38m in height, which will diminish the impact of a 'landmark' development unless it is granted additonal height due to its proposed 'lconic' status.



EXISTING NUMBER OF STOREYS AT SITES IMMEDIATELY SURROUNDING THE GEEVES AVENUE PRECINCT

EXISTING TOWN CENTRE

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TALL DEVELOPMENTS SUMMARY

	ADDRESS GEEVES AVE, PRECINCT	DA NUMBER	STOREYS	HEIGHT (m)/ LEVEL (RL)	STATUS (AS OF 11/4/17)
1	471 – 511 PRINCES HIGHWAY - mixed use, multi-residential development - allocated residential apaces - allocated cretal spaces - allocated commercial tenancies - 30,6m heght	-	12	38.9 / 54.87	-
	PROPOSED RESIDENTIAL DEVELOPM				
2	564 PRINCES HIGHWAY - mixed use, multi-residential development - 76 repartidal apartments - retail space allocated - 35.75m height.	2012/293	11	38.75 / 52.75	APPROVED
3	433 - 439 PRINCES HIGHWAY - mixed use, mult-residental development - 86 residential apartments - 3 commercial tenancies - 36.4m height	2015/322	12	36.4 / 51.6	DEFERRED COMMENCEMENT
4	401 PRINCES HIGHWAY - mixed use, multi-residential development - 39 residential apartments - 2 commercial tenancies	2016/150	7	-/-	APPROVED
5	397 PRINCES HIGHWAY - mixed use, multi-residential development - 92 residential apartments - 3 commercial tenancies - 34,64m height	2016/420	11	34.54 / 49.32	APPROVED
6	376 - 384 PRINCES HIGHWAY - mixed use, multi-residential development - 38 residential apartments - 2 commercial tenancies - 27.5m height	2016/108	9	27.5 / 42.2	APPROVED
7	386 - 396 PRINCES HIGHWAY - mixed use, multi-residential development - 80 residential apartments - 1 commercial tenancies - 27.5m height	2016/117	9	27.5 / 42.4	APPROVED
8	398 - 412 PRINCES HIGHWAY - mixed use, multi-residential development - 72 residential apartments - 4 commercial tenancies - 29.2m height	2016/343	9	29.2 / 42.98	APPROVED
9	27 - 31 BRYANT STREET - multi-residental development	2017/54	9	27.45 / 48.05	DEFERRED
	 60 residential apartments 27.46m height 				
10	75-85 RAILWAY STREET - mixed use, multiresidential development - residential space allocated - retail space allocated - stail space allocated - stail space allocated		8	28 / -	PASSED WITH CONDITIONS
	EXISTING 6 - 12 STOREY BUILDINGS		40	150.75	
11	3 - 7 KEATS AVENUE - 12 storeys	-	12	- / 53.75	BUILT
	MULTIPLE LOCATIONS - 6-12 storeys - varies	-	6-12	VARIES	BUILT

TALL DEVELOPMENTS (BUILT AND PROPOSED) LOCATED NEAR THE GEEVES AVENUE PRECINCT

REFER TO TABLE FOR INFORMATION ON EACH DEVELOPMENT



O Exceeds RL Height Restriction of 34m

Rockdale Station is the hub around which the Town Centre will be revitalised.

The Geeves Avenue Precinct is surrounded by tall developments. It requires a substantial height to match the prominence demanded by its location within the Town Centre.

The Geeves Avenue Precinct is at the centre of a cluster of tall buildings. The effect of any additional height is muted by its being at the centre of such a group of buildings.

EXISTING TOWN CENTRE

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Base Map Ref: Google Earth



CENTRAL PARK, SYDNEY Multi-level pedestrian connections with activated retail between railway station and street.

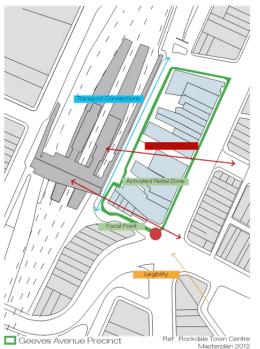
OPPORTUNITIES AND PRECEDENTS

The Geeves Avenue Precinct presents a significant opportunity to make the Rockdale Town Cente a more desirable and pedestrian-friendly urban centre where people will want to live, work and play. Easy valkability, good access to public transport and distinctive identity are ideals to pursue in the development.

The Geeves Avenue Precinct demands a focal point, with pedestrian connections streaming through the Town Centre. Legibility for local residents, commuters and visitors is required. A revitalised retail zone will provide the spur for further improvement.

> ST. MARGARETS HOSPITAL, SYDNEY Urban village scale with activated street frontages.

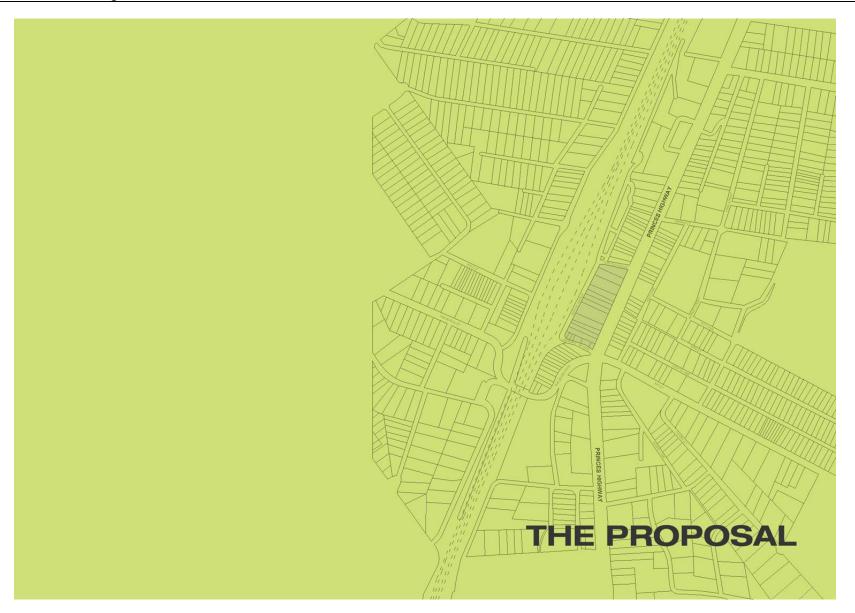




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EXISTING TOWN CENTRE

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PRINCIPLES DESIGN RESPONSE OBSTACLE LIMITATION SURFACE The building provides a pedestrian-friendly commuter and retail link between The top of the building has an RL of 54.87 metres, which is above the Sydney Rockdale Station and the Rockdale Town Centre Airport Corporation Limited Obstacle Limitation Surface height of RL 51.00. The ground plane is activated through coordinated pedestrian pathways The top of the building is lower in height than the Procedures for air navigation past retail street frontages, linking rail and bus nodes through the Transport services - aircraft operations (PANS- OPS) surfaces of RL 54.9 metres. Interchange Precinct to the Civic and King Street Precincts. The building height provides appropriate prominence for the development, At street level, a six-storey street wall defines the west side of the Princes which is demanded by its prominent location within the Rockdale Town Highway. Atop a three-storey frontage to Geeves Avenue, garden courtyards Centre Precinct. provide open space for residents. A tower rises at each end of the precinct, anchoring the development and BUILT FORM providing a focal point from both directions of the Princes Highway. A six storey street wall fronts the Princes Highway, with a three-storey frontage to Geeves Avenue at the west. The new through-site link is flanked ACCESS by five and six storey frontages. A tower sits at both ends of the precinct. Atop the lower buildings, garden courtyards provide open space for A 12-metre retail-activated laneway provides the major pedestrian pathway residents. between rail and bus interchanges and the Princes Highway and Civic and King Street Precincts. The lower levels of the development are built to the property boundaries. with a colonnade at the street level retail frontage along the Princes Highway Rail commuters connect to the precinct via a pedestrian crossing directly providing some protection from the weather. The podium steps back 2.5 outside the train station. A second pedestrian crossing further along Geeves metres from Geeves Avenue in compliance with the setback for future road Avenue provides a direct connection to the site for bus travellers. widening. The Tramway Arcade sites are trimmed back to provide more space for pedestrian near the railway station. Vehicle access to each of the three lots is via Geeves Avenue, away from the traffic of the Princes Highway. The towers are shaped and positioned to increase the solar gain to more apartments. They have ventilated corridors to provide cross ventilation to all apartments. The Princes Highway facades have been articulated to ensure FRONTAGES there is a variety in form. Compliance with ADG principles is achieved by the shape and orientation of Active street frontages are provided at the entire ground floor perimeter of the buildings and their, and their positioning relative to one another. the building. The orientation and positioning of the towers also provides for usable open A primary retail edge is at the Princes Highway, with continuous high activity space and courtyards at the above the lower buildings. frontages uninterrupted by vehicle crossings or service zones. The active frontage continues as contributory retail edge around the corner into Geeves Avenue, at the north of the block, and through the new 12-metre wide ORIENTATION AND SEPARATION through-site pedestrian street. Along Tramway Arcade at the south of the block, and Geeves Avenue to the The distance between the towers varies due to their shape and orientation. west, active laneways provide a mix of retail and business uses, along with They are as far apart as 82 metres. Separations at the through-site link are in vehicle and service access to the block. accordance with Council's proposed sketches. HEIGHTS SHADOWS The buildings rise to 38.9 metres above the ground floor, 4.9 metres above The shape of the towers, the orientation of their facades and their positioning the existing height limit. relative to one another result in reduced overshadowing of the towers The top of the building has an RL of 54.87 metres. The proposed building height is commensurate with its status as a landmark development, ensuring that the building retains prominence alongside existing tall neighbouring buildings, but also responds to airspace limitations THE PROPOSAL SITE PLAN N

No. 471 - 511 Princes Highway, Rockdale

THE PROPOSAL

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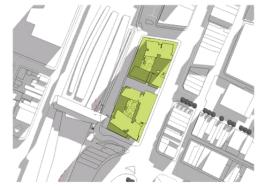


GEEVES AVENUE PRECINCT SOLAR ANALYSIS

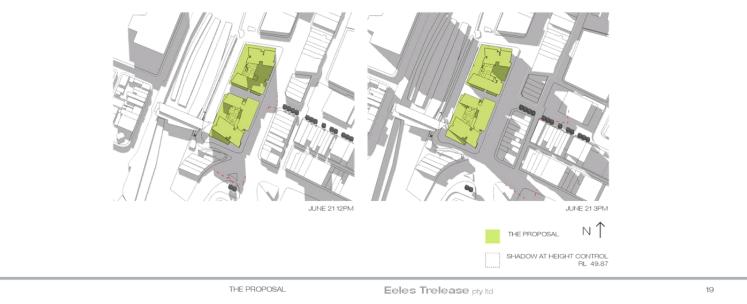
The orientation of the towers and their positioning relative to one another result in reduced overshadowing of the towers, while the lower height of the smaller buildings provides for positive solar access to a majority of apartments, such that full compliance with the solar targets of both the Apartment Design Guide and Rockdale Development Control Plan can be achieved.

The shadow analysis indicates that at midday in the middle of winter, there is minimal overshadowing on lots to the south of the Geeves Avenue Precinct. Such an outcome is achieved by limiting the height of the building fronting Tramway Arcade to three storeys.

Furthermore, at midday in the middle of winter, there is no effect on the lots across the Princes Highway, nor on the footpath in front of those lots.



JUNE 21 9AM

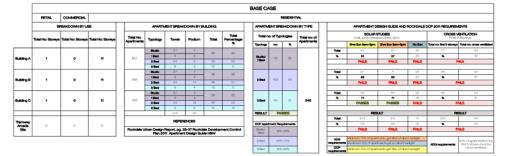


THE BASE CASE - ROCKDALE DCP: NON-COMPLIANCE WITH RESIDENTIAL CODES

The base case was assessed in terms of its ability to comply with residential building codes.



The Base Case mimics the three rectangular towers put forward in the Rockdale Development Control Plan. Setback and separation constraints pre-determine a poor outcome for repetitive rectangular towers in terms of their non-compliance with the Apartment Design Guide and the Rockdale Development Control Plan. The solar access and cross ventilation to each apartment, as required by these planning controls, cannot be met.



THE IMPROVED CASE (PREFERRED): COMPLIANCE WITH RESIDENTIAL CODES



THE PROPOSAL

The proposal successfully provides a pedestrian-friendly commuter and retail link between Rockdale Station and the Rockdale town centre precinct, while simultaneously providing for residential apartments that can comply with both the Apartment Design Guide and Council's preferred massing options.

Ease of access for public-transport users is intrinsic to the proposal. Pedestrian crossings at Geeves Avenue provide a direct link for rail commuters, as well as a coordinated access way to and from the busy Geeves Avenue bus interchange. Commuters, pedestrians and residents alke are provided with organised routes and functional interchange nodes, while active street frontages and enticing arcades stimulate movement and interest across the precinct.

Through a retai-activated ground plane, meeting points and restaurant and café hubs allow pedestrians to flow through the precinct, creating a sense of permeability, warmth and friendliness to the public domain. There is scope for restaurants and cafes to address the rail and bus commuter zones, bathed in afternoon sunshine.

The orientation of the towers and their positioning relative to one another, and the lower height of the smaller buildings provide for positive solar access, while ventilated corridors provide cross ventilation for most apartments, such that full compliance with both the Apartment Design Guide and the Rockdale Development Control Plan is achieved in terms of these targets. Simultaneously, their form allows landscaped courtyards to sit atop the lower levels, providing outdoor recreation space for residents.

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THE IMPROVED CASE (PREFERRED): COMPLIANCE WITH RESIDENTIAL CODES

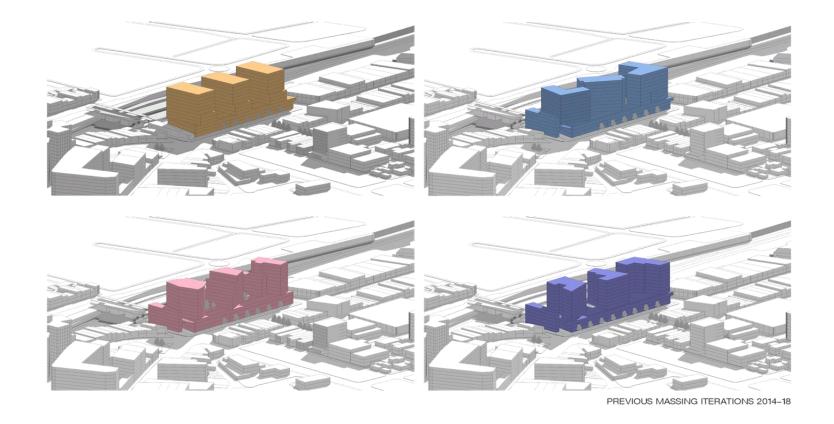
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L											2Bed 3 Bed	requirements					Maximum 15% of apartments get no direct surlight			ADG requirements	60% of apartments in the first 9 storeys must be cross ventilated									

The orientation of the towers and their positioning relative to one another, and the lower height of the smaller buildings provide for positive solar access, while ventilated comdors provide cross ventilation for most apartments, such that full compliance with both the Apartment Design Guide and the Rockdale Development Control Plan is achieved in terms of these

targets.

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SITE MASSING ITERATIONS

The massing of this precinct has evolved as follows.

- The original proposal was for three towers over a low podium. This presented problems of privacy between towers and overshadowing. Excessive bulk resulted, which made the towers appear to occlude.

 After more detailed consideration of Council controls and adjacent precincts a two tower option was investigated. The towers were positioned at either end of a taller (6 storey) podium which resulted in increased privacy, improved solar access and better massing - as the towers at either end of the precinct were located further apart. With the increase in floor area in the taller podium it was possible to develop a positive through site link between Geeves Avenue and the Princes Highway.

PROPOSAL

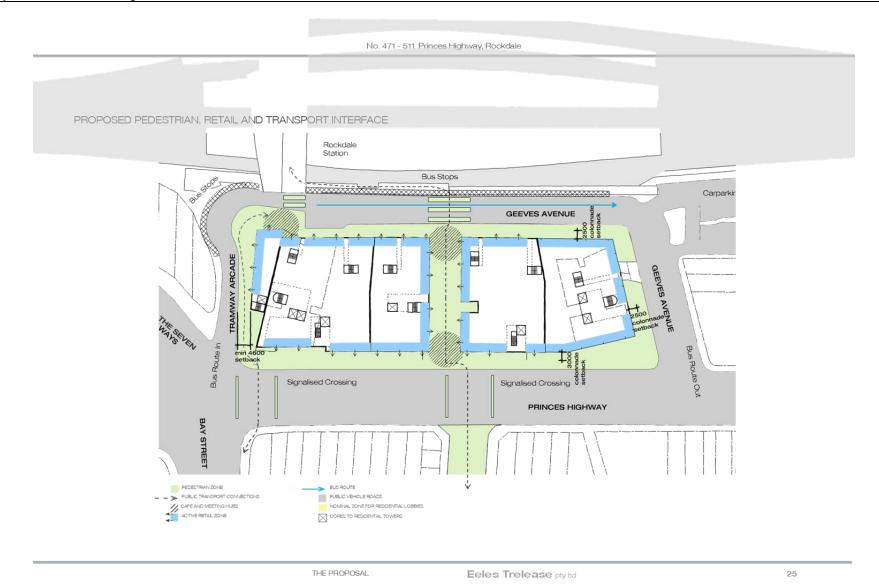
RL 54.90 PANS OPS height teight Rt, 54,87 RL 51.00 OL3 height i beight plane PL 49.97 wed additional 12m m height of podium _____ PL 29.97_ Building heights, as viewed from the east. The Rockdale Town Centre Masterplan had envisaged a low-height retail podium at the Interchange Precinct, with a tower rising above. This approach was the basis of earlier proposals for the Geeves Avenue Precinct. Council's ongoing review of the Masterplan produced preferred built forms for the precinct, which are more in line with the Rockdale DCP 2011. The ADG compliant building separations, as viewed from the Princes Highway and Geeves Avenue The outline of the proposed building envelope is dotted over the forms of the towers developed for this report, as Proposal adheres to these preferred forms, with a six storey street wall along In oppose activities to interest premier or nome, twint a set only and early the Princes Highway, three storeys fronting the railway, twelve storey towers at the south and north of the precinct, and six-storeys and 5-storeys along a widened through site link through the centre of the precinct.

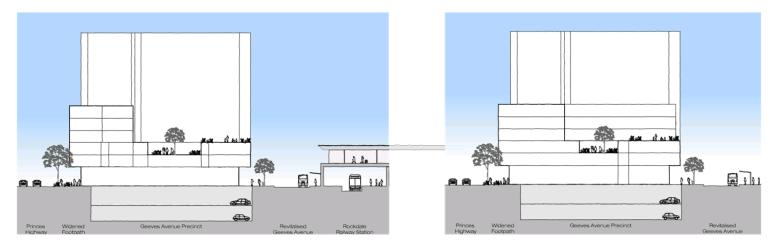
BUILDING ENVELOPE, SEPARATION AND HEIGHT

viewed from the Princes Highway.

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THE PROPOSAL



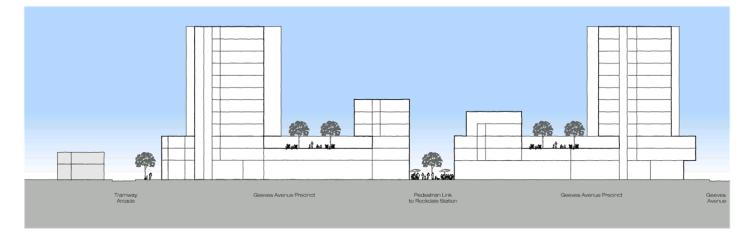


INDICATIVE CROSS SECTIONS

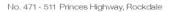
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THE PROPOSAL

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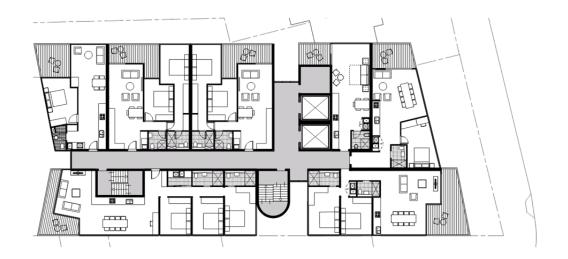
INDICATIVE LONG SECTION







No. 471 - 511 Princes Highway, Rockdale

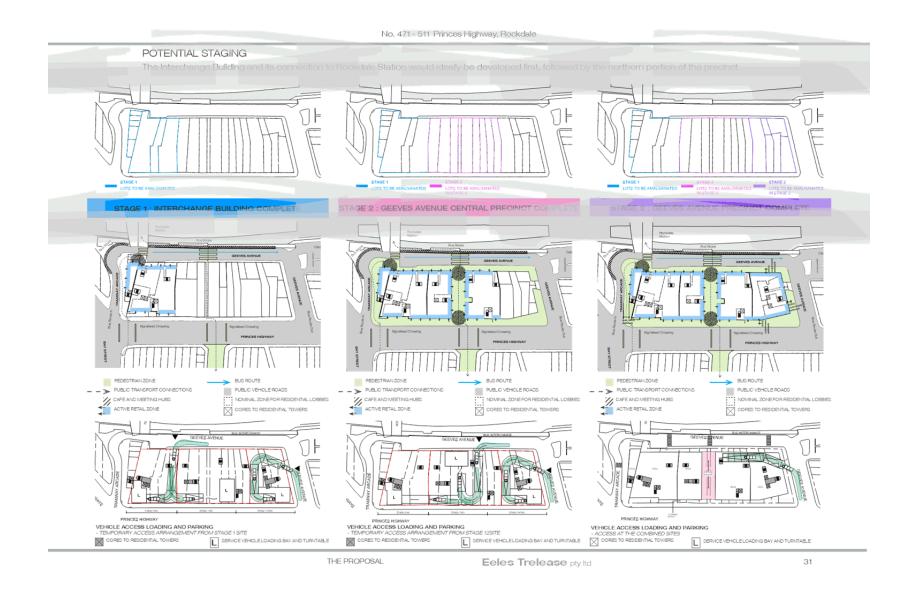


INDICATIVE APARTMENT LAYOUTS 1:200

30

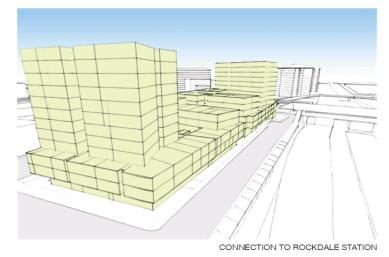
THE PROPOSAL

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THE PROPOSAL 3D VISUALISATIONS

PEDESTRIAN ZONES AND GROUND PLANE ACTIVATION VISUALISATIONS



The ground level setbacks, widened pedestrian routes and an inviting, retail activated through-site link make for a legible, pedestrian friendly precinct.

3D VISUALISATIONS



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PRINCES HIGHWAY FRONTAGE

There is a prominence given to retail activities at the ground plane in the view north along the Princes Highway, with the focus being on pedestrians.



The pedestrian spine continues through to the Geeves Avenue precinct from King Street Place. The importance of this spine is reinforced by legible routes with activated retail frontages and public gathering spaces.



PEDESTRIAN LINKS - VIEW FROM WEST

The pedestrian link from the railway station and bus interchange is prominent and legible. It is a point of orientation for pedestrians.

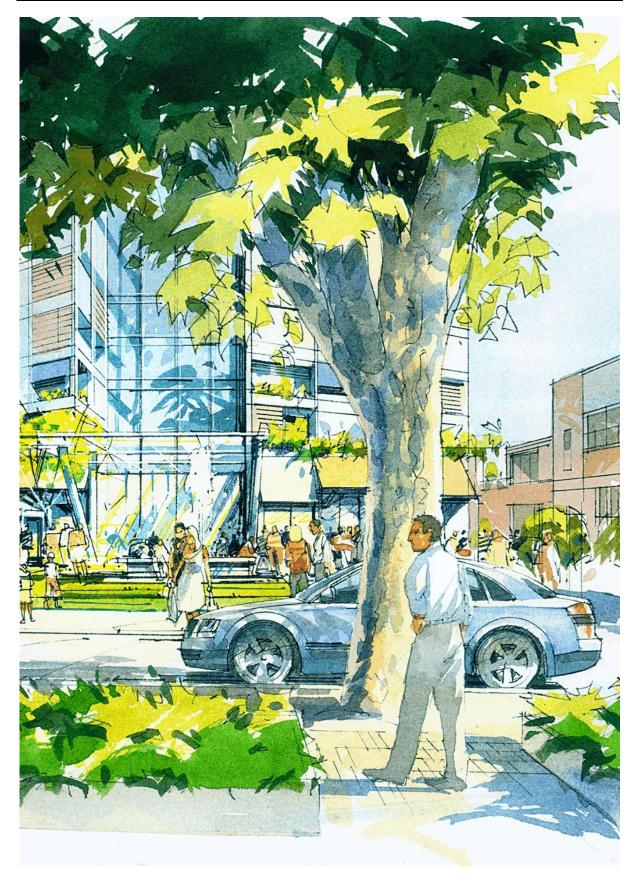
3D VISUALISATIONS

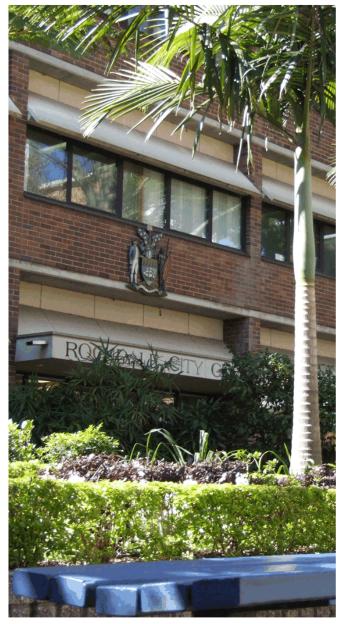
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Rockdale Town Centre Masterplan









Produced by:

Rockdale City Council Urban Strategy Team

Consultant team:

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- Landscape Architects: JMD Design
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Council would like to acknowledge the contributions of the Rockdale Town Centre Masterplan Community Reference Group (CRG). The group's inputs were pivotal to the development of this Masterplan. The CRG constitutes the following members:

- Rami Abdallah
- Christene Casali
- Mikall Chong
- Mark Donnelly
- Phil Favero
- Rifaat Hanna
- Zahwat Hoballah
- Ibrahim Ibrahim
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Final Plan for adoption 2012

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Implementation of the Masterplan Summary of implementation tools

Rockdale Town Centre Masterplan

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Introduction

Rockdale Town Centre, situated 10kms from the Sydney CBD on a major railway line and arterial road, shares many characteristics of successful and prosperous town centres. The Town Centre has the potential to develop into a unique and vibrant centre.

Rockdale Town Centre is the largest commercial centre in the City of Rockdale. Historically the Centre has played an integral role in the economy and development of the St George region. It has traditionally been the cultural and civic heart of the City of Rockdale with a close connection to the historic 'pleasure grounds' on Botany Bay at Brighton Le Sands.

Over the past thirty years this role has diminished as the centre has experienced competition from nearby Major Centres at Kogarah and Hurstville. It has also diminished on account of Rockdale Plaza which generally restricts its users solely to this shopping centre precluding visitation into the Town Centre. A new direction for the Town Centre needs to be determined that reflects Council's and the community's aspirations.

The process of developing a masterplan was undertaken to document the community's desires and aspirations for the future of the Centre and determine its future character, role and function. There are a wide range of Town Centre stakeholders, including all levels of Government, local residents, local businesses, community groups and those who utilise the services within the Centre. This Masterplan process has enabled the various stakeholders to work towards an enduring future for the Centre.

As Rockdale Town Centre grows and changes there is a need to ensure this is positive for the future of the Centre and Rockdale City and that it will create an environment that the community desires and is proud of.

Accommodating this growth was considered in the Rockdale City Employment Lands and Residential Strategies and planning for the town centre's future was identified as a key task in the Urban Strategy 2010. Rockdale Town Centre's significance is reflected in *Rockdale LEP 2011* which applies the B2 Local Centre zone. This is different to other centre zonings in the City. The LEP also introduced incentive areas, increased floor space ratios and expanded the area of the town centre. Although numerous studies and concept schemes have been prepared over time, no strategy for the Centre has been adopted.

The Rockdale Town Centre Masterplan goes beyond the *Rockdale LEP* 2011 to provide greater direction and further guidance to ensure it continues to be a centre which the community wants and is proud of, and a place where people want to shop, work, visit and live.

The Masterplan guides future change to ensure the community's vision is achieved. It is based heavily on the community's desires and aspirations, as well as thorough urban design and economic principles.

Council has numerous land holdings within the Centre, the redevelopment of which could have a significant impact on the Centre's future role and character. The Masterplan investigates the integration of the various Council owned sites within the broader Centre context to ensure realistic and beneficial outcomes are achieved.

The Masterplan is not just a vision for how the centre will look and function but also what role it will play economically and conturally

SYDNEY CBD

Metropolitan Context

South Subregion Draft Subregional Strategy

The Rockdale Town Centre is Rockdale City's highest order centre. This is espoused in the Department of Planning and Infrastructure's (DP&I's) South Subregion Draft Subregional Strategy (SSDSS).

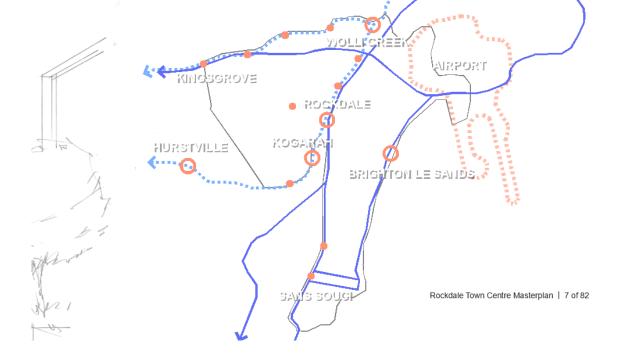
The SSDSS is the vision for the south subregion for the year 2031. It establishes a centres hierarchy for all Councils within the subregion. The Rockdale Town Centre sits above three Villages (Brighton Le Sands, Kingsgrove and Wolli Creek), six Small Villages (Arncliffe, Bexley, Bexley North, Carlton, Ramsgate and Ramsgate Beach) and eight Neighbourhood Centres (Bardwell Park, Carlton South, Dolls Point, Kogarah South, Kyeemagh, Monterey, Sans Souci and Turella).

To the south are the Kogarah and Hurstville Major Centres which are situated within the Kogarah and Hurstville Council areas. Their scale and proximity to the Rockdale Town Centre cleates challenges for the centre.

Metropolitan Plan 2036

In December 2010, the DP&I released the Metropolitan Plan 2036 (Metro Plan) which is the State Government's vision for metropolitan Sydney for the year 2036. It replaced the Sydney Metropolitan Strategy: City of Cities - the metropolitan Sydney vision for the year 2031.

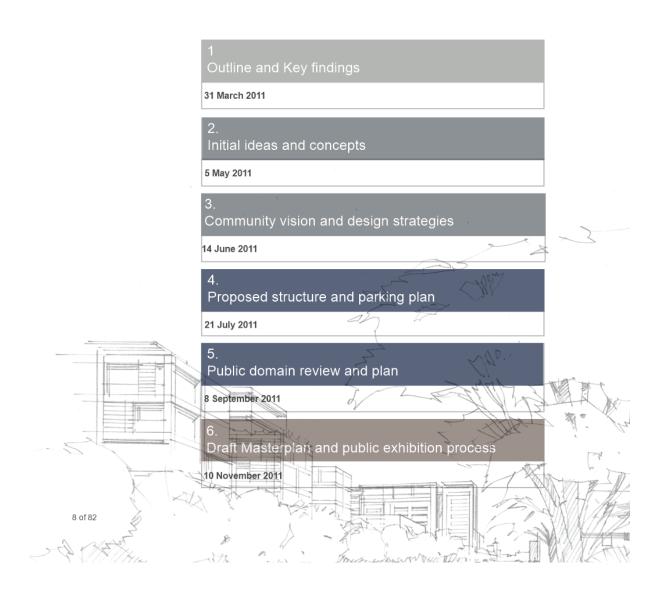
The centres hierarchy contained within the Metro Plan illustrates the Strategic Centres across metropolitan Sydney. Strategic Centres include Global Sydney, Regional Centres, Specialised Centres and Major Centres. The Rockdale Town Centre is not illustrated in this map. This means that the State Government continues to see Rockdale as a Town Centre to the year 2036. Therefore, any planning for this centre at this present time must be mindful of this hierarchy.



Community Reference Group (CRG) Journey

The community reference group (CRG) was established in early 2011 to ensure that the Rockdale Town Centre Masterplan responded to the community's aspirations through regular discussions between the project team and community representatives. The CRG comprised local business, community representatives and landowners who met regularly over the duration of the project

The CRG identified what the community saw as both the potential and the challenges of the centre, provided input into the initial design concepts and evolution of these ideas, and gave feedback on elements of the draft Masterplan as it developed. The CRG will continue to be involved in the implementation of the Masterplan and as advocates for the delivery of the Masterplan into the future.



Document overview

This Masterplan sets out the future direction for the Rockdale Town Centre and the path to achieving it. It covers all aspects of the physical environment of the Centre as well as its cultural, civic, and economic aspects.

The Masterplan is a guiding document for Council, business owners, private developers and the community. It will be implemented by more detailed tools which provide technical guidance on the design and delivery of the strategies contained in this Masterplan.

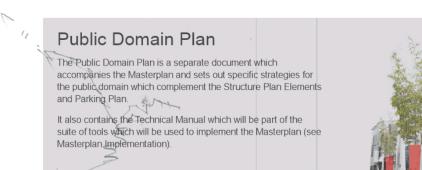
This document is divided into two parts

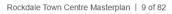
Masterplan

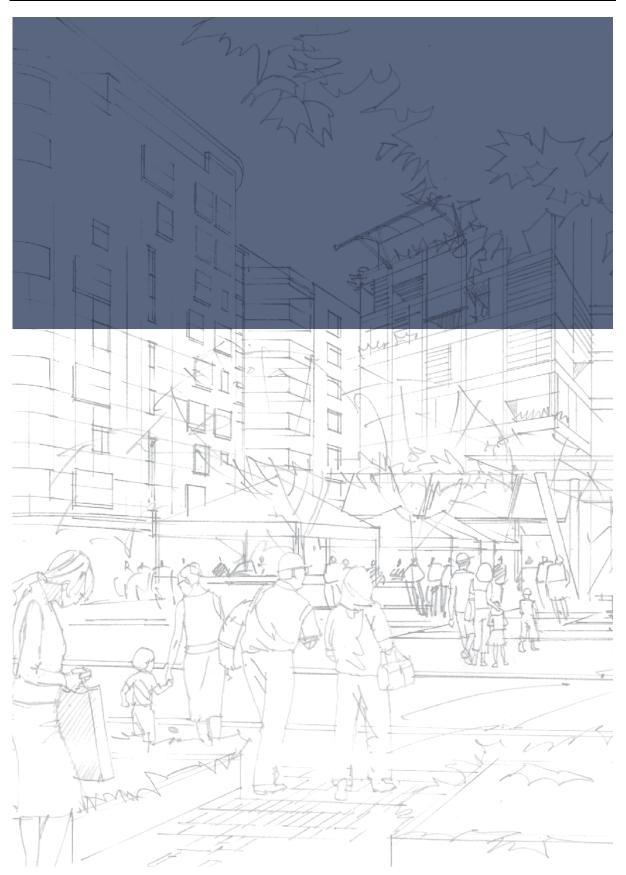
- Outlines the community's vision for the Centre
- Outlines the design strategies which set out the desired future character, role
 and function of the Centre
- Identifies plans to achieve the design strategies and realise the vision. These include:
 - Precinct Plan
 - Structure Plan
 - Parking Plan

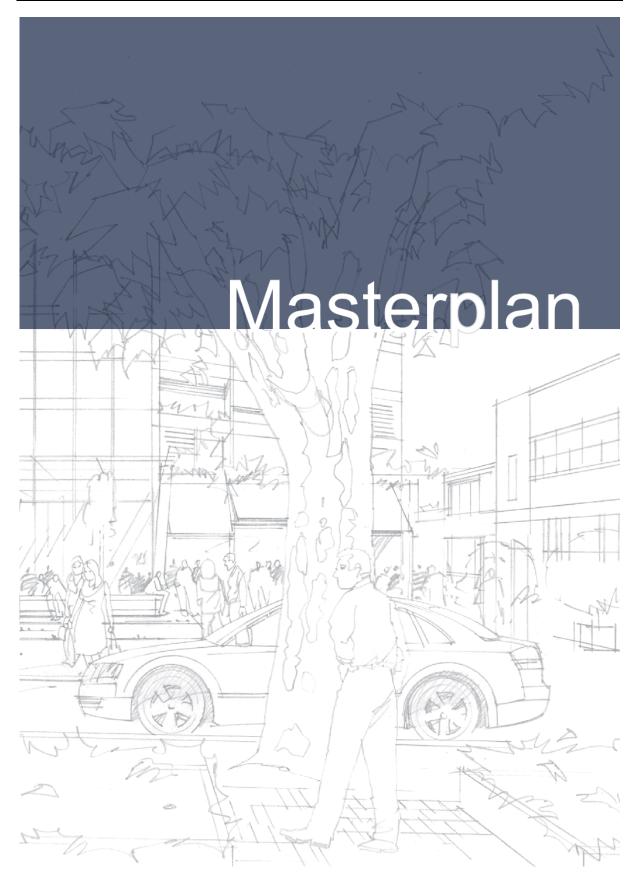
Masterplan implementation program

Identifies the suite of tools which will be used to implement the Masterplan, including the urban planning direction, actions for the community, and capital works priorities for Council.









1. Potential and Challenges

The Masterplan process commenced with an extensive review of planning studies and policies that pertain to the Centre. This established an understanding of the urban and economic environment of Rockdale Town Centre and the characteristics that have shaped the Centre's development over time. It also identified the challenges that the Centre continues to face as well as its future potential.

A centre with historical and topographical identity

Potential



Rockdale Town Centre is situated on the relatively flat area between two hills. The name "Rockdale" is derived from its topography as a "dale between two Rocky Outcrops". The Rockdale area started as a rural settlement with the original land grant in 1831. Access to the area was improved by the construction of Rocky Point Road and the dam across the Cooks River in 1839. The first retail shop in Rockdale was built in 1862. The area was officially named Rockdale in 1878.



A highly accessible centre

The Town Centre has excellent transport connections to the Sydney CBD and surrounding suburbs, by rail, bus and car. Princes Highway offers the Town Centre convenient access and high exposure. There are a significant number of public parking spaces within the Centre for visitors arriving by car. The convenient access makes the Town Centre a viable place to live, work and visit.



A public open space network

Although there are limited public open space areas within the Town Centre, some existing open spaces have more potential. The well maintained Council forecourt garden, the emerging outdoor dining/cafe atmosphere in King Street Place and the existing laneway network can be further enhanced and integrated into pedestrian linkages to make the Town Centre more accessible attractive.



A strong civic focus

Rockdale Town Centre has a range of local public buildings, similar to other successful town centresb (e.g. Rockdale Library and Town Hall, Council Administration Building). These buildings give the Town Centre a strong civic and community focus and add to the vibrancy and character of the Centre.



A diverse and growing community

The Town Centre has a culturally diverse and growing community. A demographic trend of the suburb of Rockdale shows a relatively high proportion of residents aged 20 to 34 years. According to local real estate agents, the area is attracting many young professional couples and students seeking an affordable area with good public transport connections.

Challenges

Competition from neighbouring centres

Rockdale is adjacent to the Hurstville and Kogarah Major Centres which are higher up the State Government's centre's hierarchy for metropolitan Sydney. Compared with these two centres where significant office and retail markets have been established, Rockdale Town Centre has not attracted commercial development in recent years.

Traffic

Significant volumes of traffic along the Princes Highway reduces the amenity for pedestrians and residential development with respect to noise and air pollution. This highway corridor, along with the Seven Ways intersection also hinders pedestrian movement across the Centre, particularly at the Town Centre's edge where there are fewer signalised crossings and large development blocks.

Passing rather than visiting

In spite of convenient parking and good transport access, many people only pass by or commute via the Town Centre rather than visit it. This may be due to the lack of major attractions (retail anchors or large employment generators) and excessive long stay parking (public parking spaces with no time limits) within the retail core.

Small site

A significant proportion of the Town Centre core area comprises small lot subdivision which lends itself to a fragmented ownership pattern. Without site consolidations, any future development of these sites will be difficult to achieve.

Aircraft movement impacts

The Town Centre has proximity (2km) to the Sydney Airport. The northern part of the Town Centre lies directly beneath the flight path. This has a significant impact on new developments due to noise affectation and building height limitations, as development must not breach the Obstacle Limitation Surface (OLS) which is 51m AHD for majority of the Centre.











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2. Community's Vision

"…a great place to shop, work, visit and live"

There is a strong and diverse Rockdale Town Centre community which includes residents, business owners, and land owners who are passionate about their Centre and its future.

Integral to the Masterplan process is understanding what the community likes about the Centre and how they wish to see it change and grow.

To gather input and feedback from the community, a Community Reference Group (CRG) was established at the outset of the project. Consisting of 9 members representing a cross section of the community, the CRG has met regularly to review and discuss the work and ideas of the project team throughout the development of the Masterplan.

To engage with the wider community a Community workshop was held in May 2011 and was attended by over 50 community members. The workshop included round table discussions on key issues.

These discussions identified common themes that could inform the direction of the Town Centre. The themes were documented in a community consultation report which was presented to the CRG and circulated to the workshop attendees for feedback. They now inform the community's vision for Rockdale Town Centre.

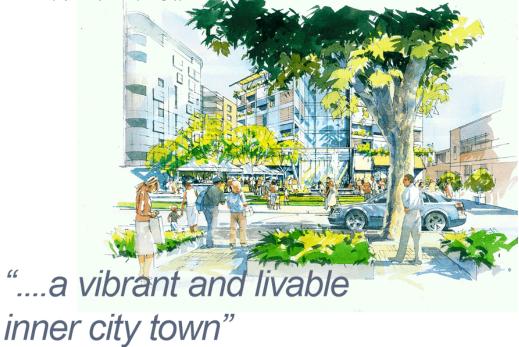






The community's aspirations for the Town Centre which have been derived from the key themes of the community workshop discussion, are to:

- Establish a unique identity for Rockdale to make it more attractive for residents and visitors
- Increase and improve the Centre's entertainment and nightlife activities and facilities
- Maintain the culturally diverse fresh food retailing as a key part of the Centre's character
- Encourage redevelopment of the Centre edges to make these areas more attractive
- Improve and provide more open space for a range of users including families and children
- Improve the laneways to better connect parts of the Centre and make them special in their own right
- Maintain and enhance the Centre's important civic role, which needs to relate better to the rest of the centre
- Simplify and improve carparking opportunities for visitors to the Centre



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3. Design Strategies

Based on the community's vision for the Town Centre, a series of design strategies were established and determine the direction of the Masterplan process and a way forward for the Rockdale Town Centre. They articulate the constraints and opportunities and set out the desired role, function, and character of the Centre upon which the more detailed land use, built form, and public domain guidelines are based.

The six design strategies are explained over the remaining pages of this section. Part 5.1 of the Masterplan references the specific strategies which each Structure Plan initiative aligns to.



1. Establish a unique identity for Rockdale	2
2. Grow the town heart and civic role	\heartsuit
3. Increase the vitality and lifestyle	
4. Improve the pedestrian experience	Ŕ
5. Strengthen the Centre's economic hubs	
6. Provide convenient and legible access for visitors	•••

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Design Strategy 1: Establish a unique **identity** for Rockdale

- Rockdale Town Centre will be made unique and attractive to visitors by building upon its existing strengths
- It will grow as an inner city centre with a strong public life by utilising its existing elements characteristic of a traditional town centre
- The experience of being in Rockdale will be improved through an upgrading of people's 'mental map' of Rockdale
- The identity of the Town Centre will be promoted through the creation of a sense of arrival to the centre



Design Strategy 2: Grow the town **heart** and civic role

- The heart of the Centre will be focused on its traditional town centre elements
- A strong public domain network will link the civic hub and retail core
- The Centre's civic functions and public life will be enhanced by providing a town square in the civic hub adjoining the Town Hall and Council administration building
- The town heart will have strong pedestrian connections to the rest of the Centre and surrounds



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Design Strategy 3: Increase the **vitality** and lifestyle

- Rockdale Town Centre will be a livable centre with an attractive lifestyle and nightlife
- The lifestyle of the Centre will be improved by encouraging elements in the Town Centre with a social or public focus: open spaces, dining, entertainment, markets, community services
- Vibrancy and activity in the Centre will be generated through increased residential densities
- Usable and safe open space will be provided that suits the needs of Rockdale's culturally diverse community



- The different precincts of the centre will be connected by laneways and a pedestrian network making the Centre easy to explore for visitors and enjoyable for residents
- Laneways will be improved and pedestrian movement prioritised by calming the traffic on streets in the Centre core
- Open spaces and laneways will be activated by the adjoining building uses



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Design Strategy 6: Provide convenient and legible **access** for visitors

- A hierarchy of access to the Centre will be developed: pedestrian, bicycles, public transport, then private vehicles
- The connection from the Railway station and transport interchange to the centre will be improved
- Convenient vehicle access to the Centre will be provided by carparking located at the edges of centre
- Vehicle movement and access will be improved by reducing long stay carparking in the Centre core
- Rockdale Town Centre will be differentiated from other centres and businesses along the highway to visitors travelling by motor vehicle



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4. Precincts Plan

Rockdale Town Centre has an elongated form which is bisected by the Princes Highway and flanks both sides of the Illawarra rail line. Within the Centre, a number of distinct and definable precincts have emerged. The role and attributes of each precinct give Rockdale Town Centre its character and diversity.

Maintaining and enhancing each precinct as the Centre grows is important as is creating a better connection and relationship between them.

This section constitutes the Precinct Plan. It outlines the existing role and character of each precinct and how they are envisaged in the future. It also includes how their relationship to other precincts will be improved to better contribute to the success of the Town Centre.



The precincts which make up the Rockdale Town Centre are:

4.1 Town Centre Core

- 4.1.1 Walz and Frederick Streets Precinct
- 4.1.2 Transport Interchange Precinct
- 4.1.3 Civic Precinct
- 4.1.4 King Street Precinct
- 4.2 Princes Highway Strip
- 4.2.1 Princes Highway Central Precinct
- 4.2.2 Princes Highway South Precinct
- 4.2.3 Princes Highway North Precinct
- 4.2.4 Princes Highway Green Gateway Precinct

4.3 Town Centre Edge

- 4.3.1 Market Street Precinct
- 4.3.2 Rocky Hills Precinct
- 4.3.3 Chapel Street Precinct
- 4.3.4 Residential Ring Precinct
- 4.3.5 Rockdale Plaza Precinct

The following pages outline the defining features and roles of each precinct and how they are envisaged in the future.



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4.1 Town Centre Core

The Town Centre Core is located around the Rockdale Railway Station. It comprises of retail, commercial, light industry, civic centre (Including town hall, library council chambers) and high density residential. The area is dominated by regional traffic. However, it is also a high pedestrian zone with cross connections through the central transport interchange. There are four precincts within this area.

4.1.1 Walz and Frederick Streets Precinct

This precinct comprises land zoned B2 Local Centre at the section of Railway Street at Frederick Street and extending north through Walz Street to Parker Street. The subdivision pattern combines small shop lots with larger sized lots. Whilst the predominant building height in the precinct is two storeys, the maximum building height is 20.5 metres in *Rockdale LEP 2011*.

Curren

The Walz Street Precinct is a vibrant retail hub with a predominance of ethnic food outlets and fresh food supplies. It has a village feel despite its fringe location at the western edge of the Centre.

Whilst the precinct trades well, there are a number of traffic and parking issues. This is due to limited parking and this is compounded by a high number of bus movements which service the bus stops on Railway Street. The steep topography of Walz Street, particularly at the street and footpath interface, can also constrain the pedestrian experience.

Future

The vitality and character of the precinct will be enhanced by improving the public domain. This is detailed in part 5.2 'Pedestrian spine and retail hubs' of the Structure Plan. The enhancements focus on the public domain and the provision of more convenient parking (i.e. angled parking) which is detailed in the Parking Plan (part 6.2). Refer also to section 4.4 of the Public Domain Plan

4.1.2 Transport interchange Precinct

The Transport Interchange Precinct contains the Rockdale Train Station and bus interchange and the adjacent commercial properties between Geeves Avenue and the Princes Highway. This precinct is zoned B2 Local Centre and has a maximum building height of 22 metres with an option for an additional 12 metres provided lots are consolidated and no less than 1,500 square metres as per exception clause 4.3(2A) (a) in *Rockdale LEP 2011*. The existing subdivision pattern comprises small narrow lots reflecting traditional retail strip shop pattern.

Current

This precinct is an extremely active and critical part of the function of the Town Centre. It experiences a high volume of pedestrian traffic and is also a point of arrival for many visitors to the centre. Despite this, the precinct is in need of revitalisation. The bus interchange is cramped; pedestrian paths to the station entrance are not convenient nor pleasant; the Bus Interchange is fronted by the rear of businesses; and the main link to King Street Place is via a small pedestrian arcade. The Princes Highway frontage, which contains a range of retail uses including banks and the post office, affords the precinct high visibility.

Futur

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The redevelopment and revitalisation of this precinct is critical in order to establish a positive image for the Centre and provide more convenient pedestrian movement between the station. A scenario is presented in the Structure Plan (see part 5.3). Refer also to section 4.1 of the Public Domain Plan.



4.1.3 Civic Precinct

The Civic Precinct is a linear area stretching from Pitt Lane extending north to encompass the Rockdale Town Hall, Administration building and Council car park on York Street. A small section of this precinct fronts Princes Highway, north of Bryant Street.

This land is zoned B2 Local Centre. The subdivision pattern contains larger lots which average over 1,000 square metres in area. Existing building heights range from single, two and three storey development. However, the maximum building height is 28 metres with the possibility of an additional 12 metres provided lots are consolidated and are no less than 1,500 square metres, as per exception clause 4.3(2A)(a) in *Rockdale LEP 2011*.

Current

The Civic Precinct provides the civic services for the Centre and subregion. The precinct has a pleasant character which is created by the existing town hall and administration building forecourt.

Containing the civic uses within the centre core will maintain its vitality and strong sense of community as well as its traditional civic nature. This is despite the fact that the forecourt is currently undersized for a civic open space and some of the buildings are in need of an upgrade.

Future

The redevelopment of this precinct in conjunction with Council's Target building and public carpark site to enhance the centre's civic role and establish a strong town heart is a key initiative of the Structure Plan (see part 5.1). Refer also to section 4.2 of the Public Domain Plan.

4.1.4 King Street Precinct

The King Street Precinct comprises those properties that have immediate frontage King Street Place between the Princes Highway and Market Street. This land is zoned B2 Local Centre as per *Rockdale LEP 2011*.

The subdivision pattern comprises shop sized lots fronting the southern side of King Street Place whilst larger retail lots front the northern side. Existing development is predominantly two storeys. However, the maximum building height is 28 metres with the possibility of an additional 12 metres provided lots are consolidated and are no less than 1,500 square metres, as per exception clause 4.3(2A)(a) in *Rockdale LEP 2011*.

Current

This precinct is a vibrant and lively retail hub and cafe strip with a strong alfresco dining culture. It contains a supermarket and series of grocers, and contains access to arcades containing further retailing and shops. It is the retail heart of the Centre core and a well used civic open space.

It is an asset for the Centre which can be capitalised on by other precincts through better pedestrian connections, a public domain network and a range of retailing opportunities which complements its character and role.

Future

King Street Place will continue to function as a key retail hub, complemented by new redevelopments, with an improved night and weekend life as detailed in the pedestrian spine and retail hubs Structure Plan initiative (see part 5.2).

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4.2 Princes Highway Strip

Bisecting the city centre is the Princes Highway. This main arterial road is one of the main regional connectors for south Sydney. The Princes Highway Strip is currently marked with bollard Ficus street tree planting that ties together the civic and retail commercial buildings that front the highway. The outer edge of the Princes Highway Strip is dominated by retail, commercial and residential uses. This area lacks clear delineation and sense of place. Parts of the Princes Highway Strip also fall within the Town Centre Core shown in section 3 of the Public Domain Plan.

4.2.1 Princes Highway Central Precinct

The Princes Highway Retail Core Precinct comprises the properties which have frontages to both Princes Highway and to Geeves Lane. This precinct is zoned B2 Local Centre and comprises predominantly single and two storey traditional shop top development. The maximum building height is 22 metres as per *Rockdale LEP 2011*.

Current

This precinct contains a variety of stores and services in a highly visible location. It is characterised by heavy pedestrian traffic but has poor pedestrian amenity and older building stock.

The impacts of vehicular traffic reduces the pedestrian amenity of the precinct but its visual prominence to passing motorists offers potential to present a positive image of the Centre.

Future

The look and feel of the Princes Highway strip will be improved by public domain upgrades and improvement to shop fronts. This will be complemented by the potential of redevelopment with site amalgamation, encouraged by the Centre's revitalisation. Smaller scale redevelopment of sites in the shorter term will also be encouraged. Refer to sections 3.3 and 3.4 of the Public Domain Plan.

4.2.2 Princes Highway South Precinct

The Princes Highway South Precinct comprises the area of the Princes Highway from Bay Street in the north to Regent Street/Lister Avenue to the south. Land within this precinct is zoned both B2 Local Centre and R4 High Density Residential.

The subdivision pattern comprises long narrow retail lots with larger lot and super lot sizes to the south. The existing development scale varies between traditional two storey strip retail buildings and more recent mixed use buildings up to 8 storeys. The maximum building height controls vary from 15.5, 22 and 28 metres (Note: some of the land which has a 28 metre height limit can also enjoy an additional 12 metres provided lots are consolidated and are no less than 1,500 square metres, as per exception clause 4.3(2A) (a) in *Rockdale LEP 2011*).

Current

The section of Princes Highway immediately south of Bay Street has experienced a lot of recent mixed use developments of varying degrees of quality with some small retail floor plates which has reduced the retail role of the precinct.

This strip of the Princes Highway is physically disconnected from the retail core by the Bay Street and Seven Ways intersection. It is also affected by the poor amenity of Princes Highway. This affects the continuity of extending the retail strip south along the highway.

Futur

This precinct will continue with its current trend of mixed use development close to the centre core, with a reduced retail focus. Public domain upgrades are also proposed. Refer to sections 3.3 and 3.4 of the Public Domain Plan.







4.2.3 Princes Highway North Precinct

The Princes Highway Green Gateway Precinct includes land fronting both sides of Princes Highway from Bryant Street (excluding the Civic Precinct component – see part 4.1.3) to an unnamed lane to the north east. Land within this precinct is zoned B2 Local Centre.

The subdivision pattern constitutes small shop front subdivision to the east and larger lots on the western side. The maximum building height controls are 22 metres on the western side and 28 metres on the eastern side, as per *Rockdale LEP 2011*.

Current

This precinct contains a mix of light industrial and highway corridor retail uses in older building stock. Due to the poor amenity from traffic noise and lack of environmental protection from awnings and street tree planting, it is well known as a unfriendly pedestrian environment.

This precinct contains a number of underdeveloped large lots that have a lot of redevelopment potential. The type of development which can occur is limited by the impacts of the busy road, railway, and the aircraft flight path. Whilst the precinct is located in close proximity to the Centre it is a fair distance from the retail core of the Centre.

Future

This precinct is envisaged as redeveloping with uses which complement the Centre but do not need to be situated in the core such as hotels or entertainment uses like function centres and pubs. Public domain upgrades are also proposed. Refer to sections 3.3 and 3.4 of the Public Domain Plan.

4.2.4 Princes Highway Green Gateway Precinct

The Princes Highway Green Gateway Precinct comprises the area of the Princes Highway south of Lister Avenue and Hegerty Street to Rockdale Plaza Drive. It has been included in the Rockdale Town Centre area under *Rockdale LEP 2011*, with a B2 Local Centre zone. It has a 22 metres height limit which is lower than in the Centre core as this appropriately responds to its location at the edge of the Centre.

Current

This precinct contains a mix of light industrial and highway corridor retail uses and older building stock. It has a pedestrian unfriendly environment due to the traffic noise and lack of environmental protection by way of awnings or street tree plantings.

This precinct contains a number of large underdeveloped sites, many of the owners of which have expressed a desire to redevelop. This area is at the edge of the Centre, well outside of the retail core but still walking distance to the Centre and station.

Future

This precinct has an opportunity to provide increased residential densities in close proximity to the centre as well as creating a gateway and entrance to the Town Centre. This redevelopment is a key initiative of the Structure Plan (see parts 5.4 and 5.5.3). Public domain upgrades are also proposed. Refer also to sections 3.3 and 3.4 of the Public Domain Plan.

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4.3 Town Centre Edge

The Town Centre Edge defines the differing quality between the city centre and the outer low density residential suburbs. The Town centre edge has established streetscapes with mature avenues of trees which are mostly oriented toward the city centre. Within the suburban streets the character is quaint with modest size houses and generous sets backs from the road. Within this character area the topography dominates with many rock outcrops creating a sense of height and prospect.

4.3.1 Market Street Precinct

The Market Street Precinct comprises the block situated east of Market Street and bounded by Bryant Street to the north, King Street to the South and George Street to the east. It contains a number of recent large scale mixed use developments. Its B2 zoning as per *Rockdale LEP 2011* and height controls are consistent with these developments

Current

This Precinct adjoins the retail hub at King Street Place and has mostly been redeveloped with mixed use developments. Although it has a landscaped streetscape there exists a poor interface between the footpath and the buildings. This is a missed opportunity to create a lively retail strip.

As Market Street is fronted by the Target site and connected to King Street Place there is an opportunity to capitalise on its relationship to the Centre core.

Future

The Town Heart redevelopment of the site that currently contains the Target store and public carpark will revive the retail role of Market Street on the western side, whilst maintaining its landscape character. With a reduction of off-street parking in the centre core reduced traffic flow will also increase the pedestrian amenity of Market Street.

4.3.2 Rocky Hills Precinct

This precinct is bounded by George Street (western boundary), Pitt Street (northern boundary), Cameron Street (eastern boundary) and Bay Street (southern boundary). This area is zoned R2 Low Density Residential with a 2 storey (8.5 metre) height limit as per *Rockdale LEP 2011*.

Current

The precinct contains low density residential housing with a strong landscaped streetscape with some heritage character elements. It has been dubbed Rocky Hills because of its similarities with some of Sydney's inner city suburbs

This area is close to King Street Place and the railway station which some may argue makes it suitable for increased residential densities. However, it is over the ridge which physically defines the edge of the centre.

Future

This precinct will contribute to providing a range of housing choice is a key initiative of the Structure Plan (see part 5.5.2). Refer also to sections 3.3 and 3.4 of the Public Domain Plan.





4.3.3 Chapel Street Precinct

Chapel Street Precinct is situated south of Bay Street on the eastern side of the Princes Highway. This area is zoned B2 Local Centre and contains larger lots which reflect more recent residential subdivision of the precinct. Its current height limit is 28metres however, some parcels enjoy an additional 12 metres provided lots are consolidated and are not less than 1,500 square metres, as per exception clause 4.3(2A)(a) in *Rockdale LEP 2011.*

Current

This precinct contains off street public parking which is under-utilised. It contains a well maintained heritage listed chapel and large fig trees which are major features of this precinct.

The precinct has large Council land ownership in close proximity to the retail core and station, though it is somewhat disconnected from the retail core for shoppers due to the lack of pedestrian crossing opportunities on Bay Street.

Future

The redevelopment of the Chapel Street Precinct to provide residential revitalisation in a prime location is a key initiative of the Structure Plan (see part 5.5.1). Refer also to sections 3.3 and 3.4 of the Public Domain Plan.

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4.3.4 Residential Ring Precinct

Current

The Residential Ring Precinct includes the area of land around the edge of the Town Centre comprising predominantly low and medium density residential buildings with a small portion of high density residential buildings. This precinct has a high level of landscaping and street tree planting.

The high density residential buildings are mostly strata title and are unlikely to change. The proximity of this residential population to the centre helps contribute to the Centre's vitality.

The precinct is zoned R2 Low Density Residential and contains an 8.5 metre (2 storey) height limit as per *Rockdale LEP 2011*.

Future

The precinct is not envisaged to change. Residential intensification will be occurring in specific locations that are suited to increased densities as outlined in the Structure Plan (see Part 5.5).

This includes York Street north of the civic hub which is low density residential housing at the northern edge of the centre. Although this area is in close proximity to the Centre core it is directly under the Aircraft flight path which limits growth potential.





4.3.5 Rockdale Plaza Precinct

The Rockdale Plaza Precinct is flanked by Rockdale Plaza Road to the north, Princes Highway to the west and Chandler Street to the south. The precinct is mostly zoned B2 Local Centre with small areas to the suth zoned B4 Mixed Use and R4 High Density and R3 Medium Density.

The precinct comprises some sites that are of massive scale whilst lots along Chandler street are smaller averaging 1500 square metres (zoned R4) and 350 square metres (zoned R3 and R2). The maximum building height control is 31 metres reflecting the height of the existing development with lower heights of 22 metres, 14.5 metres and 8.5 metres depending on the zoning as per *Rockdale LEP 2011*.

Current

The Rockdale Plaza Precinct comprises the Rockdale Plaza stand alone shopping centre and large scale high density residential development on top. This major development does not contribute to the built environment of the Town Centre because the design of its access is based on private vehicle access. This means users drive to and from this shopping centre without seeing any other aspect of the Rockdale Town Centre.

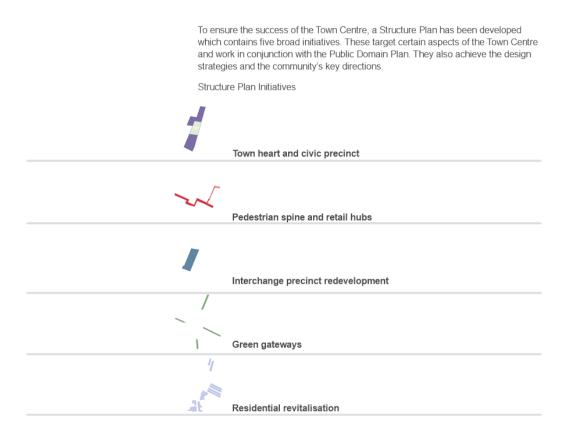
The retail in Rockdale Plaza competes economically with Rockdale Town Centre. However, it does not offer the same experience that the Town Centre offers.

Future

The Plaza will remain as it is. The Green Gateway element of the Structure plan for the Princes Highway South may improve the pedestrian connection to the centre from the Plaza for its residents. The area surrounding Rockdale Plaza will also remain as it is. This area is too far and too disconnected from the Town Centre. The internalised nature of Rockdale Plaza means that the area surrounding it does not benefit from proximity to the Plaza.

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5. Structure Plan

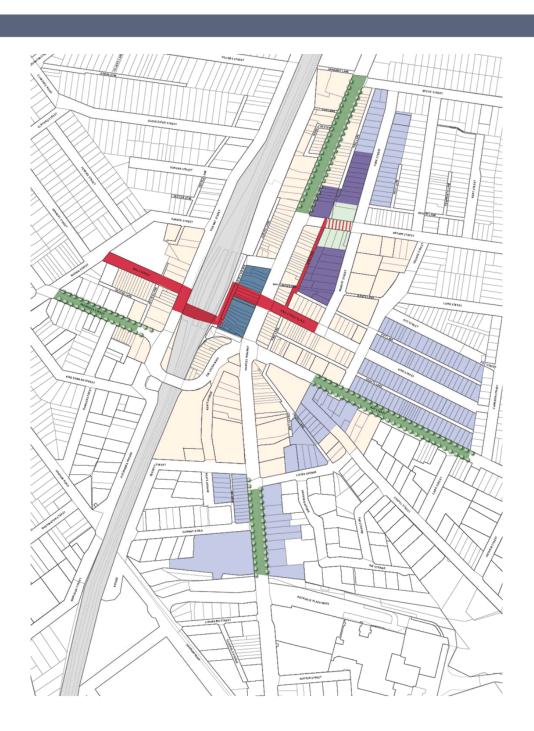


This section presents these initiatives in plan form followed by a detailed description of each initiative. A concept plan or artist's impression which demonstrates one way of delivering the initiative is included in some instances. Key elements also underpin each initiative. The key elements are referenced in the Masterplan Implementation section of this document, along with the accompanying Public Domain Plan, which sets out how these Structure Plan initiatives will be implemented.

The initiatives were developed based on key sites and areas which:

- Have a high redevelopment potential, particularly where they are in Council ownership
- Are most in need of revitalisation
- Would have the greatest impact to improving the Town Centre

The rationale for each initiative is discussed in the following sections (see preamble and context) before the Structure Plan elements are detailed. In some cases, the Structure Plan elements inform potential redevelopment scenarios.



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5.1 Town heart and civic precinct

Preamble

Vibrant and prosperous town centres contain a range of civic and community uses which are as important to the function and life of a town centre as are the shops and businesses. These uses foster a strong sense of community, make centres an inviting place to visit and an attractive place to live.

The traditional town centre form locates these civic uses (i.e. town hall, market and town square) at the heart of the town centre with a strong connection to its retail core or strip.

Context

Rockdale Town Centre has these traditional elements and there is the potential to build on this in order to establish a strong heart for the Centre.

The Council administration building, forecourt and Town Hall give the Centre a strong civic precinct. The Council forecourt is a rare open space facility within the Centre, which is well used but undersized for the scale of the Centre.

The retail core of the Town Centre at King Street Place currently has no relationship to the Civic Precinct. The two locations are separated by a large site which consists of a Target store and public carpark. This Council owned site and King Lane which flanks the western side, are in poor condition. However, if redeveloped the site would connect the retail and civic functions of the Centre. This would strengthen the Town Heart, forming a more coherent Civic Precinct.

The Target store and public carpark site, and adjoining properties, will be redeveloped to provide a new town square on Bryant Street and a food providore market. It will also form the necessary link between the civic precinct and King Street precinct. A food providore market would be situated on the ground level of a mixed use development which will also provide increased residential densities in the Centre.

This development would provide an active and attractive frontage to King Lane, Market Street and a new town square with adjoining ground floor development that is permeable to pedestrians, which would link with the existing arcade network. The new town square would cater to the whole community and be used for public events and functions. It would have a strong relation to the existing Council forecourt, through traffic calming measures on Bryant Street including the ability to close Bryant Street for special events to create a single large public space. The existing civic precinct could also be enhanced by the provision of a new public library and upgrades to the Town Hall.

The Structure Plan Elements below articulate how this vision will be achieved. Refer to indicative Concept Plan overleaf for a proposed redevelopment scenario.

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STRUCTURE PLAN ELEMENTS

Redevelopment of the Target store and public carpark site and adjoining lots for a high quality mixed use development which addresses Market Street, King Lane and the new town square, that:

- 5.1.1 Creates a new town square fronting Bryant Street, King Lane and Market Street that is suitable for cultural and civic events as well as the day to day open space needs of the Centre.
- 5.1.2 Comprises mixed use redevelopment including a new market, and potential for cultural, creative or community space.
- 5.1.3 Includes traffic calming devices on Bryant Street to create a relationship between the forecourt and the town square with the opportunity for temporary road closure for major events.
- 5.1.4 Provides a food providore market on the ground floor (see inset box overleaf 'Food Providore Market' for details) with a focus on fresh and ethnically diverse food. This would be permeable to pedestrians and it would activate all frontages including King Lane.
- 5.1.5 Is setback from King Lane to allow for public domain upgrades to improve the pedestrian environment.
- 5.1.6 Construct a new parking structure on York Street to accommodate public carparking consistent with the parking plan (also see part 6.1).
- 5.1.7 Allows for the provision of a new library and community facilities in the existing civic precinct which does not prevent the delivery of the town square or new York Street parking structure.

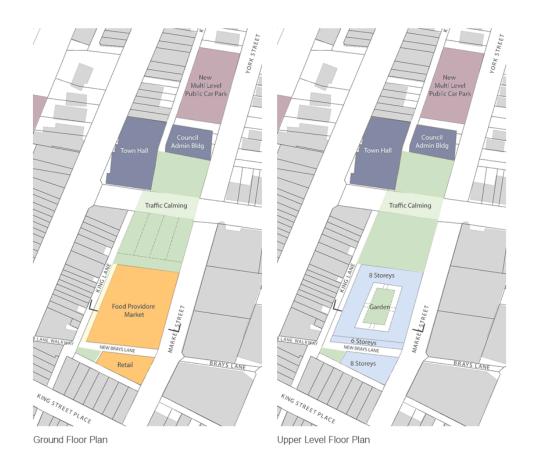
Refer also to sections 3.3, 3.4 and 4.2 of the Public Domain Plan.

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Indicative Concept Plan - Town Heart and Civic Precinct

The concept plans below show indicative site layouts and building envelopes to illustrate a potential redevelopment scenario for the Town Heart and civic precinct.

NB: These plans should not be interpreted as proposed built form controls. The plans shown are indicative only and will be used as a guide to determine any revised built form controls.



Refer also to section 4.2 'Civic Plaza' of the Public Domain Plan which looks at the spatial components and the design parameters of this concept.



Indicative King Lane Street Section

The above concept section illustrates a way that King Lane could be realised with one redevelopment scenario in achieving the intentions of the Structure Plan.

NB: This plan should not be interpreted as built form controls. The building envelopes shown are indicative only, and will be used as a guide to determine (if appropriate) revised built form controls.

Food Providore Market

The food providore market will operate most days of the week and will contain a mix of permanent stores, regular market stalls and temporary market stalls.

These will operate under lease agreements for varying periods of time. Stall holders would need to apply for a lease. Applications would be assessed against a retailing strategy for the Market to ensure a complementary mix of stalls which do not compete with the Centre's existing retail core.

The market space would remain in Council ownership, hence the market would be run by a board in accordance with a Market Management Plan prepared by Council. The plan will include a retail strategy which provides direction and control on the mix of stalls.

This model would be based on existing markets which operate in a similar fashion. These include: Queen Victoria Markets; Adelaide Central Markets; Prahran Markets; and South Melbourne Markets.

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5.2 Pedestrian spine and retail hubs

Preamble

Town centres are not just a collection of shops and businesses which people rely on. They are a place where people can spend time, that are pleasant to explore and experience - places where people want to be. A successful town centre invites people to visit, linger, and use for multiple purposes.

Successful Centres achieve this by providing an attractive pedestrian friendly public domain. This makes it easy and safe to explore and move around a centre and provides spaces and opportunities for people to sit, relax, gather, talk, or meet. The success of the public domain also depends on the shops and businesses which front it to make the lanes and streets active. It is the combination of a centre's shops and businesses positively addressing a convenient pedestrian friendly public domain network that creates a vibrant, lively and prosperous town centre.

Context

Rockdale Town Centre consists of a number of retail hubs, each with different roles and characters which complement each other. However, these retail hubs are somewhat divided and disconnected for pedestrians by the Princes Highway and the Railway line. Improving the quality and convenience of the pedestrian connections between these hubs is an important component of improving the function of the Centre.

Rockdale Town Centre has an extensive hierarchy of lanes and pedestrian arcades which provides a foundation for creating a lively, attractive and accessible public domain network. However, some of these lanes are of poor quality, are lined by the rear of shops and businesses, and/or have a vehicle focus with little pedestrian amenity.

A primary pedestrian spine which connects the Town Centre's retail hubs will be formalised and enhanced. The primary pedestrian spine runs south from the Civic Precinct down to the proposed new town square and market to King Street Place. It then extends east-west; east through the Interchange Precinct, across the railway station concourse to Walz Street (see red notation in Structure Plan).

A positive experience will be created along this spine because pedestrian movement will be prioritised. This in conjunction with upgrading the public domain will create a more attractive environment. It will also entice existing retailers and new development to address the lanes and improve the presentation of shop fronts to create a more attractive and active environment.

This pedestrian spine will connect the Walz and Frederick Streets Precinct to the King Street Precinct. The improved pedestrian amenity and safety of the public domain, namely through its pedestrian spine connecting the retail hubs to the transport interchange and carparking structures, will facilitate a centre which would operate successfully of an evening and on weekends.

The Structure Plan Elements below articulate how this vision will be achieved.

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5.3 Interchange Precinct Redevelopment

Preamble

Rockdale Town Centre benefits from being situated on a major rail line which has a very busy rail/bus interchange as well as a major arterial road. Both of these attributes provide opportunities to attract visitors to the Centre and create a positive image of the Centre.

The Transport Interchange Precinct is on the Princes Highway adjoining the Railway Station and is bounded by the Tramway Arcade and Geeves Avenue. It is in a highly visible location and experiences high levels of pedestrian traffic. Because it is situated at the Seven Ways any development in this location has the potential to form a landmark for the Rockdale Town Centre. The redevelopment scenario also incorporates a direct pedestrian link between either side of the railway station to King Street Place.

Context

This precinct will be redeveloped into a high quality mixed use precinct with extensive ground and first floor retail forming a podium upon which will sit a number of residential towers. This will capitalise on the highly visible location creating a landmark which identifies Rockdale Town Centre to passing motorists and train users, and helps strengthen its identity.

The redevelopment will improve the pedestrian experience for visitors and users of the Centre by providing a more direct link to the railway station concourse through to a larger and more active arcade. It will significantly improve the function of the transport interchange. The improved pedestrian arcade and railway station concourse connection will also create a more viable and lively retail environment, provide the opportunity for extensive retail floor space over two levels with visual prominence to the railway line and the Princes Highway.

The Structure Plan Elements below articulate how this will be achieved. Refer to indicative concept plans overleaf for a proposed redevelopment scenario

STRUCTURE PLAN ELEMENTS

- 5.3.1 High quality mixed use development consisting of a podium containing retail uses on the ground and first floor, which fronts the Princes Highway and the new improved pedestrian linkages, and residential towers above, designed to achieve high levels of amenity and provide modern apartment living in the heart of the Centre.
- 5.3.2 The development will become a landmark at the Seven Ways intersection which presents a positive image of the centre to passing motorists and rail users.
- 5.3.3 Provide an improved and enlarged through site pedestrian link which connects the bus interchange with the Princes Highway at the pedestrian traffic signals.
- 5.3.4 Facilitate the upgrade and expansion of the bus interchange, and provide a setback to Geeves Avenue to achieve the required space.
- 5.3.5 Direct level access for pedestrians provided from the railway station concourse into the redevelopment, which connects to the Seven Ways intersection and the improved through site pedestrian link. All this will be activated by retail uses.

Refer also to sections 3.3, 3.4 and 4.1 of the Public Domain Plan.



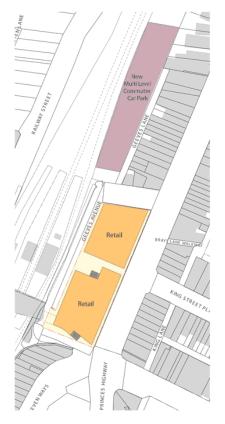


Indicative Concept Plans

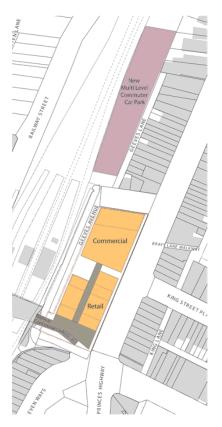
The concept plans below show indicative site layouts and building envelopes to illustrate one potential redevelopment scenario for the Interchange Precinct.

NB: These plans should not be interpreted as built form controls. The plans shown are indicative only and will only be used as a guide to determine any revised built form controls.

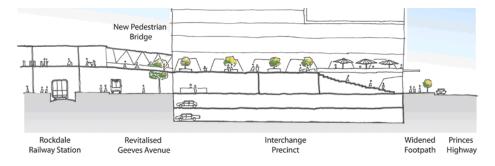
Refer also to section 4.1 of the Public Domain Plan.



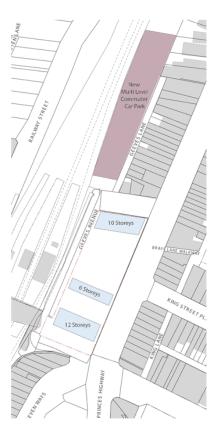
Ground Floor Plan



First Floor Plan



Cross Section



Upper Level Plan

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5.4 Green Gateways

Preamble

Rockdale Town Centre is situated on a number of intersecting routes, namely the Princes Highway running north-south, Bay Street and Frederick Street running eastwest, and the Seven Ways. These routes provide the centre with easy access for motorists.

The Princes Highway passes through a number of local government areas. Therefore, it contains a number of centres and commercial and industrial precincts. To passing motorists these areas can be hard to distinguish from each other and can also be harsh and unattractive; a product of the built environment historically responding negatively to the busy highway rather than capitalising on its potential.

Context

Rockdale Town Centre has entry points on the Princes Highway to the north and south of the centre. The centre also has entry points at the east and west of the Centre, at Bay Street and Frederick Street respectively. These are underdeveloped and there is an opportunity to change how these entry points present themselves to passing motorists.

It is critical that the Rockdale Town Centre is distinguished from the rest of the Princes Highway and other nearby centres. It can be presented as an attractive town centre, rather than just a commercial strip along the highway. To achieve this, 'Green Gateways' at the four entry points to the centre will be created. The Green Gateways will comprise of significant street tree planting. In the case of the Princes Highway, landscaped front setbacks to new developments would be promoted through planning controls. Both the public domain works (street trees) and planning controls would create boulevards which lead into and out of the Centre. This would signify to motorists that the Town Centre is a point of difference. It would also alert motorists to the increased pedestrian activity and potentially reduce vehicle speeds and improve pedestrian safety. These would also prompt motorists to take in and view the surrounds and act as an advertisement for the Town Centre.

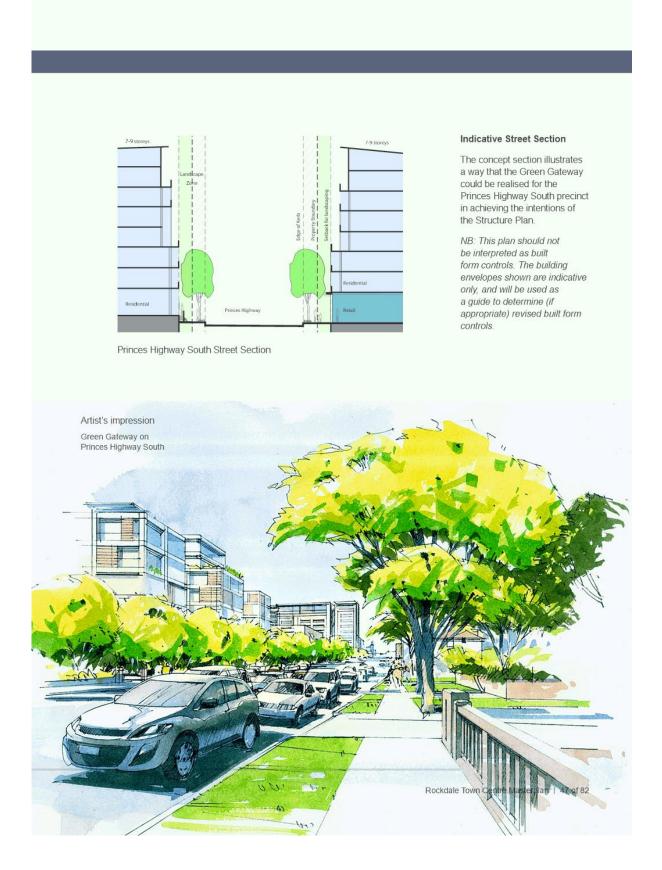
The Structure Plan Elements below articulate how this will be achieved. Refer overleaf for an indicative Street Section.

STRUCTURE PLAN ELEMENTS

- 5.4.1 Public domain upgrades with a focus on street tree planting along the Princes Highway, Bay Street, and Frederick Street at the entry points to the Town Centre (see Structure Plan).
- 5.4.2 Landscaped front setbacks to new redevelopment along the Princes Highway South Precinct, including deep soil landscaping to allow for large mature trees complemented by landscape design which provides pedestrian access and a visual connection between new buildings and the street.
- 5.4.3 Public domain upgrades to be coordinated with improvements to the rest of the Town Centre as envisaged in the Public Domain Plan.

Refer also to figure 8 of section 3.3, and section 3.4.1 of the Public Domain Plan.

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Residential Revitalisation

Preamble

For a town centre to be vibrant and lively, particularly during evenings and weekends, it must have a supporting residential population within convenient walking distance. It is the immediate population that can patronise the centre on the way home from work or within a short walking trip from their front door. It is this local activity which will attract visitors from surrounding suburbs, further increasing the prosperity of the Centre.

Context

Rockdale Town Centre has seen a number of recent redevelopments at the edge of the commercial core. This development has increased the centre's residential population but has primarily focused on small 2 bedroom apartments. There are a number of residential areas at the edge of the Centre which are under developed that offer the opportunity to provide not only additional dwellings, but also a greater range of dwellings. Each of these precincts has its own character which needs to be respected and sensitively responded to.

Key precincts at the Centre edges will allow increased residential densities to offer a range of housing choice. Creating an active and attractive public domain in these precincts will be critical to ensuring they become high quality residential areas that contribute positively to the Centre.

The following sub-sections detail these residential precincts.







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5.5.1 Chapel Street Precinct

Preamble

The area known as the Chapel Street Precinct currently contains a number of under-utilised public carparks. The area is close to the Centre core and railway station, but is disconnected by poor pedestrian connections across Bay Street. The area adjoins an existing high density residential precinct which generates a large volume of pedestrian traffic through the area.

Context

The precinct will contain high quality upmarket high density residential apartments within a accessible public domain network which responds to existing pedestrian desire lines and provides new open spaces to interface with the heritage listed chapel. Redevelopment of the precinct would provide new apartments close to the Centre with high amenity and potential Botany Bay views. New development would have retail uses on the ground floor fronting Bay Street and the new plaza. Some public car parking will be retained at street level to serve the retail use in the vicinity, whilst the remainder of the current public parking will be relocated to other locations in the Centre.

The Structure Plan Elements below articulate how this will be achieved.

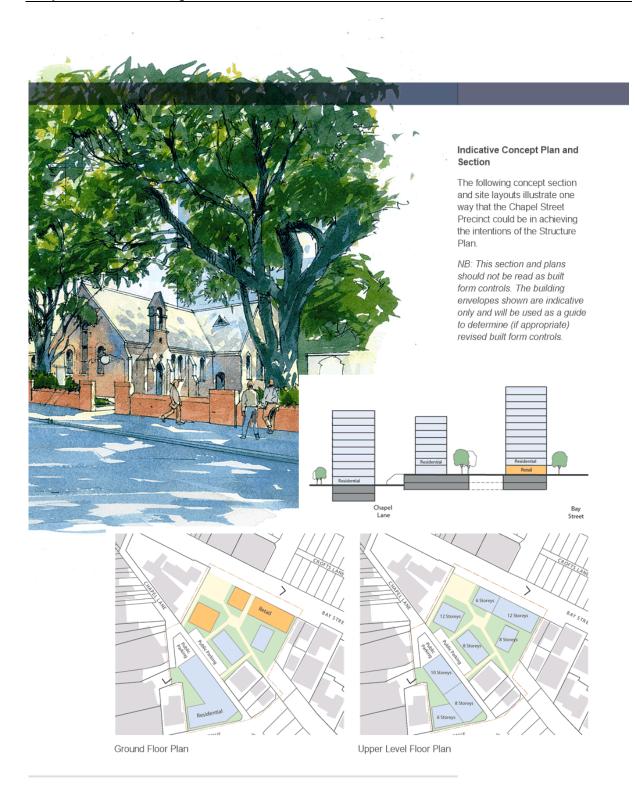
Artist's impression

Potential redevelopment scenario of the Chapel Street Precinct viewed looking east along Bay Street

STRUCTURE PLANELEMENTS

- 5.5.1.1 High quality residential flat buildings
- 5.5.1.2 Ground floor retail fronting Bay Street and the new plaza
- 5.5.1.3 New public plaza on Bay Street which connects to a public pedestrian linkage to Chapel Street
- 5.5.1.4 Street level public parking off Chapel Lane provided off street or as 90 degree kerb side parking
- 5.5.1.5 Extension of Chapel Lane to create a direct link to Lister Avenue
- 5.5.1.6 Ground floor residential units with direct access from the street, lane, and pedestrian linkage network to create an active and permeable public domain through the site

Refer also to sections 3.3 and 3.4 of the Public Domain Plan.



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5.5.2 Rocky Hills (King Street)

Preamble

King Street, east of the Centre, currently contains an eclectic mix of low density residential dwellings in a landscaped street setting. Many of these existing dwellings have strong heritage characteristics. The area also contains a number of rocky sandstone outcrops and historic retaining walls which reflect the unique topography of Rockdale and its historical development. These characteristics make the Rocky Hills area a feature of the Centre, contributing to the quality of the built environment.

This area is located very close to the retail heart of the Centre and railway station giving it a strong relationship to the Centre core. However, the area is over the rise which physically defines the eastern boundary of the Town Centre core.

Contex

The area is envisaged as retaining its landscaped low rise character offering an alternative housing choice to that provided by higher density apartments in other precincts.

Any redevelopment in the precinct would need to respond to the heritage characteristics of the area. Suitable redevelopment could include terrace style houses such as found in inner city suburbs. This new housing could be developed on the subdivision of existing lots and could occur over time, integrating with and not disturbing the existing street character. Vehicle access to these properties would be from the existing rear lanes which allow for narrower lot widths without compromising the streetscape.

The Structure Plan Elements below articulate how this will be achieved.

STRUCTURE PLAN ELEMENTS

- 5.5.2.1 Retention of the precinct's heritage characteristics, including topographical features.
- 5.5.2.2 Continuation of the precinct's role as a low density residential precinct providing alternative housing choice to other precincts in the Centre.
- 5.5.2.3 New dwellings to be sympathetic to the existing streetscape character and low density setting.
- 5.5.2.4 New dwellings to occur within existing lot subdivision through attached dwellings (terrace housing).
- 5.5.2.5 Vehicle access to be provided from the rear lanes.
- 5.5.2.6 The heritage value of the area, including the street planting and topographical features, will be investigated to ensure it is not compromised or diminished by any redevelopment.

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5.5.3 Princes Highway South

Preamble

As the Centre grows it is natural that it expands along the Princes Highway into the stretch south of the Centre which currently contains more traditional highway business uses.

This section of the Princes Highway is disconnected from the retail core of the Centre for pedestrians due to the poor amenity of Princes Highway, the Seven Ways intersection and the fall of the land away from centre. This reduces its viability for retail and commercial uses. However, this area is still close to the Centre core and Railway Station and is flanked by high and medium density residential developments which have a strong landscape setting. This stretch of the Princes Highway could contain residential uses which allow for the expansion of the landscape setting.

Context

The Princes Highway south of the Centre will contain high quality residential flat buildings with a landscaped setback to the Princes Highway. This setback will help form a Green Gateway into the Centre and mitigate some of the negative amenity impacts from the highway. Any redevelopment will contain significant deep soil landscaping to allow for the continuation of the green canopy of the surrounding areas. New developments could also contain retail uses such as showrooms suitable to the highway locations, which would also be required to be setback from the street frontage.

The Structure Plan Elements below articulate how this will be achieved.

STRUCTURE PLAN ELEMENTS

- 5.5.3.1 Landscaped front setback on Princes Highway, which will be predominately deep soil to allow for mature tree planting, complemented by landscape design that provides pedestrian access and a visual connection between new buildings and the street.
- 5.5.3.2 Redevelopment achieved through site consolidation to minimise the number of vehicle access points from the Princes Highway.
- 5.5.3.3 Flexibility for a variety of building uses, predominantly residential accommodation in buildings which define a strong street edge and create a boulevard feel to the highway.
- 5.5.3.4 Development of a height and density which is a transition from the mixed use development to the north and the surrounding high and medium density residential development, to the east and west.
- 5.5.3.5 Any retail and commercial uses in the precinct are to be suitable to the out of centre highway location.
- 5.5.3.6 Respond to the proximity to the Muddy Creek drainage channel by taking appropriate measures consistent with the Flood Risk Management Plan.

Refer also to sections 3.3 and 3.4 of the Public Domain Plan.



Artist's impression Potential residential redevelopment scenario in Princes Highway South Precinct



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6. Parking Plan

Introduction

This Parking Plan is an integral part of the Masterplan. The aim of the Parking Plan is to ensure Rockdale Town Centre's continued economic growth by providing visitors with convenient and appropriate parking facilities. Despite its title, the Parking Plan is also designed to facilitate a sustainable transport approach that creates a platform for a strong pedestrian culture and environment.

The following principles underpin the development of the Parking Plan:

- A satisfactory parking supply meets the Centre's current and future demand
- Visitors have convenient and legible car parking access
- Public car parks are strategically located and benefit both the vehicular and pedestrian modes within the Town Centre
- Parking rates reflect contemporary parking demands and enable redevelopment of key sites and small sites in the Town Centre
- Utilisation of sustainable transport is encouraged

Based on these principles and the assessment of the existing car parking profile, the Parking Plan makes recommendations on public car parks as well as the parking requirements for private developments within the Town Centre.

6.1 Off-street public parking

The Centre has a number of off-street public parking sites at a variety of locations across the centre. These are the Council owned York Street car park, the multi level public car park above the Target store (Target car park) and the Chapel Street car park as well as the commuter car park at Geeves Avenue which is owned by Railcorp (refer to 'existing off-street public car parking' figure overleaf).

A parking study conducted in 2008 found that the usage capacity of the Centre's existing parking supply was yet to be reached (industry best practice says 85% usage of the total parking supply is a practical capacity). This means that the current car parking supply meets the current and the likely future parking demand based on the development trend in the Town Centre.

The parking study also revealed that the parking demand within the Town Centre varies at different times of the day and week. Rail commuters, local employees and retail customers result in a high level parking utilisation during the middle of the day on weekdays. Due to the characteristics of different car parks, the Town Centre does not offer the most efficient parking access to visitors.

Chapel Street car park

The Council owned Chapel Street at-grade car park which falls across three adjacent sites has approximately 120 short stay and 27 long stay parking spaces. Separated from the Centre core by Bay Street means this car park is more likely to serve adjacent and nearby businesses around the Chapel Street Precinct vicinity. This means there is an oversupply of parking for that area.

Target car park

The Council owned Target car park is located in middle of the Town Centre offering great convenience to its users. This three storey multi level car park contains some 200 long stay parking spaces which are likely to be utilised by commuters and employers rather than visitors to the centre, and 175 short stay spaces. However, despite the significance of this facility, it is imperative that this key strategic site is utilised to its best potential for the benefit of the Town Centre.

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York Street car park

The Council owned carpark at York Street contains 66 short stay and 21 long stay at-grade carparking spaces, which are well used.

The Parking Plan proposes the redevelopment of this car park to a multi level parking facility that will accommodate most of the future public parking supply for the Town Centre. It will replace the existing short stay parking spaces within the Chapel Street and Target car parks, which will unlock the redevelopment potential of these two sites.

The York Street car park site, is considered to be the most suitable and feasible for providing a large number of public parking spaces, because:

- · It is in close proximity to community/Council facilities and the retail core
- It will allow people to arrive by car and park at the edge of the Town Centre and walk to the retail core through future revitalised laneways
- It will reduce vehicular traffic and increase pedestrian movement in the Town
 Centre and improve the pedestrian flow
- With future improved directional signage (e.g. dynamic parking signs), this facility will enable Council to monitor and manage parking efficiently and effectively
- Council will ensure the proposed structure provides flexibility in its design to incorporate future community facilities when the Civic precinct requires expansion
- It could offer opportunities in future for private development to transfer commercial parking to Council public parking. This is in line with the best practice in providing efficient public parking and, at the same time, offers incentives for redevelopment

Geeves Avenue commuter car park

The at-grade facility at Geeves Avenue is owned by Railcorp and has 140 long stay carparking spaces.

The Parking Plan proposes another multi level parking facility on this site. It is anticipated that the proposed car park concept could triple the current supply of commuter parking spaces on the site and replace long stay parking spaces at the Target car park. Given that the land is owned by Railcorp, Council would negotiate/ develop a partnership with the State government to redevelop the site.

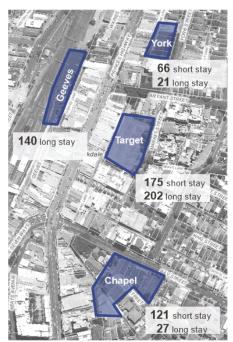
In order to provide efficient, convenient and legible parking for visitors and to facilitate redevelopment of the Town Centre as envisaged by the Masterplan, the Parking Plan proposes a reconfiguration of off-street car parks.

Off-street public parking

- 6.1.1 Maintain a sufficient supply of short stay parking spaces which are essential for the commercial vitality of the Town Centre
- 6.1.2 Construct a multi level parking facility at York Street to consolidate the public parking within the Town Centre
- 6.1.3 Relocate long stay parking spaces to areas close to the Rockdale rail/bus interchange
- 6.1.4 Provide directional signage to enhance the efficiency and experience of off street public parking

Refer to the figures below which illustrate existing and proposed public parking facilities for the Town Centre

Existing off street public parking

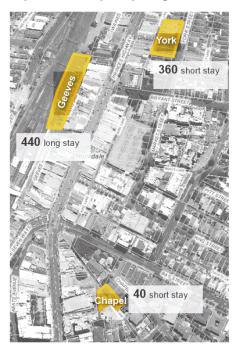


Existing: Total short stay parking spaces - 362 Total long stay parking spaces - 390

Short Stay parking spaces with a time limit

Long Stay parking spaces with no time limit

Proposed off street public parking



Proposed: Total short stay parking spaces - 400 Total long stay parking spaces - 440

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6.2 On-street public parking

In most areas of Rockdale Town Centre, the on-street parking functions at an acceptable level. The utilisation of on street parking should be continually monitored in future. In areas where high parking demands are experienced, measures such as parking layout rearrangements, time and cost management issues should be considered.

Walz Street

Walz Street contains parallel on-street parking spaces. During the afternoon peak period, the street experiences high parking demand and problems such as double parking.

Additional parking spaces could be introduced to the area by converting the existing parallel parking to angle parking. However, the design and its impact on traffic flow and bus movement needs further investigation.

George Street

George Street contains a road reservation which was originally required to facilitate realignment of the existing staggered T-intersection at Bryant Street. However, additional angled parking could be achieved within the road reservation resulting in an estimated additional 40 short stay parking spaces.

Proposed on street angle parking



On-street public parking

- 6.2.1 Introduce additional on-street parking spaces in Walz Street precinct by converting the existing parallel parking to angle parking6.2.2 Introduce additional on-street angle parking within the road reservation on
 - George Street
 - 6.2.3 Continue to monitor the utilisation of on-street parking within the Town Centre and address future parking demands through time and cost management

6.3 Parking for private development

Parking rates

The aim of the Parking Plan adopts a sustainable approach for parking in private development. It recognises changes to parking generation rates over the past 20 years and better reflects actual parking demands associated with developments in the Town Centre.

The ABS Census data revealed that an increasing number of young people aged between 25-34 are living in Rockdale (suburb). Many of them are couples with no children and rent rather than own their property. The affordability and accessibility of public transport in this suburb are the two likely factors which attract this group to the area.

It is proposed that the Rockdale Town Centre investigates adopting parking rates which are lower than the city wide parking rates to better reflect the demographic pattern and public transport use in the Centre.

Consolidated Parking Concession

In order to better integrate public parking within the context of the broader Town Centre objectives, a Consolidated Parking Concession policy (CPC) is proposed for the Centre. The policy will encourage private developments to contribute to parking which is off-site and operated by Council.

A CPC policy says that Instead of requiring parking spaces (non residential) to be constructed as part of the development, developers will be offered incentives to pay contributions to Council (via a discount 'cash in lieu' scheme) for providing spaces at a public parking facility. The discount contribution acknowledges that public parking is more efficient if located in a public facility compared to within a private development.

It has a number of benefits, including:

- Providing developers with greater investment flexibility
- · Providing efficient, convenient and legible parking access to visitors
- Providing a shared parking amenity, where businesses with different peak periods can utilise the spaces at alternate times
- Allowing Council to effectively manage parking in a consolidated facility

Parking for private development

- 6.3.1 Investigate appropriate parking rates for developments within the Town Centre core in Rockdale Development Control Plan 2011. The following rates could be considered:
 - 0.5 space per studio/1 bedroom dwelling
 - 1 space per 2 bedroom dwelling
 - 1.5 spaces per 3 bedroom dwelling
 - 1 visitor space per 10 dwellings
- 6.3.2 Investigate introducing a Consolidated Parking Concession policy to encourage developments to transfer parking spaces to public parking facilities

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6.4 Sustainable transport initiatives

Use of sustainable transport modes and practices should be encouraged in the Town Centre by investigating the introduction of formal "car share" services and promoting informal car pooling opportunities. Locations for bike parking facilities in the Town Centre and opportunities for bike sharing will also be investigated.

- 6.4.1 Introduce "car share" services in the Town Centre
- 6.4.2 Promote other sustainable transport modes e.g. bicycle

6.5 Implementation of the Parking Plan

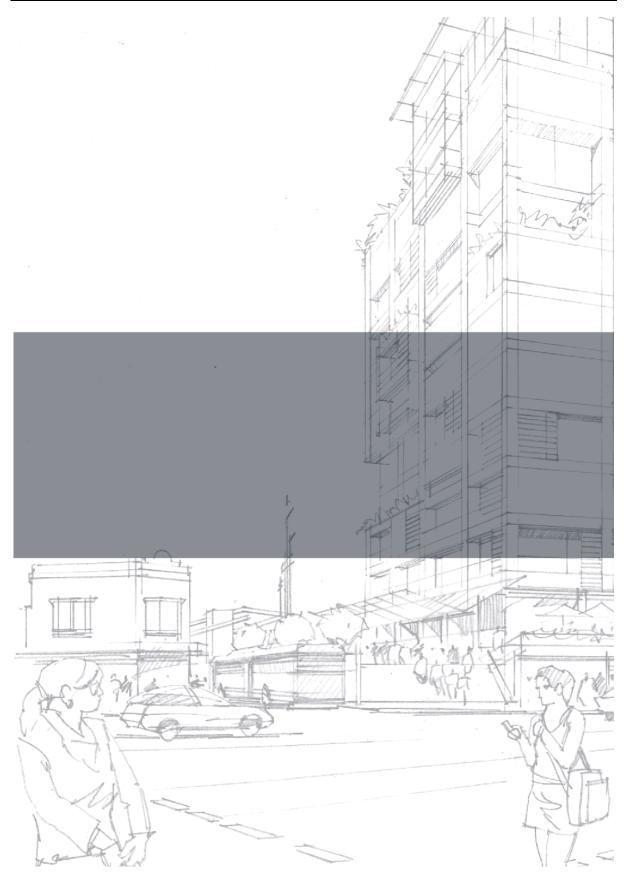
Summary of actions

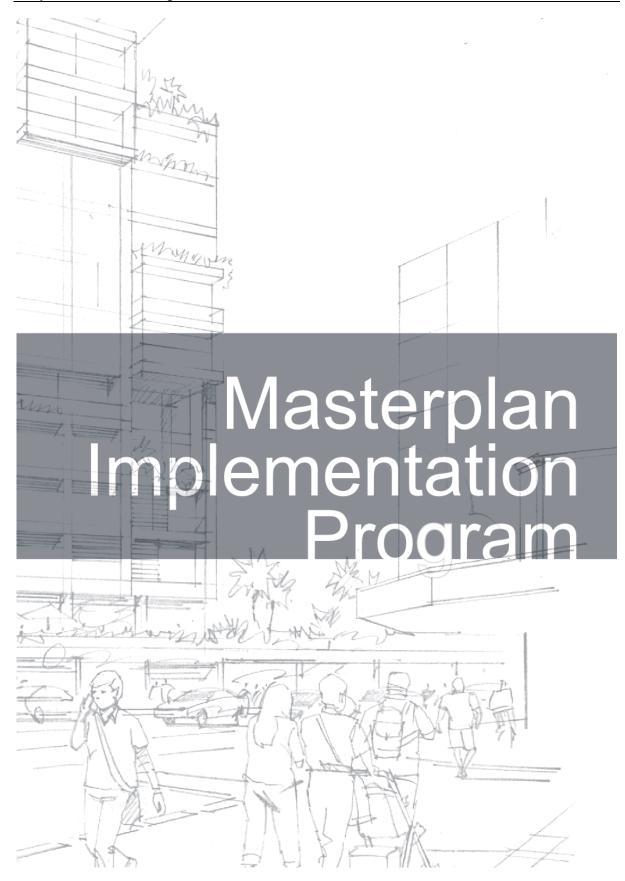
Following is a summary of the actions to be undertaken to implement the key elements of the Parking Plan. Refer to Masterplan Implementation, page 64, for details.

- Investigate the feasibility and design of the York Street multi level parking facility
- Implement improved directional signage (e.g. dynamic signage) to enhance the efficiency and experience of off-street public parking
- Liaise with the NSW State Government to provide a multi level car park for long stay parking near the Rockdale bus/rail interchange
- Undertake feasibility assessment of rearranging on-street parking at Walz Street and George Street
- Monitor the utilisation of the on-street parking within the Town Centre and investigate on street paid parking at areas where there is high demand
- Investigate incorporating new parking rates for Rockdale Town Centre in Rockdale Development Control Plan 2011
- Investigate introducing a Consolidated Parking Concession policy to encourage developments to contribute to parking which is off-site and operated by Council

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Implementation of the Masterplan

The Masterplan is a long term plan for the future of the Rockdale Town Centre. Whilst it contains elements which can be implemented in the short term, much of the Plan requires further work to be undertaken to be able to implement it.

This section outlines the tools to implement the Masterplan and how each of the Structure Plan Elements and Parking Plan initiatives will be implemented. Many issues can be addressed through the town planning framework but there are also actions that will need to be captured in other Council plans and policies, or which require further studies or consultation either internally with Council, or with State agencies.

This Implementation Plan is presented in a table which lists each Structure Plan Element and Parking Plan initiative and lists what tools and actions are required to implement them. It includes the major dependencies which affect the delivery of the Masterplan for its implementation over time, and assignment of responsibility, be it government, the development industry, or the business community.

The implementation of the Masterplan will put in place the guidelines, framework and program to be able to deliver the Masterplan. This is to ensure future development, works, and events in the Rockdale Town Centre will be working towards realising the Masterplan.

The realisation of the community's vision and design strategies for the Masterplan relies on the involvement of landowners, private developers, business owners as well as Council.

Summary of implementation tools

Within the town planning framework

Rockdale LEP 2011

Potential LEP amendments to enact land use, height, floor space ratio (FSR) changes as well as documenting any proposed property acquisitions after rigorous analysis.

Rockdale DCP 2011

Potential DCP amendment to include a new 'special precinct' for the Rockdale Town Centre. This will summarise the structure and precinct plans, and document each of the key aspects as objectives. It will also contain any specific built form controls such as setbacks that are required to achieve the Masterplan.

Rockdale Town Centre Public Domain Plan and Technical Manual

The Rockdale Town Centre Public Domain Plan accompanies this Masterplan and sets out specific strategies for the public domain. Technical Manual forms a final component of the final Public Domain Plan. This component sets out more specific objectives and guidelines for the delivery of public domain improvements. This component will be for use by Council's technical staff as well as designers and engineers of private developers.

Outside of town planning framework

Masterplan Implementation Plan

The Masterplan Implementation Plan will be a new document which expands upon the Masterplan Implementation Program section of the Masterplan and also complements the Public Domain Plan and Technical Manual. It will provide additional detail on individual projects necessary to implement the Plans. This will include setting priorities for work - short, medium and long term - and investigating indicative costings as well as exploring potential funding mechanisms.

- S94 Developer Contributions Plan
- Capital works program
- Town centre management programs
 - Further studies or plans
 - Market Management Plan
 - Traffic studies
 - Lighting Strategy
 - Signage Strategy
- Further consultation with stakeholders (such as the NSW State Government e.g. Railcorp, State Transit and Roads and Maritime Services)
- Integrated Planning Framework (i.e. Delivery program, Operational Plan, etc)

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		Plann requir LEP	ing cor red	ntrols	Summary of planning controls required	
5.	STRUCTURE PLAN	LEP	DCP	PDP		
5.1.	Town heart and civic precinct				DOD a bis stings and built form	
site and develop	lopment of the Target store and public carpark adjoining lots for a high quality mixed use ment which addresses Market Street, King nd the new town square and:	\checkmark	\checkmark	\checkmark	DCP objectives and built form envelope and design controls	
5.1.1.	Creates a new town square fronting Bryant Street, King Lane and Market Street that is suitable for cultural and civic events as well as the day to day open space needs of the Centre.	\checkmark	\checkmark	\checkmark	LEP open space zoning and land dedication	
5.1.2.	Comprises mixed use redevelopment including a new market, and potential for cultural, creative or community space		\checkmark		DCP objectives and design guidelines	
5.1.3.	Includes traffic calming on Bryant Street to create a relationship between the forecourt and the town square with the opportunity for temporary road closure for major events.		\checkmark	\checkmark	-	
5.1.4.	Provide a food providore market on the ground floor. This would be permeable to pedestrians and it would activate all frontages including King Lane.	√	√		DCP detailed specifications for Market space LEP active frontages map and potential dedication of market space	
5.1.5.	Is setback from King Lane to allow for public domain upgrades to improve the pedestrian environment.	\checkmark	\checkmark	\checkmark	DCP setbacks LEP land dedication of setback	
5.1.6.	Construct a new parking structure on York Street to accommodate public carparking consistent with the parking plan.	\checkmark	\checkmark		LEP permissibility	
5.1.7.	Allow for the provision of a new library in the existing civic precinct which does not prevent the delivery of the town square or new York Street parking structure.		\checkmark		-	
5.2.	Pedestrian spine and retail hubs					
5.2.1.	Upgrade and improve King Lane to increase pedestrian priority and safety, day and night, and create a more attractive and pleasant environment, ensuring that it integrates with the proposed redevelopment of the Target store site.		√	~	DCP objectives and design guidelines	
5.2.2.	Encourage existing retailers and new developments to front the lane network, particularly along the pedestrian spine.	\checkmark	\checkmark	\checkmark	LEP active frontages map DCP objectives and design guidelines	

Outside of town planning framework	
Further actions (enacting plan, policy, strategy)	Dependency for delivery
-	Redevelopment of precinct
	Council
Masterplan Implementation Plan - including alternate option for delivery of town	Acquisition of land
square independent of 'Target site' redevelopment	Council
S94 Developer Contributions Plan	
Traffic studies for impact of temporary road closures	Traffic study and traffic committee approval
Develop management plan for operation of market	Redevelopment of precinct
	Council
S94 Developer Contributions Plan	Redevelopment of precinct
Capital Works Program	Council
S94 Developer Contributions Plan	Redevelopment of precinct
Capital Works Program	Council
Library and Civic Precinct Masterplan project to be consistent with Rockdale Town Centre Masterplan	Council
Masternan Inclorentation Dise	Dedeuelenment of tourn to the
Masterplan Implementation Plan	Redevelopment of town heart and interchange precinct
S94 Developer Contributions Plan	Council
Town centre management strategy	Participation of retailers and
Council liaison with owners and applicants at DA stage	business owners

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	Within town planning framework				
	requir			Summary of planning controls required	
	LEP	DCP	PDP		
5.2.3. Any existing pedestrian paths and arcades are to be maintained in redevelopments		\checkmark		DCP controls for through site links	
5.2.4. Improve public domain in the Walz Street and Frederick Street Precinct to enhance the shopping experience of this retail hub and integrate with the pedestrian spine.		\checkmark	\checkmark	DCP objectives and design guidelines	
5.2.5. To create a consistent and coherent public domain network which is easy to navigate, all public domain upgrades and improvements will follow the Public Domain Plan which accompanies the Masterplan.			~		
5.2.6. Encourage the improvement of shopfronts to create a more attractive and active centre particularly in the retail hubs and along the pedestrian spine.		\checkmark		DCP objectives and design guidelines	
5.2.7. Develop the night time and weekend economy of the centre, focused on the retail hubs, facilitated by improvements to pedestrian safety and amenity.					
5.3. Interchange precinct redevelopment					
5.3.1. High quality mixed use development consisting of a podium containing retail uses on the ground and first floor, which fronts the Princes Highway and the new improved pedestrian linkages, and residential towers above, designed to achieve high levels of amenity and provide modern apartment living in the heart of the centre.	 ✓ 	 ✓ 		DCP objectives, design guidelines, building envelop and setback controls	
5.3.2. The development will become a landmark at Seven Ways intersection which presents a positive image of the centre to passing motorists and rail users.		\checkmark		DCP objectives, design guidelines, building envelop and setback controls	
5.3.3. Provide an improved and enlarged through site pedestrian link which connects the bus interchange with the Princes Highway at the pedestrian traffic lights.		\checkmark	\checkmark	DCP design controls for pedestrian linkage	
5.3.4. Facilitate the upgrade and expansion of the bus interchange, and provide a setback to Geeves Avenue to achieve the required space.	✓	\checkmark	~	LEP land dedication DCP setback controls	
5.3.5. Direct level access for pedestrians provided from the railway station concourse into the redevelopment, which connects to the Seven Ways intersection and the improved through site pedestrian link. All this will be activated by retail uses.		√		DCP objectives, design guidelines, building envelop and setback controls	

Outside of town planning framework	
Further actions (enacting plan, policy, strategy)	Dependency for delivery
Council liaison with owners and applicants at DA stage	Applicant and Council
Traffic studies required for any changes in traffic movement or parking operation Masterplan Implementation Plan	Negotiations with State Transit regarding bus movements
Develop signage strategy for the town centre	Council
Town centre management strategy Council liaison with owners and applicants at DA stage	Participation of retailers and business owners Council
Town centre management strategy	Participation of retailers and business owners Council
Consultation with key stakeholders	Amalgamation of sites and private development Liaison with State Government and site owners
Consultation with key stakeholders	Amalgamation of sites and private development
Masterplan Implementation Plan - include interim strategy for improvement to arcade independent of redevelopment of the precinct	Amalgamation of sites and private development
Liaise with State Transit and Railcorp - upgrade to bus interchange	State Transit and Railcorp in consultation with Council
Liaise with State Transit and Railcorp - feasibility of connection to railway station concourse over Geeves Avenue	State Transit and Railcorp in consultation with Council Amalgamation of sites and private development

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		W	wn planning framework	
	requir			Summary of planning controls required
54 0 04	LEP	DCP	PDP	
5.4. Green Gateways 5.4.1. Public domain upgrades with a focus on street tree planting along the Princes Highway, Bay Street, and Frederick Street at the entry points to the town centre (see Structure Plan).		~	\checkmark	DCP objectives requiring compliance with the PDP
5.4.2. Landscaped front setbacks to new redevelopment along the Princes Highway South Precincts, including deep soil landscaping to allow for large mature trees complemented by landscape design which provides pedestrian access and a visual connection between new buildings and the street.		 ✓ 	 ✓ 	DCP objectives and setback and landscape controls
5.4.3. Public domain upgrades to be coordinated with improvements to the rest of the town centre as envisaged in the Public Domain Plan.			\checkmark	N/A
5.5. Residential intensification				
5.5.1. Chapel Street Precinct	\checkmark	\checkmark	\checkmark	-
5.5.1.1. High quality residential flat buildings		\checkmark		DCP objectives and design guidelines and building envelop controls
5.5.1.2. Ground floor retail fronting Bay Street and the new plaza	\checkmark	\checkmark		LEP active street frontages map DCP objectives and design guidelines
5.5.1.3. New public plaza on Bay Street which connects to a public pedestrian linkage to Chapel Street	√	\checkmark	\checkmark	LEP open space zone and land dedication DCP objectives and design guidelines
5.5.1.4. Street level public parking off Chapel Lane provided off street or as 90 degree kerb side parking		\checkmark		DCP objectives and parking requirements
5.5.1.5. Extension of Chapel Lane to create a direct link to Lister Avenue	\checkmark	\checkmark		LEP land dedication DCP objectives and design guidelines
5.5.1.6. Ground floor residential units with direct access from the street, lane, and pedestrian linkage network to create an active and permeable public domain through the site	 ✓ 	 ✓ 		LEP active street frontages DCP objectives and design guidelines

Outside of town planning framework	
Further actions (enacting plan, policy, strategy)	Dependency for delivery
Masterplan Implementation Plan	Council
-	Private development
Masterplan Implementation Plan, Capital Works Program, Delivery Program, Operational Plan	Council
-	Acquisition and private redevelopment
-	Council (via policy) and owners and developers (via DA process)
-	Council
Masterplan Implementation Plan, Capital Works Program, Delivery Program, Operational Plan	Council
S94 Developer Contributions Plan	Provision of public carparking
Capital Works Program	in York Street to off set reduction
S94 Developer Contributions Plan	Council
Capital Works Program	
	Council

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			Wi			
		requir			Summary of planning controls required	
	1 1 1 9	LEP	DCP	PDP		
5.5.2. Ro	CKY HIIIS	\checkmark	\checkmark		N/A	
5.5.2.1.	Retention of the precinct's heritage characteristics, including topographical features.		\checkmark		DCP design and building envelop controls	
5.5.2.2.	Continuation of the precinct's role as a low density residential precinct providing alternative housing choice to other precincts in the Centre.		\checkmark		LEP zoning DCP design and building envelop controls	
5.5.2.3.	New dwellings to be sympathetic to the existing streetscape character and low density setting.		\checkmark		LEP zoning DCP design and building envelop controls	
5.5.2.4.	New dwellings to occur within existing lot subdivision through attached dwellings (terrace housing).		\checkmark		DCP objectives and design guidelines	
5.5.2.5.	Vehicle access to be provided from the rear lane.		\checkmark		DCP vehicle access and streetscape controls	
5.5.2.6.	The heritage value of the area, including the street planting and topographical features, will be investigated to ensure it is not compromised or diminished by any redevelopment.		 ✓ 		DCP objectives and design guidelines	
5.5.3. Pri	nces Highway South	\checkmark	\checkmark		-	
5.5.3.1.	Landscaped front setback on Princes Highway, which will be predominately deep soil to allow for mature tree planting, complemented by landscape design that provides pedestrian access and a visual connection between new buildings and the street.		~		DCP setback and landscape controls	
5.5.3.2.	Redevelopment achieved through site consolidation to minimise the number of vehicle access points from the Princes Highway.	\checkmark	\checkmark			
5.5.3.3.	Flexibility for a variety of building uses, predominantly residential accommodation in buildings which define a strong street edge and create a boulevard feel to the highway.		√		DCP objectives and built form controls	

Outside of town planning framework	
Further actions (enacting plan, policy, strategy)	Dependency for delivery
-	Private development
-	Land owners (private development)
-	Land owners (private development)
-	Land owners (private development)
Investigation of the precinct's heritage value	Council
-	Private development
-	-
-	-

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			Wi			
		Plann requir LEP	ing cor ed DCP	ntrols	Summary of planning controls required	
5.5.3.4.	Development of a height and density which is a transition from the mixed use development to the north and the surrounding high and medium density residential.	 ✓ 	~		LEP development standards	
5.5.3.5.	Any retail and commercial uses in the precinct are to be suitable to the out of centre highway location.	\checkmark	\checkmark		LEP permissibility DCP design guidelines	
5.5.3.6.	Respond to the proximity to the Muddy Creek drainage channel by taking appropriate measures consistent with the Flood Risk Management Plan		\checkmark		DCP design guidelines	
6.	PARKING PLAN					
	street Parking					
6.1.1	Maintain a sufficient supply of short stay parking spaces which are essential for the commercial vitality of the Town Centre				N/A	
6.1.2	Construct a multi level parking facility at York Street to consolidate the public parking within the Town Centre				N/A	
6.1.3	Relocate long stay parking spaces to areas close to the Rockdale rail/bus interchange				N/A	
6.1.4	Provide directional signage to enhance the efficiency and experience of off street public parking				N/A	
6.2 On-	street Parking					
6.2.1	Introduce additional on-street parking spaces in Walz Street precinct by converting the existing parallel parking to angle parking			\checkmark	Part of public domain strategy for Walz Street Precinct	
6.2.2	Introduce additional on street angle parking within the road reservation on George Street			\checkmark	N/A	
6.2.3	Continue to monitor the utilisation of on-street parking within the Town Centre and address future parking demands through time and cost management				N/A	
6.3 Par	king for Private Development					

Outside of town planning framework	
Further actions (enacting plan, policy, strategy)	Dependency for delivery
-	-
-	-
Further investigation of flood risk	Council
Coordinate feasibility studies for new car parking to ensure parking yields are maintained and appropriate transitional measures will be put in place.	Council
Investigate the feasibility and design of the York Street multi level parking facility S94 Developer Contributions Plan	
Liaise with State Transit and Railcorp	State Transit and Railcorp
Prepare directional signage strategy for public parking in the Centre in the context of new parking arrangement	Redevelopment of York Street car park
	State Transit
Undertake feasibility assessment of rearranging and undertake community consultation and liaise with State Transit	State fransit
S94 Developer Contribution Plan Undertake feasibility assessment of rearranging and undertake community consultation and liaise with State Transit S94 Developer Contribution Plan	State Transit
Continually monitor the utilisation of the on street parking within the Town Centre and investigate on street paid parking at areas where there is high demand	Council

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		Wi	thin to	wn planning framework	
	Planning controls required				
	LEP	DCP	PDP		
6.3.1 Investigate appropriate parking rates for developments within the Town Centre core in Rockdale Development Control Plan 2011		\checkmark		Parking rates for the Town Centre	
6.3.2 Investigate introducing a Consolidated Parking Concession policy to encourage developments to transfer parking spaces to public parking facilities		\checkmark		Consolidated Parking concession policy for the Town Centre	
6.4 Sustainable Transport Initiatives					
6.4.1 Introduce "car share" services in the Town Centre				N/A	
6.4.2 Promote other sustainable transport modes i.e. bicycle				N/A	

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Outside of town planning framework	
Further actions (enacting plan, policy, strategy)	Dependency for delivery
-	Council
S94 Developer Contributions Plan	Council
Investigate the introduction of formal "car share" services in the Town Centre and promote informal car pooling opportunities	Council
Investigate locations for bike parking facilities in the Town Centre and opportunities for bike sharing	Council

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Important

This document contains important information about Rockdale City Council. If you do not understand, please visit Council's Customer Service Centre at 2 Bryant Street Rockdale, Monday – Friday from 8.30am – 4.30pm, Saturday from 9am – Ipm. Council Staff will be happy to arrange interpreter services for you.

You may also contact Telephone Interpreter Services on 131 450 and ask them to ring Rockdale City Council on 9562 1666 on your behalf.

Chinese

هام:

Arabic

تحتوي هذه الوثيقة على معلومات هامة عن بلدية روكدايل. إذا لم تكن قادراً على فهمها. يرجى زيارة مركز خدمة زيائان البلدية على العنوان التالي: Bryant Street 2 في روكدايل من الإثنين إلى الجمعة بين الساعة مباحاً و ٢٠.٩ مساءً, والسبت بين الساعة ٩.٠٠ مساءاً, و ١٠.٠ بعد الظهر حيث سيقوم موظفو البلدية بتأمين مترجم لك بكل سرور.

كما يمكنك الاتصال بخدمة الترجمة الهاتفية على الرقم 1450 والطلب منهم الاتصال ببلدية روكدايل على الرقم 1666 9562 نيابةً عنك.

ltalian

Importante:

Questo documento contiene importanti informazioni sul Comune di Rockdale City. Se avete difficoltà a comprenderne il contenuto, recatevi presso il Customer Service Centre del Comune a 2 Bryant Street, Rockdale dal lunedi al venerdi dalle ore 8.30 alle 16.30 e al sabato dalle 9.00 alle 13.00. Il personale del Comune sarà ben lieto di procurarvi un servizio interpreti.

Potete anche chiamare il Servizio telefonico interpreti (TIS) al numero 131 450 chiedendo che telefoni per vostro conto al Comune di Rockdale City al numero 9562 1666. 重要消息 本文件載有關於 Rockdale 市 政府的重要資訊,如果您有 不明白之處,請於星期一至 星期五,上午8時30分至下 午4時30分,及星期六上午 9時至下午1時,前來位於 2 Bryant Street,Rockdale,市 政府的顧客服務中心。市政府 的職員會很樂意為您安排傳譯 員的服務。

您也可以聯絡電話傳譯服務 處,電話 131 450,並請他們代 您致電 9562 1666 給Rockdale 市政府。

Macedonian Важно:

Овој документ содржи важни информации за Rockdale City Council (Градската општина на Rockdale). Ако не го разбирате, ве молиме, посетете го општинскиот Customer Service Centre (Центар за услуги на клиенти), кој се наоѓа на 2 Bryant Street, Rockdale, од понеделник до петок, од 8.30 наутро до 4.30 попладне и во сабота од 9.00 наутро до 1.00 попладне. Вработените во општината со задоволство ќе ви организиоват да користите преведуван.

Исто така, можете да телефонирате во Telephone Interpreter Services (Служба за преведување по телефон) на 131 450, и да ги замолите во ваше име да се јават во Градската општина на Rockdale на 9562 1666. Αυτό το έγγραφο περιέχει σημαντικές πληροφορίες για τη Δημαρχία Rockdale City Council. Αν δεν τις καταλαβαίνετε, παρακαλείσθε να επισκεφτείτε το Κέντρο Εξυπηρέτησης Πελατών [Customer Service Centre] του Δήμου στο 2 Bryant Street, Rockdale, Δευτέρα - Παρασκευή από 8.30πμ - 4.30μμ και Σάββατο από 9.00πμ - 1.00μμ. Το Προσωπικό του Δήμου θα χαρεί να κανονίσει υπηρεσίες διερμηνέων για σας.

Μπορείτε επίσης να επικοινωνήσετε με τις Τηλεφωνικές Υπηρεσίες Διερμηνέων (Telephone Interpreter Services) στο 131 450 και να τους ζητήσετε να τηλεφωνήσουν στο Rockdale City Council στο 9562 1666 για λογαριασμό σας.

Spanish Importante:

Greek

Σημαντικό:

Este documento contiene información importante sobre el Rockdale City Council (Municipio de Rockdale). Si no la entiende, le rogamos concurrir al Centro de Servicio al Cliente del Municipio, ubicado en 2 Bryant Street, Rockdale, atención de lunes a viernes, de 8:30 am a 4:30 pm y el sábado de 9.00 am a 1.00 pm. El personal del municipio se complacerá en obtener los servicios de un intérprete para usted.

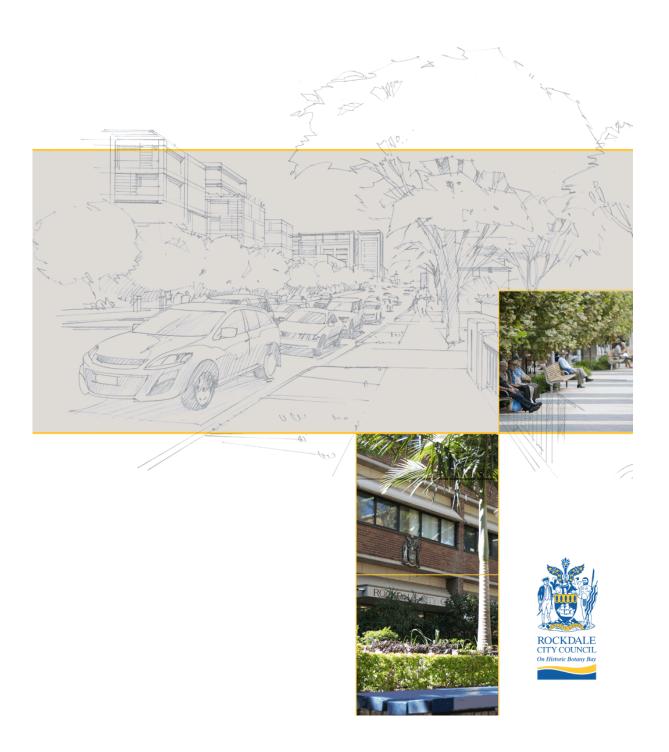
Puede asimismo llamar al Servicio Telefónico de Intérpretes al 131 450 y pedirles que llamen de su parte al Rockdale City Council, teléfono 9562 1666.

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Business Paper authored by Coordinator Urban Strategy (Jacky Wilke ... Page 1 of 11



Council Meeting

Print

General Report - Mee	eting Date: 15/10/2014
Public -	
Item Number:	ORD12
Subject:	PLANNING PROPOSAL & DEVELOPMENT CONTROL PLAN - ROCKDALE TOWN CENTRE
File Number:	F12/479
Report by:	Coordinator Urban Strategy (Jacky Wilkes)
Community Engagement:	Yes
Financial Implications:	No

Precis

Back

The purpose of this Council report is to report back on the exhibition of the Planning Proposal and draft Development Control Plan (DCP) for the Rockdale Town Centre.

The Rockdale Town Centre draft Planning Proposal and draft Development Control Plan (DCP) were publicly exhibited from 19 May 2014 to 16 June 2014. 22 written submissions were received on the Planning Proposal. Eight of 22 submissions offered general support for the Planning Proposal and draft DCP. The remaining submissions raised concerns about specific Planning Proposal or draft DCP controls or requests that additional amendments be made.

A separate matter related to a recent court ruling on the definition of "shop top housing" and its implications on the B2 Local Centre within Rockdale Town Centre is also dealt with in this report. The issues have been taken into account in the preparation of a revised Planning Proposal and draft DCP.

A supplementary matter has been incorporated into this report. It deals with incentives for the creation of pedestrian links and proposes that some variations to development standards may be justified as compensation for the creation of these linkages.

This report recommends that Council adopts the revised Planning Proposal and draft DCP for their finalisation. Revisions to the exhibited versions can be identified by a different colour for additional words and marked deletions (see **Attachments 1 and 2**).

Council Resolution

NOTE:

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Mayor O'Brien had previously declared a Significant Non-Pecuniary Interest in this item on the basis that he has just become aware that a friend of his owns property affected by the Planning Proposal and DCP for the Rockdale Town Centre, and left the Chamber for discussion and voting. The Deputy Mayor, Councillor Barlow, assumed the Chair.

Councillor Saravinovski had previously declared a Significant Non-Pecuniary Interest in this item on the basis that his family owns business, and that no members of his family made any submissions in the Rockdale Town Centre, and left the Chamber for discussion and voting.

Councillor Mickovski had previously declared a Significant Non-Pecuniary Interest in this item on the basis that due to recent changes of his employment with Transport for NSW, and his dealings with relevant Transport Agencies within its cluster, and left the Chamber for discussion and voting.

Councillor Bezic had previously declared a Significant Non-Pecuniary Interest in this item on the basis that a relative owns a property affected by the Planning Proposal and DCP for the Rockdale Town Centre, and left the Chamber for discussion and voting.

Councillor L Sedrak was absent for the voting on this item.

Reverend Martin Goodwin, supporting the Officer Recommendation, addressed the Council.

MOTION moved by Councillors Awada and Tsounis

1 That the report on the Planning Proposal - Rockdale Local Environmental Plan (RLEP) 2011 Rockdale Town Centre and Rockdale Development Control Plan (RDCP) 2011 Amendment No.3 -Rockdale Town Centre Amendment, be received and noted.

2 That Council defers 591-597 Princes Highway and the Interchange Site (which include properties, 2, 4, 6, 8-14 Tramway Arcade; 6,14 Geeves Ave; 471, 475 477, 481, 483, 485, 487, 489, 491, 493, 495, 501, 507, 509 and 511 Princes Highway), under Section 58(3) of the EP&A Act, from the final plan.

3 That Council adopts the revised Planning Proposal - RLEP 2011 Rockdale Town Centre (see Attachment 1) and with the following amendment (shown in quotation marks) to Part 4 – Exceptions to Development Standards (clause 4.6)...(8)(ca) clause 4.3 (2A), 4.4(2A), (2B), (2C) or (2D), "unless it is for a demonstrable public benefit, such as the provision of pedestrian links".

4 That Council adopts the revised RDCP 2011 Amendment No.3 - Rockdale Town Centre, which will come into effect on the day the RLEP Amendment is notified (see Attachment 2) and with the following amendment under the heading Pedestrian Connection, "2. Applicants are encouraged to liaise with Council to deliver a pedestrian link; in return Council may consider flexibility in the application of development standards or development controls."

DIVISION

DIVISION on the MOTION called for by Councillors Awada and Tsounis

FOR THE MOTION

Councillors Macdonald, P Sedrak, Awada, Barlow, Kalligas, Nagi, Ibrahim, Hanna, Tsounis and Poulos

AGAINST THE MOTION

Nil

The MOTION was ADOPTED 10 votes to 0.

NOTE:

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The Deputy Mayor, Councillor Barlow, vacated the Chair at the conclusion of this item and the Mayor, Councillor O'Brien, resumed the Chair.

RECOMMENDATIONS

Officer Recommendation

That voting on this matter be by way of a Division.

1. That the report on the Planning Proposal - Rockdale Local Environmental Plan (RLEP) 2011 Rockdale Town Centre and Rockdale Development Control Plan (RDCP) 2011 Amendment No.3 -Rockdale Town Centre Amendment, be received and noted.

2. That Council defers 591-597 Princes Highway and the Interchange Site (which include properties, 2, 4, 6, 8-14 Tramway Arcade; 6,14 Geeves Ave; 471, 475 477, 481, 483, 485, 487, 489, 491, 493, 495, 501, 507, 509 and 511 Princes Highway), under Section 58(3) of the EP&A Act, from the final plan.

3. That Council adopts the revised Planning Proposal - RLEP 2011 Rockdale Town Centre (see Attachment 1) and with the following amendment (shown in quotation marks) to Part 4 – Exceptions to Development Standards (clause 4.6)...(8)(ca) clause 4.3 (2A), 4.4(2A), (2B), (2C) or (2D), "unless it is for a demonstrable public benefit, such as the provision of pedestrian links".

4. That Council adopts the revised RDCP 2011 Amendment No.3 - Rockdale Town Centre, which will come into effect on the day the RLEP Amendment is notified (see Attachment 2) and with the following amendment under the heading Pedestrian Connection, "2. Applicants are encouraged to liaise with Council to deliver a pedestrian link; in return Council may consider flexibility in the application of development standards or development controls."

Background

OVERVIEW

Since December 2012, the major milestones for the Rockdale Town Centre Masterplan process have been as follows:

- Council adopted the Rockdale Town Centre Masterplan on 5 December 2012. The Masterplan sets out the vision and strategies for the growth and revitalisation of the Centre.
- On 19 June 2013, Council adopted the Rockdale Town Centre Masterplan Implementation Plan and 18 June 2014, Council adopted its first year review. The Implementation plan details Councils approach for working with the community and other stakeholders to implement the Masterplan. Council also endorsed the Planning Proposal for its submission to the Department of Planning and Environment, and endorsed the draft DCP for public exhibition with the Planning Proposal.
- Council received its revised Gateway Determination from the Department of Planning and Environment on the 6 May 2014 which approved the exhibition of the Planning Proposal and draft DCP.
- The Planning Proposal and draft DCP were publicly exhibited from 19 May 2014 to 16 June 2014. Council received 22 submissions from the public and government agencies regarding the draft planning documents. Further information about the content of the submissions received is detailed later in this report.
- The Planning Proposal and draft DCP were assessed by the St George Design Review Panel on 31 July 2014. The comments from the Design Review Panel have been incorporated into

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the review of the draft planning documents.

Overview of the planning documents

The Planning Proposal and the draft Development Control Plan translate the Masterplan into appropriate planning controls to facilitate its implementation. The controls aim to encourage redevelopment and deliver higher quality built form outcomes to ensure that Rockdale excels as the local government area's highest order Centre as per the Centre's hierarchy. Combined with the Implementation Plan, the controls will put in place a robust framework for the built form outcomes of the Masterplan. Following is an overview of the proposed amendments along with how they will facilitate positive change and encourage quality redevelopment.

Planning Proposal

The Planning Proposal seeks to provide flexibility and incentive for redevelopment within desirable building envelopes by:

- amending the maximum building height controls for certain land within the centre;
- removing the maximum FSR control for land in the Centre; and
- introducing design excellence and competition clauses to certain sites.

The Planning Proposal also seeks to:

- encourage and facilitate efficient and logical redevelopment which is capable of delivering public benefit by permitting additional building height for large development sites
- create a transition in land use and density from the Centre core to the surrounding residential areas by rezoning land and increasing permissible building heights at the edge of the Centre; and
- facilitate the provision of new public open space through the rezoning and identification of land for acquisition where identified by the Masterplan.

Draft Development Control Plan

The draft DCP provides detailed building design and built form controls to complement the Planning Proposal

Gateway Determination Process

The Planning Proposal has complied with the Gateway Determination which include the following conditions:

- Made minor changes to some technical content in the Planning Proposal document prior to Public Consultation;
- Conducted Community consultation under section 56(2)(c) and 57 of the EP&A Act; Consult with relevant public authorities under section 56(2)(d) of the EP&A Act and /or
- to comply with the requirements of relevant S117 Directions;
- Noted a pubic hearing was not required to be held into the matter; and
- Noted the time frame for completing the LEP is 12 months from the date of the Gateway determination (that is, 6 May 2014).

SUBMISSIONS SUMMARY

Eight (of 22) of the submissions offered general support for the Planning Proposal and draft DCP.

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Examples of general support for the Planning Proposal and draft DCP:

" In general our client supports the directions under the Rockdale Town Centre Master Plan to guide and encourage redevelopment within the centre, and its implementation through the proposed amendments to the LEP and DCP controls" – Landowner

" I was impressed with the fact that Council was proactive and serious about stimulating the revitalisation of the Rockdale Town Centre district. – Landowner

"...wholeheartedly supports the proposed changes, which aim to encourage redevelopment to take place and stimulate developers into facilitating the urban revitalisation and rejuvenation of the Rockdale Town Centre." – Bexley Chamber of Commerce

The remaining submissions raised concerns about specific controls or requested that certain amendments be made.

Position	Number of Submissions
Site-specific requests to increase building height or	9
reduce minimum site area to receive height incentive	
Concerns that the proposed controls will have negative	7
impacts such as excessive bulkiness, overshadowing and	
traffic and car parking impact	
Other comment and questions	4
Requests to include sites not currently included in the	2
planning proposal	
Total	22

The following table provides further information about the nature of the submissions received:

SUMMARY OF KEY ISSUES

Site-specific requests to increase building height

The majority of submissions were requests for site-specific amendments to building height from the respective land owners. The rationale for these requests were:

- to take advantages of the site's "corner/landmark" location.
- to encourage redevelopment on smaller lot by reducing the minimum lot size requirements

The Planning Proposal (as exhibited) provides a good range of amalgamation incentives with height bonuses. The purpose of the incentive is to encourage appropriate lot site amalgamation to allow better architectural and urban design outcomes and mitigate against the concerns expressed in some submissions that new development will be too bulky and create poor urban amenity. The proposed heights has been underpinned by detailed urban design analysis. Therefore, it is recommended that the height remain as proposed. A detailed review of the submissions and responses is included in **Appendix 3**.

Request to increase building height and defer 591-597 Princes Highway Rockdale

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During the exhibition period, the owners of 591-597 Princes Highway Rockdale drafted a submission seeking significant changes, including height. The site is particularly large and in exchange for additional height and yield the owners are proposing the creation of a substantial urban park that would provide amenity for residents in the entire southern part of the Rockdale Town Centre. At this stage the concept is still being developed with the owners design team and when it is it will require adoption by Council before further public consultation. More detail is included in **Appendix 3**.

Other concerns

Removal of Floor Space Ratio Controls will lead to excessive bulk and scale

A few concerns were raised in public submissions and by the Design Review Panel about the impact of the removal of floor space ratio controls will have a negative impact by resulting in bulky buildings. These concerns have been addressed by applying the Design Excellence control to more areas including sites that propose to take advantage of available height incentives; a subsequent design brief will be prepared to all competitors eligible for Design Competition. The brief will clearly identify all the constraints which must be observed and expected outcomes. In addition, the issue has also been dealt with by provide additional built form controls in the draft DCP. Detailed responses are provided in **Attachment 3**.

The interchange site

During the consultation period of the Planning Proposal, a number of key challenges have raised to the site that require further studies. This included concerns that relate to traffic impact on major intersections and the Obstacle Limitation Surface (OLS) restrictions for building height. It is recommended to defer the interchange site from the Planning Proposal until further studies have been finalised.

Overshadowing impacts on public open space and adjoining neighbouring properties

A few submissions raised concerns about the potential overshadowing impact of King Street Place, the Chapel Street Church and south of Lister Ave. The concern have been addressed by providing an additional clause to the draft Development Control Plan to protect solar access to public spaces. The issue will also be dealt with through expanding the Design Excellence clause to sites that are eligible for height incentives.

Loss of carparking

Two submissions raised concerns regarding the loss of car parking in the Chapel Street Precinct. Under the adopted Rockdale Town Centre Masterplan, 40 carparking spaces will be retained on the Chapel Street Precinct in addition to publicly available parking associated with the future development of the site. In addition, planning has commenced for a new multideck carpark in York Street and additional on-street parking on George Street.

Relationship to heritage buildings

Some concerns were raised about the interface between the heritage buildings and future development. This can be addressed through the design brief as part of the design competition process. The brief will clearly identify that any development adjoining or close to an identified heritage item must be designed to ensure a sympathetic relationship to that item

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in relation to building form and character. It is also noted that Chapel Street is proposed to be retained and formed as a public road adjacent to the historic buildings providing a greater separation to new development and enhancing their presence.

Request for inclusion of specific sites in the planning proposal

Two submissions requested that additional sites to be included in the Planning Proposal. These sites will not be considered in this report because they are outside of the Masterplan study area and not included in the land affected by the planning proposal. This will trigger a substantial delay to the Planning Proposal as further studies are required to be conducted. The owners can, however, pursue separate planning proposals if they wish.

A detailed review of submissions and responses is included in Attachment 3.

Issues that were raised only occasionally or those which had no direct relationship to the planning controls identified in the Planning Proposal and draft DCP have not been discussed further in this report, but were considered, where relevant, in the review of revising the draft documents.

OTHER TECHNICAL MATTERS

Deletion of Active Frontage Clause along Bay Street

The exhibited Planning Proposal applied an active frontage along Bay Street which could realise a supermarket on the site. The notation could undermine the Masterplan vision of a Market Precinct of the current "Target" site. It is recommended to remove the active street frontage requirement in the Planning Proposal to ground floor apartments. Small retail shops fronting the future new open space have also been enabled.

Rezone the green gateway north to B4 Mixed Use

A technical error was identified in the exhibited Planning Proposal in relation to the proposed zoning map. The northern section of Princes Highway (397 - 431A and 376 - 442 Princes Highway) was intended to be rezoned to B4 Mixed Use. However, it was exhibited with the B2 Local Centre Zone, which is not consistent with the Master Plan vision for the green gateways. This adjustment will provide flexibility at the edges of the Centre where traditional strip retail type is not as viable and ensure consistency of the green gateways.

Land and Environment Court (LEC) ruling on "shop top housing"

LEC ruling "Hrsto v Canterbury City Council (No 2) [2014] NSWLEC 121" (Decision date: 14 August 2014). The court finding is that "Shop Top Housing" ::

- means one or more dwellings located above ground floor retail premises or business premises.
- shop top housing is a type of residential accommodation.

The ruling prohibits any form of residential accommodation on the ground floor in the case of the RLEP 2011. An analysis was undertaken to determine the impact of the ruling in the Rockdale Town Centre planning controls. The objectives of the B2 Local Centre were also considered which largely protect employment uses. An urban design analysis identified that there are two sites which could be considered appropriately for ground floor residential accommodation. These areas have two common attributes:

 They both have deep building depths which allows residential accommodation to be built in the centre of the site with commercial/retail development at street frontages.

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 They are located in discontinued laneways meaning that they have poor commercial viability and low traffic volumes allowing for residential amenity. Residential accommodation in these areas would also lead to better outcomes in terms of provide passive surveillance.

Residential accommodation should not be allowed on the ground floor in the B2 Local Area zone with the exception of sites identified above that have unique site attributes. The preferred planning mechanism to facilitate this is in Schedule 1 - Additional Permitted Uses.

Response:

A clause in Schedule 1 - Additional Permitted Uses has been drafted to apply to 564 -570 Princes Highway and 75 - 81 Railway Street, Rockdale to enable residential development at the ground floor.

CHANGES TO PLANNING DOCUMENTS

A number of changes have been made to the Planning Proposal and draft Development Control Plan (DCP) based on submissions received and a response to the recent court ruling matter. Additions to the exhibited Planning Proposal and draft DCP are marked with a different colour in the respective documents (Attachments 1 and 2). Deletions are identified with a strike through of the specific words/sections.

Changes to the Planning Proposal

- Defer two sites in the Planning Proposal. That is, "The Interchange Site" identified as 2, 4, 6, 8-14 Tramway Arcade, 6, 14 Geeves Ave, 471, 475 477, 481, 483, 485, 487, 489, 491, 493, 495, 501, 507, 509, 511 Princes Highway and 591-597 Princes Highway be deferred from the final plan prior to the plan being made.
- Expand the Design Excellence Clause to sites that are eligible for height bonuses.
- Allow ground floor residential accommodation to two sites on the ground floor by amending Schedule 1 in the LEP.
- Delete Active Frontage Clause along Bay Street.
- Other changes were minor wording changes or fixing technical errors in the current Planning Proposal. These changes do not alter the overall objectives in the Planning Proposal.

Changes to the draft Development Control Plan

- Provide an additional control to maintain sufficient solar access to King Street Place.
- Provide additional building envelope controls.
- Reduce carparking rate as an incentive to retain existing arcades and create new connections.
- Allow residential apartment on certain B2 land with building depth restrictions.
- Other changes were minor wording and graphic changes. These changes do not alter the overall objectives in the draft Development Control Plan.

SUPPLEMENTARY INFORMATION - INCENTIVES FOR PEDESTRIAN LINKS

The revised Development Control Plan notes the importance of pedestrian movement within the centre and identifies a need to retain or provide additional pedestrian

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connections between Princes Highway or King Street Place and laneways.

To encourage the provision of pedestrian links some variations in development standards (i.e. height) may be justified by way of compensation.

Two technical changes in the Planning Proposal and revised Development Control Plan are recommended so that the consent authority has the ability to consider variations where they are justified:

• Amend the Planning Proposal with the following:

Part 4 – Exceptions to Development Standards (clause 4.6)...(8)(ca) clause 4.3 (2A), 4.4(2A), (2B), (2C) or (2D), <u>unless it is for a demonstrable public benefit, such as the provision of pedestrian links.</u>

• Amend the revised Development Control Plan (page 7.5_44) under heading "Pedestrian connection", item 2, to replace with the following:

2. Applicants are encouraged to liaise with Council to deliver a pedestrian link; in return Council may consider flexibility in the application of development standards or development controls.

CONCLUSION

This report attaches a revised Planning Proposal and Development Control Plan for adoption so both can proceed to finalisation. This report also explains the rational for deferring two sites from the Planning Proposal so as to allow time for further analysis.

Financial Implications

There are no financial implications applicable to this report.

Community Engagement

The preparation of the Planning Proposal and draft DCP has been underpinned by a sound community engagement plan that was developed in conjunction with Council's Community Planning and Engagement team and is in line with Council's Engagement Process/Protocol (see **Attachment 4**).

External consultation

The Planning Proposal and the draft DCP were on public exhibition between from 19 May 2014 to 16 June 2014 (28 days). Key Strategies include:

- 4,500 notification letters were sent to properties within/adjoining the study Public Notice in the St George Leader.
- Council website Have your say.
- Information Brochure explaining the Planning Proposal and draft DCP.
 Hard copies were available at Rockdale City Library and Council's customer service centre.

Two Public Feedback sessions were held:

- 5 June 2014, 6: 30 8:30pm, 30 people attended
- 12 June 2014, 4:30 6:30pm, 14 people attended

Government Agencies

Input was sought from the following public authorities:

- · Department of Infrastructure & Regional Development
- Sydney Water
- Transport for NSW ٠
- Sydney Airport Corporation Limited

Internal consultation

- · Email to "RCC All Users" seeking feedback
- Notification to Councillors via portal
- · A workshop with Development Assessment Planners was held on 8 July 2014 to discuss current design issues and provide comments to the Planning Proposal and draft DCP
- A presentation to Council's Leadership Team was held on 19 August 2014.

Design Review Panel

The Planning Proposal and draft DCP were presented to the St George Design Review Panel on 31 July 2014. Further information about the content of the submissions received is detailed earlier in this report.

Rockdale City Plan

Outcome:	Outcome 3 - Rockdale is a City with a thriving economy that provides jobs for local people and opportunities for lifelong learning.
Objective:	Objective 3.3 - Our City has vibrant town centres that provide a range of services and experiences for our residents, workers and visitors
Strategy:	3.3.1 - Ensure Town Centres are improved on a rolling program

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Delivery Program:	3.3.1.A - Plan and implement the Town Centre Improvement Program (DCPD)
Operational Plan:	3.3.1.A.1 - Implement the Rockdale Town Centre Masterplan (MUES)
Additional Comments:	
FOT .	
Attachment 1 - Planning Pro	posal_pdf
Attachment 2 - Development	Control Plan Amendment No 3 - Rockdale Town Centre.pdf
Attachment 3 - Review of Su	bmissions - Rockdale Town Centre PP and DCP.pdf
Attachment 4 - Community E	ngagement Strategy - Rockdale Town Centre PP and DCP.pdf

Subject:	RE: 507-511 Princes Highway Rockdale - Draft Transport Assessment CRM:0012263
Date:	Tuesday, 28 February 2017 at 3:34:36 PM Australian Eastern Daylight Time
From:	Pegg, Brendan
To:	Brett Maynard
CC:	Ozinga, Mark, HALL James C, FLYNN Greg, Lee McCourt, Lesli Berger (Iberger@fivex.com.au), Karen McNatty, Nicole Vukic - GTA Consultants, council@bayside.nsw.gov.au, Grosskopf, Tom
Attachments	: image001.gif, image005.jpg, image006.jpg, 161221rep-1651109000 507-511 Princes Highway Rockdale Transport Study DRpdf

Friday, June 9, 2017 at 4:52:14 PM Australian Eastern Standard Time

Hi Brett,

In regards to the draft Transport Study for '507-511 Princes Highway, Rockdale', please see our comments/recommendations on behalf of Transport for NSW (TfNSW) and Roads and Maritime Services (RMS):

Pedestrian Overhead Walkway

TfNSW and RMS notes that Rockdale Masterplan (2013) envisages a pedestrian overhead walkway from Rockdale Station to the at-grade pedestrian crossing on the Highway at King Street intersection via the subject site. Whilst TfNSW and RMS supports the provision of the overhead pedestrian walkway to promote an integrated transport network, the cost of this infrastructure shall be at no cost to the NSW Government.

TfNSW and RMS recommend that Council (as the relevant Planning Authority) should consider having a discussion with the proponent regarding funding arrangements (i.e. through Planning Agreement and/or Section 94) for the provision of the pedestrian bridge.

Vehicle Access

Conflict between motorists entering/exiting the subject site on Geeves Avenue and pedestrian/bus movements along the Rockdale Interchange (Geeves Avenue) should be minimised as much as possible.

TfNSW and RMS recommend that Council (as the relevant Planning Authority) request the applicant to consolidate vehicular access to a single combined entry and exit driveway to service the three sites. This can be achieved either via a right of way between the basement car parks and/or site consolidation planning controls (i.e. minimum frontage requirements to force site consolidation)

TfNSW and RMS also recommend that a Pedestrian Impact Assessment (PIA) and Swept Path Analysis is conducted to demonstrate that vehicle access can safety occur in Geeves Avenue without being detrimental to pedestrians/bus operations.

Loading Dock

Similarly, conflict between heavy vehicles manoeuvring in/out of the subject site and pedestrian/bus movements along Rockdale Interchange (Geeves Avenue) should be minimised as much as possible. It is unacceptable on safety grounds for heavy vehicles to reverse in/out of the subject site directly adjacent a major Transport Interchange with significant pedestrian activity (including elderly, disabled and children) and constant bus movements/operations.

Council (as the relevant Planning Authority) should give consideration to requesting the proponent to consolidate commercial drop/pick up to one single consolidated loading dock with a turntable that enables a 12.5 metre long medium rigid vehicle to enter and exit the loading dock in a forward direction.

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Retail Uses

TfNSW and RMS notes that planning proposal has been assessed on the basis that the retail space (3,890 GFA) will comprise of speciality retail stores and exclude major department stores and/or supermarkets. However, under the proposed zoning a supermarket (i.e. including a large Woolworths/Coles etc) is a permitted use and would generate approximately 14.7 and 15.5 vehicle trips per hour (two-way) per 100m² Leasable Floor Area in the Saturday and Thursday afternoon peaks respectively.

As a supermarket is a permitted use, the traffic generating impacts of a supermarket should be assessed on the basis that this would be the worst case scenario as supermarkets are traffic generating developments.

Car Parking

It is noted that for Site 1 no parking is proposed, leading to a shortfall of 143 spaces (against Council's statutory parking requirements) on the basis that "Site 1 will be unique in its ability to provide access to the public transport network, encouraging high public transport usage through the proposed overhead walkway".

TfNSW and RMS supports the reduction of parking space allocation with sites adjacent to Transport Interchanges. However, to ensure that this parking space reduction is implemented, it is recommended that Council (as the relevant Planning Authority) give consideration to requesting the applicant of the planning proposal to prepare and submit a site specific Development Control Plan for Site 1, which restricts parking for Site 1 and promotes sustainable transport (i.e. car sharing).

Bicycle Parking

The site would need to provide Bicycle Parking Facilities in accordance with *Australian Standards Bicycle Facilities AS2890.3*. This should be documented in Section 7.3 'Bicycle Parking) (page 32) of the Transport Study.

Princes Highway/Geeves Avenue

It is noted that analysis of the intersection of Geeves Avenue and Princes Highway has identified that right turn movements are impacting the overall performance of the intersection and is likely to improve through the removal of existing on-street parking on Geeves Avenue (approach and departure) between the Highway and Geeves Lane.

As the planning proposal is likely to result in exacerbating the delays at this intersection, Council (as the relevant Planning Authority) may wish to give consideration to the proponent being required to remove the parking prior to the release of any Occupation Certificate for any development post gazettal of the planning proposal.

Construction Traffic

Construction vehicle access to/from the subject site has the potential to be problematic due the site having frontage to both the Highway and bus operations on Geeves Avenue/Tramway Arcade.

TfNSW and RMS recommend that the proponent should be conditioned to submit a strategic Construction Pedestrian and Traffic Management Plan (CPTMP) as part of any future Part 4 DA. The CPTMP needs to specify, but not limited to, the following

- Location of the proposed work zone;
- Haulage routes;
- o Construction vehicle access arrangements;
- Proposed construction hours;

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- o Estimated number of construction vehicle movements;
- Construction program;
- Consultation strategy for liaison with surrounding stakeholders;
- Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works;
- Cumulative construction impacts of other projects in the vicinity. Existing CPTMPs for developments within or around the development site should be referenced in the CPTMP to ensure that coordination of work activities are managed to minimise impacts on the road network; and
- Should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist should be clearly identified and included in the CPTMP.

If you have any questions, regarding the above information, please let me know.

Kind regards,

Brendan Pegg Analyst, Integrated Planning Service Planning & Development Infrastructure and Services Transport for NSW

T 02 8202 2862 | M 0400 250 950 Level 2, 18 Lee St Chippendale NSW 2008



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From: Brett Maynard [mailto:brett.maynard@gta.com.au]
Sent: Friday, 23 December 2016 7:35 AM
To: Sangar, Para; Ozinga, Mark; Pegg, Brendan; POPOFF Andrew M
Cc: Lee McCourt; Lesli Berger (lberger@fivex.com.au); Karen McNatty; Nicole Vukic - GTA Consultants
Subject: 507-511 Princes Highway Rockdale - Draft Transport Assessment CRM:0012263

Hi all

Following previous meetings to discuss the scope and potential impacts of the above development adjacent to Rockdale Station, please see the attached draft transport assessment for your review and comment prior to formal lodgement with the Planning Proposal.

Mark and Para - Edmond was previously involved with this one. Can you please advise who will take over?

Have a great Christmas break and we look forward to discussing this further in the New Year.

Regards

Brett Maynard Director GTA Consultants 02 8448 1800 0414 240 412 Level 6, 15 Help Street, Chatswood, NSW 2067 www.gta.com.au

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Interchange Precinct Geeves Avenue, Rockdale Transport Study

 Client //
 Fivex

 Office //
 NSW

 Reference //
 16S1109000

 Date //
 31/10/17

Interchange Precinct

Geeves Avenue, Rockdale

Transport Study

Issue: D 31/10/17

Client: Fivex Reference: 16S1109000 GTA Consultants Office: NSW

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A	12/05/17	Final	Andrian Juric	Nicole Vukic / Karen McNatty	Brett Maynard	Brett Maynard
В	30/05/17	Final	Andrian Juric / Oasika Faiz	Karen McNatty	Brett Maynard	Brett Maynard
с	16/10/17	Final – Response to Council Comments added	Andrian Juric / Oasika Faiz	Karen McNatty	Brett Maynard	Brett Maynard
D	31/10/17	Final	Andrian Juric / Oasika Faiz	Karen McNatty	Brett Maynard	B.T. Mayned

\ Report - NSVV (160805 v1.10

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1. Introduction

1.1 Background

1

A planning proposal is to be lodged with Rockdale City Council (Council) on behalf of the owner of 507-511 Princes Highway, Rockdale for a mixed-use development on land identified by Council as the 'Transport Interchange Precinct' located on Geeves Avenue, Rockdale.

It is anticipated that the planning proposal will include three separate mixed use sites, which combined would incorporate:

- o 257 residential units, including:
 - o 59 studio units
 - o 38 one bedroom units
 - o 133 two bedroom units
 - o 27 three bedroom units
- o 3,890 square metres retail space.

Fivex commissioned GTA Consultants (GTA) to undertake a transport study to support the planning proposal.

1.2 Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the planning proposal, including consideration of the following:

- i Existing traffic and parking conditions surrounding the site
- ii Suitability of the proposed parking in terms of supply and layout
- iii Service vehicle requirements
- iv Pedestrian and bicycle requirements
- v The traffic generating characteristics of the Planning Proposal
- vi The transport impact of the development proposal on the surrounding road network.

1.3 Consultation

Department of Planning and Environment, Transport for NSW (TfNSW), Roads and Maritime Services (Roads and Maritime) and Bayside Council (formerly Rockdale City Council) were consulted at the start of this assessment to gain agreement on the study methodology and ensure elements required by TfNSW and Roads and Maritime in particular were assessed. Various meetings held to confirm the final scope and a draft version of this study was provided to TfNSW, Roads and Maritime and Council for comment. Comments received on the draft report have been incorporated into this final assessment.

1.4 References

In preparing this report, reference has been made to the following:

- An inspection of the site and its surroundings on Thursday 11 August 2016
- o Rockdale City Council Development Control Plan (DCP) 2011

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1

- Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004
- Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS 2890.2:2002
- Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009
- Traffic and car parking surveys undertaken by Matrix Traffic and Transport Data as referenced in the context of this report
- o Proposed precinct schedule prepared by Eeles Trelease dated 17 August 2016
- o Other documents and data as referenced in this report.

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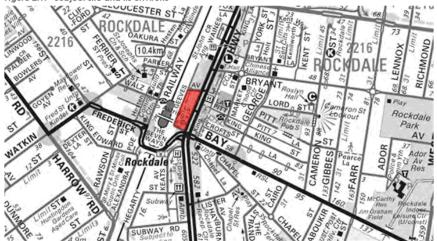
2

2. Existing Conditions

The subject site is bounded by the Princes Highway, Geeves Avenue and Tramway Arcade, Rockdale and is known as the Interchange Precinct, in the Rockdale Town Centre Masterplan. The site of around 6,000 square metres has a frontage of 140 metres to Princes Highway in the east, 50 metres to Geeves Avenue in north, 130 metres to Geeves Avenue in the west and 55 metres to Tramway Arcade in the south. The site currently has a land use classification as B2 – Local Centre and is occupied by retail and commercial land uses. The surrounding properties predominantly include commercial and retail uses.

The location of the subject site and its surrounding environs is shown in Figure 2.1.

Figure 2.1: Subject site and its environs



Source: Sydways

2.1 Road Network

2.1.1 Adjoining Roads

Princes Highway

The Princes Highway is a classified State road (Roads and Maritime Services [Roads and Maritime] Road Number 1) and is a major north-south aligned route linking Sydney CBD with Sydney's southwestern suburbs and Wollongong. It is a two-way road configured with a six-lane divided road with an 18-metre wide carriageway, set within an approximately 22-metre wide road reserve. It has a posted speed limit of 60 km/h.

Kerbside parking is permitted, subject to half-hour time restrictions and peak period clearway restrictions.

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The Princes Highway is shown in Figure 2.2 and Figure 2.3 and carries around 38,000 vehicles per day¹.

Geeves Avenue

Geeves Avenue is a local road and near the site is aligned in a north-south direction. It is a twoway road configured with a two-lane, 11-metre wide carriageway, set within an 11.5-metre wide road reserve. It has a posted speed limit of 10 km/h along the western frontage of the site and 50 km/h along the northern frontage of the site.

Adjacent to the western site frontage, Geeves Avenue includes a bus zone, which is part of the Rockdale Transport Interchange. There is kerbside parking on Geeves Avenue adjacent to the northern site frontage including a loading zone, five-minute and one-hour time restricted parking on both sides of the road.

Geeves Avenue is shown in Figure 2.4 and Figure 2.5 and carries around 400 vehicles per day².

Figure 2.2: Princes Highway (facing south)



Figure 2.4: Geeves Avenue (facing south)

Figure 2.3: Princes Highway (facing north)



Figure 2.5: Geeves Avenue (facing north)



1 Based on the peak hour traffic counts undertaken by GTA in July 2016 and assuming a peak-to-daily ratio of eight per cent for arterial roads.

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² Based on the peak hour traffic counts undertaken by GTA in July 2016 and assuming a peak-to-daily ratio of eight per cent for arterial roads and 10 per cent for local roads.

2.1.2 Surrounding Intersections

The following intersections currently exist near the site:

- Princes Highway/ Bryant Street (signalised)
- o Princes Highway/ Geeves Avenue (signalised)
- o Princes Highway/ Bay Street/ The Seven Ways/ Tramway Arcade (signalised)
- o Geeves Avenue / Geeves Lane (priority controlled).

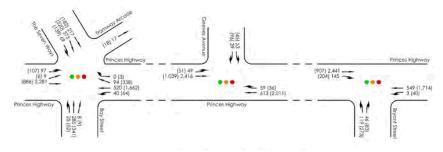
2.2 Traffic Volumes

GTA commissioned traffic movement counts on key roads near the site on 4 August 2016 during the following peak periods:

- o 6:30am and 9:30am
- o 3:30pm and 6:30pm.

The AM and PM peak hour traffic volumes are summarised in Figure 2.6, with full results contained in Appendix A of this report.

Figure 2.6: Existing AM / PM peak hour traffic volumes



10 (10) = AM Peak Hour Flow (PM Peak Hour Flow)

Traffic volumes accessing Geeves Avenue is largely associated with pick-up/ drop-off activities for the Rockdale Transport Interchange and the 159-car space Geeves Avenue/Lane commuter car park.

2.3 Intersection Operation

The operation of the key intersections within the study area have been assessed using the network analysis function of SIDRA Intersection³, a computer based modelling package, which calculates intersection performance.

The commonly used measure of intersection performance, as defined by the Roads and Maritime, is vehicle delay. SIDRA Intersection determines the average delay that vehicles encounter and provides a measure of the level of service.

Table 2.1 shows the criteria that SIDRA Intersection adopts in assessing the level of service.

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5

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Table 2.1	SIDRA	Intersection		service	criteria
Tuble 2.1.	JIDKA	mersection	level 0	service	ciliena

LOS	Average delay per vehicle (secs/veh)	Traffic signals, roundabout	Give way and stop sign
A	Less than 14	Good operation	Good operation
В	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
С	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Near capacity	Near capacity, accident study required
E	57 to 70	At capacity, at signals incidents will cause excessive delays	At capacity, requires other control mode
F	Greater than 70	Extra capacity required	Extreme delay, major treatment required

Table 2.2 presents a summary of the existing operation of the key intersections, with full results presented in Appendix B.

Table 2.2:	Existing	operating	conditions	(2016)
------------	----------	-----------	------------	--------

Intersection	Control	Peak	Degree of saturation (DOS)	Average delay (sec)	95th percentile queue (m)	LOS
Princes Highway/ Bryant Street	Signalised -	AM	0.64	12	126	A
		PM	0.58	18	178	В
Princes Highway/ Geeves Avenue	Signalised	AM	0.85	4	37	A
	signalisea -	PM	1.02	31	122	с
Princes Highway/ Bay Street/ The Seven Ways/ Tramway Arcade	Signalised PM	AM	1.18	49	446	D
		PM	0.89	38	205	с

Based on the above assessment, all the intersections analysed currently operate at an acceptable level of service, with the Princes Highway/ Bryant Street and Princes Highway/ Geeves Avenue intersections indicating there is some spare capacity in the AM peak. During both the AM and PM peaks the intersection of the Princes Highway/ Bay Street is operating at an acceptable level but is approaching capacity.

2.4 Car Parking

A review of publicly available car parking near the site indicates that parking demand is high.

Parking along the Princes Highway is generally at capacity outside of restricted parking times. Within the dedicated off-street parking areas, employee parking was full and in some instances tandem parking was observed.

Near the site there also exists the following public car parks:

 Geeves Avenue/Lane commuter car park – located adjacent to the proposal this car park is at-grade with 151 long term parking spaces, including five accessible spaces, in addition there are eight ¼ P restricted spaces

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- Chapel Street car park an at-grade car park with 120 short stay and 27 long stay parking spaces
- Target car park located in the middle of the Rockdale town centre, the site contains approximately 200 long stay and 175 short stay parking spaces
- York Street car park located close to Rockdale Town Hall it contains 66 short stay and 21 long stay at-grade car parking spaces
- Railway Street car parks there are two at grade car parks provided on the opposite side of the station with around 22 spaces provided in the car park closest to the station and 28 spaces provided in the car park further north.

Figure 2.7: On-street parking – Princes Highway

Figure 2.8: Off-street employee parking – Geeves Avenue



2.5 Public Transport

The site is well serviced by public transport. Adjacent to the site is a high frequency bus interchange and access to the rail network through Rockdale station. The site's proximity to the Rockdale bus interchange and Rockdale station is shown in Figure 2.9.

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7



rce: Base map from Sydways

The bus interchange provides regular services to the surrounding area with buses travelling to:

- Sydney CBD 0
- Hurstville 0
- Brighton-Le-Sands 0
- 0 Bondi Junction
- Burwood 0
- Campsie. 0

Rockdale station is located on the T4 – Eastern Suburbs and Illawarra Line and provides commuters access to the rail network. The station provides direct services to the CBD and southern centres including Cronulla and Wollongong.

Services to the CBD and to the southern centres arrive at Rockdale station every 10 minutes throughout the day.

The local public transport network summarised in Figure 2.10.

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Source: Transport Buses (Sydney Buses)

2.6 Pedestrian and Cycling Infrastructure

The site and its surroundings are well connected by pedestrian infrastructure.

Pedestrian paths are located as follows:

- o Princes Highway (both sides)
- o Geeves Avenue, northern frontage (both sides)
- o Tramway Arcade (both sides).

Pedestrian footpaths are shown in Figure 2.11 and Figure 2.12.

Figure 2.11: Footpath – Geeves Avenue Figure 2.12: Footpath – Princes Highway



Crossing facilities in vicinity of the site include the following:

- o Geeves Avenue adjacent to the site's internal walkway
- All legs of the Princes Highway/ Bay Street/ The Seven Ways/ Tramway Arcade intersection
- o All legs of the Princes Highway/ Geeves Avenue intersection
- o Princes Highway signalised pedestrian crossing (mid-block).



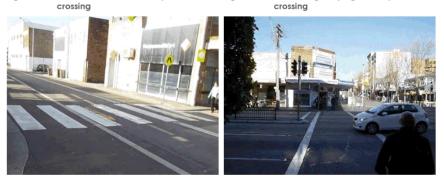
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Item 5.2 – Attachment 8

The crossings maintain pedestrian permeability in the area and provide direct access from the King Street shared zone to Rockdale station. The Geeves Avenue crossing and the Princes Highway crossing are shown in Figure 2.13 and Figure 2.14.

Figure 2.13: Geeves Avenue marked pedestrian Figure 2.14: Princes Highway signalised pedestrian



In addition, the site contains an internal pedestrian walkway. This walkway is connected to a larger east-west pedestrian link that runs through Rockdale. The walkway is shown in Figure 2.15 and Figure 2.16.

Figure 2.15: Internal walkway (facing east)

Figure 2.16: Internal walkway (facing west)



The King Street shared zone is about 17 metres wide and 100 metres long. It provides pedestrian access to the eastern retail precinct and is connected to the site via the Princes Highway signalised pedestrian crossing. The shared zone is shown in Figure 2.17.

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Figure 2.17: King Street shared zone

The site is located within proximity of an on-road cycling route. The route is located on Railway Street, 100 metres west of the subject site and has a north-south orientation. The route generally runs parallel with the railway line and connects the Rockdale Local Government Area (LGA) with the Cooks River cycleway and the greater Sydney cycle network.

The subject site and the surrounding cycling network is shown in Figure 2.18.





11



Source: Rockdale City Council

A summary of the all existing pedestrian and cycling infrastructure is shown in Figure 2.19.

Figure 2.19: Pedestrian and cycling infrastructure summary



Source: NSW Department of Finance, Services and Innovation (DFSI)



2.6.1 Pedestrian Activity

GTA completed pedestrian surveys in November 2016 during the weekday AM (7am to 9am) and PM (4:30pm to 6:30pm) peak periods. The peak hourly pedestrian movements near the site are summarised in Table 2.3 and Table 2.4 and shown in Figure 2.20.

Table 2.3: Pedestrian movements to/from Rockdale station

	To Rockdo	ale station	From Rockdale station		
Location	AM peak (7:45-8:45am)	PM peak (4:45pm-5:45pm)	AM peak (7:45-8:45am)	PM peak (4:45pm-5:45pm)	
Tramway Arcade	842	215	106	392	
Internal walkway	273	130	104	220	
Car park	43	27	12	46	

Table 2.4: Peo	destrian movemen	ts to/from	bus stop
----------------	------------------	------------	----------

	To bu	s stop	From bus stop		
Location	AM peak (7:45-8:45am)	PM peak (4:45pm-5:45pm)	AM peak (7:45-8:45am)	PM peak (4:45pm-5:45pm)	
Internal walkway	32	14	29	3	
Car park	5	1	0	2	

The following observations were made with respect to the pedestrian arrival and departure profiles during the peak periods:

- Tramway Arcade carries the highest proportion of pedestrians near the site, with up to 950 and 607 pedestrians (two-way) observed to use this link during the AM and PM peak hours, respectively
- The internal walkway carries around 410 and 370 pedestrians during the AM and PM peak hours, respectively
- The footpath linking the station and bus stop to the commuter car park carries around,
 60 and 80 pedestrians (two-way) during the AM and PM peak hours, respectively.





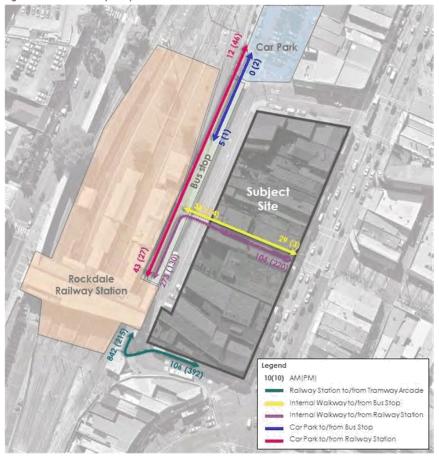


Figure 2.20: AM and PM peak pedestrian movements

Basemap source: Nearmap

Analysis of the pedestrian surveys show that there is a high demand for pedestrian access from Rockdale station through Tramway Arcade to the Princes Highway and through the existing internal walkway between Geeves Avenue and the Princes Highway.

2.7 Existing Travel Behaviour

The 2011 Census data provided by the Australian Bureau of Statistic (ABS) was reviewed to understand the travel demand characteristic for the travel zone containing and surrounding the subject site (TZ 2606). The travel zone is shown in Figure 2.21.





Source: NSW Bureau of Transport Statistics accessed February 2016 (http://visual.bts.nsw.gov.au/jtwbasic/)

Place of Work

The 2011 Census data indicates that a total of 4,027 employed residents live in the relevant travel zones. Of these, 32 per cent worked in Sydney CBD, 19 per cent worked in the eastern suburbs and Botany and 15 per cent worked within the Rockdale/ Kogarah statistical area. Figure 2.22 shows where the 4,027 employed residents in the travel zone go to work.





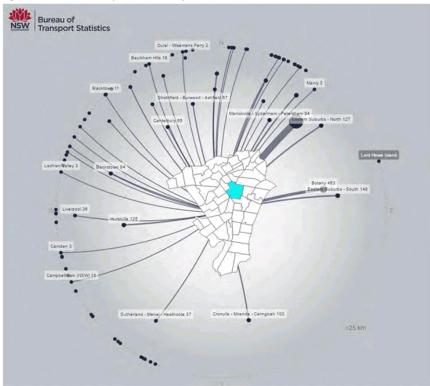


Figure 2.22: Place of work (statistical area 3) for workers in travel zones 2764, 2766 and 2768

Source: NSW Bureau of Transport Statistics accessed February 2016 (http://visual.bts.nsw.gov.au/jtwdynamic/)

Place of Residence

2011 Census indicates that 2,756 people were employed in the travel zone, of which 36 per cent lived in the Kogarah/ Rockdale area. The remaining 64 per cent lived outside Rockdale, predominantly in neighbouring statistical areas, such as Hurstville (12 per cent), Sutherland/ Menai/ Heathcote (seven per cent), Canterbury or Cronulla/ Miranda/ Caringbah (seven per cent) and Bankstown (five per cent). Figure 2.23 shows where the 5,386 people who work in the travel zone originate.



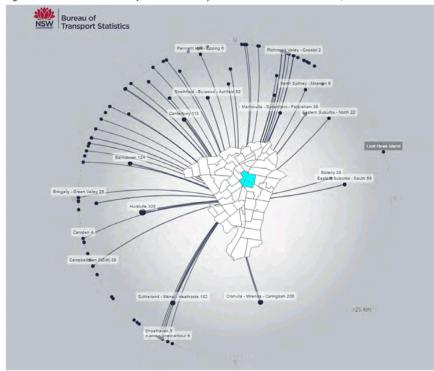


Figure 2.23: Place of residence (statistical area 3) for workers in travel zones 2764, 2766 and 2768

Source: NSW Bureau of Transport Statistics accessed February 2016 (http://visual.bts.nsw.gov.au/jtwdynamic/)

Mode Choice

2011 Census indicates that for trips to locations where access to public transport is well established, commuter trips would generally be made using public transport. For employed residents of Rockdale, mode choice for each location in descending order of commuter volumes is as follows:

- o Sydney Inner City (1,296): 81 per cent public transport, 19 per cent private vehicle
- Kogarah/ Rockdale (604): 29 per cent walked only, 20 per cent public transport, 46 per cent private vehicle
- o Botany (453): 35 per cent public transport, 63 per cent private vehicle
- o Eastern Suburbs South (148): 30 per cent public transport, 67 per cent private vehicle
- o North Sydney Mosman (144): 75 per cent public transport, 25 per cent private vehicle
- o Eastern Suburbs North (125): 66 per cent public transport, 33 per cent private vehicle
- The key mode of travel used by people employed in the Travel Zone included vehicle as a driver or passenger (59 per cent), train (14 per cent), walked only (nine per cent) and bus (five per cent).



Sustainable Transport Infrastructure 3.

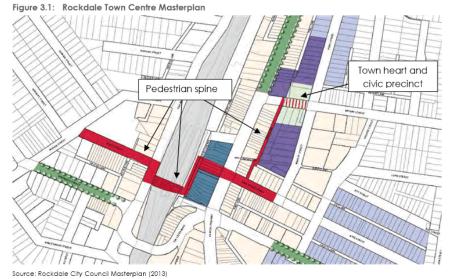
3.1 Rockdale Masterplan (2013)

The Rockdale Masterplan is a document developed by Council and addresses the growing needs within the Rockdale town centre. The overall aim of the document is to set out how the area can achieve the following:

- Establish a unique identity for Rockdale 0
- 0 Grow the town heart and civic role
- Increase the vitality and lifestyle 0
- Improve the pedestrian experience 0
- 0 Strengthen the centre's economic hubs
- Provide convenience and legible access for visitors. 0

In pursuit of the above, Council has recognised the area occupied by the subject site as playing a crucial role in the overall development of Rockdale's sustainable transport infrastructure.

The subject site will make up the centre point of the proposed pedestrian spine expected to be developed in the future. This pedestrian spine is shown in Figure 3.1.



Council plans to have a pedestrian walkway that that connects the King Street shared zone with

Watkin Street in the west. The pedestrian spine will run through the site and connect to the overhead pedestrian walkway at Rockdale station via a pedestrian bridge. This walkway will then connect to the at grade pedestrian foot path. An artist's impression of this connection is shown in Figure 3.2.



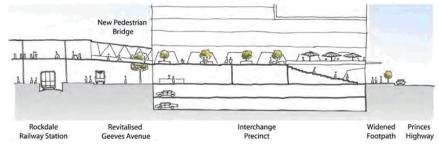


Figure 3.2: Anticipated cross section (artist's impression)

Council also anticipates that any future development at the subject site will incorporate high density, mixed use land. Figure 3.3 is an extract from the masterplan and shows that Council expects high rise developments to occur. The figure shows indicative floor plans and anticipated building heights.





The extract from Council's masterplan shows that Council anticipates major development to occur on site.



3.2 Existing Development

The existing development consists of an assortment of commercial and retail outlets with a total area of around 6,000 square metres. Existing developments are generally limited to a single ground level with access points along Tramway Arcade, the Princes Highway and Geeves Avenue. Traffic generated by the combined commercial and retail outlets are generally limited to pedestrian traffic. Any vehicular traffic generated by the site is assumed to be diverted to one of the surrounding public car parks.



4. Development Proposal

4.1 Proposal

The proposal includes the development of three separated areas with residential, commercial and retail uses. These sites are known in this report by the following names:

- o Site 1: 507 511 Princes Highway
- o Site 2: mid site
- o Site 3: end site.

The anticipated land use to form the planning proposal includes:

- o 59 studio units
- o 38 one bedroom units
- o 133 two bedroom units
- o 27 three bedroom units
- o 3,890 square metres retail space.

The proposed development should provide parking that satisfies Council's DCP and AS 2890.1 requirements. Site 1 proposes to provide direct pedestrian access to Rockdale station. It is proposed that an overhead pedestrian walkway over Geeves Avenue would connect the station to the site and through to the Princes Highway at the intersection of Bays Street/Princes Highway/Tramway Arcade/ The Seven Ways. When complete, Site 1 will be unique in its ability to provide access to the public transport network, encouraging high public transport use to key employment destinations and active transport use to key amenities within the Rockdale town centre. Based on the high public transport usage expected for the interchange precinct, the provision of the pedestrian link is proposed in exchange for reduced parking provision. However, it is proposed that car parking and loading facilities would be combined across the three sites.

A common car park and combined loading dock is proposed across the basement of all three sites. This would also comply with motorcycle parking and relevant bicycle end of trip facilities requirements.

Loading and service areas on site will be designed such as to be compliant with Council's DCP and AS 2890.1.

The development schedule for each site is summarised in Table 4.1, Table 4.2 and Table 4.3 with a summary of the entire site shown in Table 4.4.

Type Yield Studio 15 1 Bedroom 18 2 Bedroom 42 3 Bedroom 9		
Studio	15	
1 Bedroom	18	
2 Bedroom	42	
3 Bedroom	9	
Sub-total	84 units	
Ground Floor	1,297 m ²	
Area	1,723 m ²	
	Studio 1 Bedroom 2 Bedroom 3 Bedroom Sub-total Ground Floor	

Table 4.1: Site 1 – 507-511 Princes Highway development schedule



Table 4.2: Site 2 – Mid site development schedule

Use	Type Yield Studio 24 1 Bedroom 9 2 Bedroom 50 3 Bedroom 9 Sub-total 92 units		
	Studio	24	
	1 Bedroom	9	
Residential	2 Bedroom	50	
	3 Bedroom	9	
	Sub-total	92 units	
Retail	Ground Floor 1,297 m		
Site Ar	ea	2,166 m²	

Table 4.3: Site 3 – End site development schedule

Use	Type Yield Studio 20 1 Bedroom 11 2 Bedroom 41 3 Bedroom 9 Sub-total 81units		
	Studio	20	
	1 Bedroom	11	
Residential	2 Bedroom	41	
	3 Bedroom	9	
	Sub-total	81 units	
Retail	Ground Floor	1,297 m ²	
Site A	Site Area		

Table 4.4: Summary development schedule

Use	Туре	Yield	
	Studio	59	
	1 Bedroom	38	
Residential	2 Bedroom	133	
	3 Bedroom	27	
	Sub-total	257 units	
Re	3,890 m²		
Site	Site Area		



5. Car Parking

5.1 Car Parking Requirements

The car parking provision requirements for different development types are set out in Council's DCP 2011. A review of the car parking rates and the gross floor area (GFA) schedule results in a parking requirement for the planning proposal is summarised in Table 5.1.

Table 5.1: DCP car parking requirements

Precinct Total				428				
Individual Total				143		145		140
Retail 1 space/ 40 m ² GFA		1,297	33	1,297	33	1,297	33	
	Su	ub-Total		110	112		107	
	Visitor	1 space/ 5 dwellings	84	17	92	19	81	17
Residential 3 Bed	3 Bed	2 spaces/ unit	9	18	9	18	9	18
	2 Bed		42	42	50	42	41	41
	1 Bed	1 space/ unit	18	18	9	9	11	11
	Studio		15	15	24	24	20	20
	036	rate	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement
Description	Use	DCP parking	507 – 511 Princes Highway		Mid site		End site	

As outlined in Table 5.1 to comply with the DCP requirements the precinct would need to provide a total of 428 parking spaces.

5.2 Empirical Assessment of Car Parking Demand

5.2.1 Residential

The NSW Department of Planning and Environment have released the Apartment Design Guide4 (ADG) that provides commentary on acceptable levels of car parking provision.

The ADG states that for developments either:

- within 800 metres of a railway station or light rail stop in Sydney Metropolitan Area; or
- on land zoned, or within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre,

the lesser resident and/ or visitor car parking rate of either the 'Guide to Traffic Generating Developments' (October 2002) or the relevant Council's requirements <u>can</u> be used.

The site is uniquely positioned within 20 metres of the Rockdale station and bus interchange, and on land proposed to be zoned B4 Mixed Use. As such, the lesser resident and visitor car parking rates provided in the Roads and Maritime Guide are applicable.

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⁴ NSW Department of Planning and Environment, Apartment Design Guide, July 2015.

An assessment of the car parking requirements adopting the high density residential rates in the Roads and Maritime Guide is presented in Table 4.2.

Table 4.2:	Roads and Mariti	me - residential	l parking requirements
------------	------------------	------------------	------------------------

Description Use				511 Princes way (Site 1)	Mid site (site 2) End site		site (site 3)	
	Parking rate	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	
	Studio	0.4	15	6	24	10	20	8
	1 Bed	spaces / unit	18	8	9	4	11	5
Residential	2 Bed	0.7 spaces / units	42	30	50	35	41	29
	3 Bed	1.2 spaces / units	9	11	9	11	9	11
	Visitor	1 space / 5 units	84	17	92	19	81	17
Individual Resi	dential Tota	I		72		79		70
Precinct Resid	ential Total			2	21			

Table 4.2 indicates that the application of the Roads and Maritime based residential parking rates would equate to a residential parking demand of 221 car spaces across the precinct. This is less than the DCP residential car parking requirement of 329 spaces. Therefore, in accordance with the ADG, the Roads and Maritime parking provision would be applicable to the proposed development sites.

5.2.2 Retail

The DCP parking rates for the retail land uses result in a requirement of 99 spaces for the retail components of the planning proposal.

5.3 Car Sharing Opportunities

There are currently no GoGet car sharing pods located in Rockdale. To encourage and promote sustainable transport there could be an opportunity to provide parking GoGet cars within the precinct. Providing GoGet vehicles promotes car sharing and provides vehicles to residents and tenants if required.

5.4 Adequacy of Parking Supply

The proposal provides a combined basement car park across the precinct. The proximity of the entire site to the local train and bus network provides unparalleled access to public transportation. The site located at the southern end (507-511 Princes Highway) proposes to construct a direct pedestrian walkway (overbridge) from the station through the site and to the Princes Highway. This unique opportunity will promote the use of public transport and reduce car occupancy for the site. It is therefore proposed that in exchange for the development providing an innovative direct link to the train station, that the retail component of parking from Site 1 be removed, therefore reducing the retail parking spaces by one-third across the precinct.



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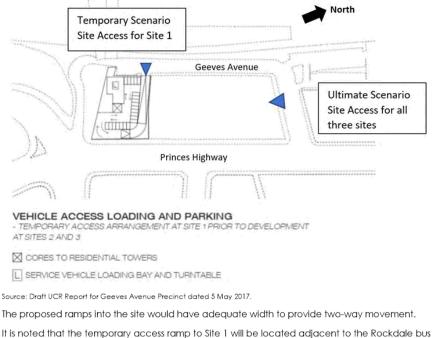
The development proposes to provide a maximum total of 395 car parking spaces across the precinct, which would result in a shortfall of 33 spaces, when compared to the DCP requirement. Due to the unique ability of direct access to the public transport network, it is considered that 395 parking spaces should be the maximum number provided across the precinct, with possible consideration being given to reduce the retail component of parking further to tenant (staff) parking only. This arrangement will meet the Roads and Maritime parking requirements in accordance with the ADG discussed in Section 5.2.1, with further opportunity to also reduce resident parking in accordance with the ADG.

5.5 Access Arrangements

The access arrangements for the complete development of the site (Sites 1, 2 and 3) are proposed to be from a single (two-way) access provided from Geeves Avenue at the northern end of the site as shown in Figure 5.1. This access would connect through to a centralised loading dock and parking areas for all three sites.

However, it is likely that Site 1 will be developed first and therefore a temporary access for Site 1 is proposed as shown in Figure 5.1. This access would be removed under the ultimate scenario (or restricted to service vehicles only) when Sites 2 and 3 are developed.

Figure 5.1: Site Access – Temporary and Ultimate Scenarios



It is noted that the temporary access ramp to Site 1 will be located adjacent to the Rockdale bus interchange. Vehicles accessing this site will enter and exit in a forward direction. The temporary access is not expected to negatively affect the operation of the bus interchange. In the ultimate scenario the access ramp is proposed to be located on the northern section of Geeves Avenue



away from the bus interchange and therefore would not adversely impact the operation of the bus interchange.



6. Traffic Impact Assessment

6.1 Overview

The traffic impact assessment for the planning proposal has been undertaken in the following manner:

- Identification of the traffic generation characteristics of the land uses that form the planning proposal
- Off-setting the existing traffic volumes being generated by the subject site.

6.2 Traffic Generation

6.2.1 Development Generated Traffic

Traffic generation estimates for the land uses that form the planning proposal are based the Roads and Maritime Guide to Traffic Generating Developments 2002 and Roads and Maritime Technical Direction 2013/04a (TDT 2013/4a).

Residential Uses

TDT 2013/04 provides updated rates for high density residential flat dwellings (2012 surveys) that are close to public transport services, greater than six storeys and almost exclusively residential in nature.

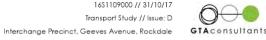
TDT 2013/04 conducted surveys of 10 separate sites, eight of which were in the Sydney metropolitan area and two located in regional NSW. Two of the surveys were conducted in Chatswood and Parramatta. Traffic generation rates for the planning proposal were based on the rates derived from these surveys.

TDT 2013/04 indicates that for Parramatta and Chatswood, an average AM peak hour trip generation of 0.15 trips per hour per apartment, with PM peak hour rates slightly lower at 0.08 trips per hour. These rates have been adopted for the residential component of this assessment.

Retail Uses

The proposal includes ground level and level one retail space and is expected to comprise of specialty retail stores, thus excluding major department stores and/or supermarkets. As such, the Thursday evening rate applicable to speciality stores of 46 vehicle movements per 1,000 square metres gross leasable floor area (GLFA) as detailed in the Roads and Maritime Guide (2002) has been adopted for the retail space. It has also been assumed that retail activity would be lower during the AM peak hour than the PM peak hour. Therefore, the traffic generated by the retail component for the AM has been assessed based on a rate 50 per cent that of the PM peak hour.

It is also considered that the retail uses will largely operate as complementary to not only the proposed residential uses, but all surrounding existing land uses given the site's proximity to the Rockdale town centre and Rockdale station. Retail analysis suggests that around 40 per cent of retail activity within mixed use developments is generated by the residential component of the same site. That said, no reduction has been applied to reflect this characteristic.



Existing Uses

As previously discussed the existing site consists of an assortment of small commercial/ retail outlets. On-site inspections revealed that most individual outlets were restricted to a single storey and no public parking spaces are provided on site. It was observed that most of the traffic generated by the existing land uses is pedestrian. It is also noted that any vehicular traffic generated by the site would likely use the surrounding public car parks or on-street parking, and therefore it was not possible to accurately survey existing traffic generation.

The entire existing site is around 6,000 square metres, with an estimated 4,600 square metres GLFA. Most visitors to the current site would be from those passing by either by vehicle or walking. It is not expected that this site would be considered a destination. It has been assumed that the GLFA of the site would therefore be around 3,500 square metres. The expected traffic generation of the existing site has been reduced to 50 per cent as a conservative approach to calculate based on no on-site parking and passing by traffic. The total anticipated existing traffic generation is shown Table 6.1 and will be offset from the expected traffic generation of the site.

Table 6.1: Existing retail traffic generation

Land use		Weekc	lay AM	Weeko	lay PM
	Total size	Trip rate	Vehicle trips per hour (vtph)	Trip rate	vtph 81
Existing retail	3,500 m² GLFA [1]	23 per 1,000 m²	81	23 per 1,000 m² [2]	81

[1] GFA to GLFA conversion: 0.75 GFA = GLFA

[2] 23 trips per 1,000 m² = 46 trips per 1,000 m² x 0.5 (for trip containment)

Summary

Estimates of peak hour traffic volumes resulting from the proposal are set out in Table 6.2. Table 6.2: Traffic generation estimates

		Size	Weekd	lay AM	Weeko	lay PM
Land use	Total size	(excl. Site 1 Retail)	Trip rate	vtph	Trip rate	vtph
Residential	257 apartments	-	0.19 per apartment	49	0.15 per apartment	39
Retail	3,890 m² GLFA [1]	1,297 m² GLFA [1]	23 per 1,000 m²	60	46 per 1,000 m² [2]	60
Existing retail	3,500 m²GLFA	-	23 per 1,000 m ²	- 81	23 per 1,000 m²	-81
Total				28		18

GFA to GLFA conversion: 0.75 GFA = GLFA

[2] 23 trips per 1,000 m² = 46 trips per 1,000 m² x 0.5 (for trip containment)

Table 6.2 indicates that the land uses that make up the planning proposal could be expected to generate an additional 28 and 18 vehicle movements during a weekday AM and PM peak hours, respectively, above the existing site traffic generation.





6.3 Distribution and Assignment

The directional distribution and assignment of traffic generated by the planning proposal will be influenced by many factors, including the:

- i Configuration of the arterial road network in the immediate vicinity of the site
- Existing operation of intersections providing access between the local and arterial road network
- iii Distribution of households near the site
- iv For residential uses surrounding employment centres, retail centres and schools in relation to the site
- For office uses likely distribution of employees' residences in relation to the site
- vi Configuration of access points to the site.

Having consideration to the above, for the purposes of estimating vehicle movements, the following directional distributions have been assumed:

- o North/east: 25 per cent
- o West: 15 per cent
- o South: 60 per cent.

The distribution has been based on information gathered from both the on-site surveys as well as the existing 2011 Census data as outlined in Section 2.6.1. It is understood that the largest generator of trips is the Sydney CBD, which accounts for around 50 per cent of all trips from the site. It was found for trips taken to the Sydney CBD, the majority (80 per cent) of all commutes were undertaken by public transport. Conversely, trips taken to areas with less established public transport infrastructure had higher proportions of commuters using private vehicles.

Because of this, a greater emphasis was given to trips to the south and west. In modifying the existing trip distributions, the true number of trips taken by private vehicles can be more accurately predicted. This will give a more accurate understanding of the true traffic impact of the proposed development.

In addition, the directional split of traffic during the AM and PM period has also been calculated. Each land use on site will generate trips in different directions depending on the time of day. Residential land uses will generally have more 'out' trips in the morning and 'in' trips in the afternoon. Conversely retail land use will reflect the influx of staff in the morning and the equal distribution of customers travelling both to and from the site.

The directional split of traffic is shown in Table 6.3.

Table 6.3: Directional split of traffic

Land use		Weekda	y AM			Weekday	PM	
Lana use	In		0	ut	1	n	0	ut
Residential	20%	10	80%	39	60%	23	40%	16
Retail	70%	42	30%	18	50%	30	50%	30
Total	52		5	7	5	3	4	6

Based on the above, Figure 6.1 and Figure 6.2 have been prepared to show the estimated marginal increase in turning movements near the subject property following full site development.



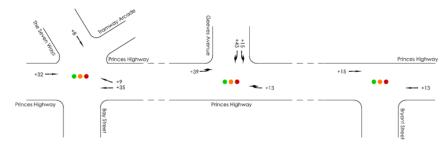
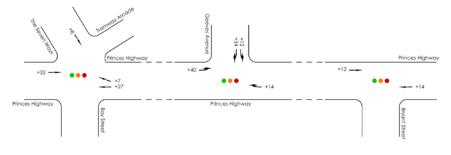


Figure 6.1: AM peak hour site generated traffic volumes

AM Peak Hour Flow (Proposal Generated Traffic)

Figure 6.2: PM peak hour site generated traffic volumes



PM Peak Hour Flow (Proposal Generated Traffic)

Figure 6.1 and Figure 6.2 provide an understanding of the traffic distribution associated with the proposed development, not accounting for the existing traffic generation of the site, which will be removed (therefore presenting a conservatively high analysis).

6.4 Cumulative Impacts

6.4.1 Approved Developments

To provide an understanding of future traffic conditions this report will take into consideration proposed and approved future developments. The approved development directly impacting Geeves Avenue is 433-439 Princes Highway. This site, along with the planning proposal, will be accessed via the Geeves Avenue/ Princes Highway intersection. Because of this, it is important to develop an understanding of the cumulative impact.

The location of the sites that will be accessed via the Geeves Avenue/ Princes Highway intersection is shown in Figure 6.3.





Basemap source: Sydway

433 – 439 Princes Highway

The redevelopment of 433-439 Princes Highway will result in the demolition of the existing bulky goods retail building followed by the construction of high density residential apartments. The apartments will consist of a total of 86 apartments and be accessed from Geeves Lane.

Varga Traffic Planning conducted a traffic and parking assessment in April 2017. The assessment stated that the site will produce a total traffic generation of 34 vehicles during the peak hour. This increase was offset by the existing bulky goods retail stores which produces a total peak hour traffic generation of 38 vehicles.

The overall traffic impact of the site was assessed to be a decrease of five trips during the peak hour.

Council advised that this assessment should also take into consideration the potential future development of the sites adjacent to 433-439 Princes Highway as traffic from these sites would also access through the intersection of Geeves Avenue and the Princes Highway. The existing land uses of the sites 441-467 Princes Highway are similar to that of the neighbouring sites at 433-439 Princes Highway. As no planning proposal has currently been submitted for these adjacent sites, it has been assumed that a similar development to that proposed at 433-439 Princes Highway would be likely. Based on the traffic report by Varga Traffic Planning Pty Ltd for 433-439 Princes Highway it can be assumed that the development of the sites from 441-467 Princes Highway would not result in any net increase in traffic generation through the intersection of Geeves Avenue and Princes Highway.

6.5 Future Growth and Assessment

This section provides potential future traffic conditions on the local road network and the potential impact of the planning proposal and surrounding developments. For this assessment, the year of opening has been assumed to be 2021.

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A 2021 base model scenario has been modelled to assess the traffic impact of the planning proposal, comprising existing traffic conditions with background growth rate applied to 2021.

Once the existing site traffic generation has been removed, the expected net traffic generation increase for the site is expected to be around 28 vehicles in the peak hour. Modelling for this increase has been outlined in Section 6.6 for the potential year of opening.

6.5.1 Background Traffic Growth

Background traffic growth has been obtained from the Sydney Strategic Travel Model (STM) for the years 2016 and 2036 for the three analysed intersections to determine the expected background traffic growth in both the AM and PM peak hour periods. The average compound annual growth rate is about 0.4 per cent.

6.6 Traffic Impact

The scenario outlined in Section 6.5. has been modelled within SIDRA Intersection, using a network model. The operational impact is discussed and tabulated in the following sub sections.

2021 Base Model

The 2021 base model considers the operation of each of the three intersections studied in Table 2.2. This model applies the same traffic volumes to each intersection whilst also factoring an average 0.4 per cent annual growth rate. The operation of each intersection is shown in Table 6.4. Table 6.4: 2021 base model

Intersection	Control	Peak	Degree of saturation	Average delay (sec)	95th percentile queue (m)	LOS
Princes Highway/	Signalised	AM	0.66	13	130	A
Bryant Street	signaisea	PM	0.70	20	228	В
Princes Highway/	Signalised	AM	0.91	5	39	A
Geeves Avenue	signalised	PM	0.97	46	122	D
Princes Highway/ Bay Street/ The	Signalised	AM	1.25	53	465	D
Seven Ways/ Tramway Arcade	signalised	PM	0.91	44	274	D

As shown in Table 6.4 the intersection of Geeves Avenue/ Princes Highway in the PM peak and the intersection of Princes Highway/ Bay Street/ Seven Ways/ Tramway Arcade in both AM and PM peaks would be operating near capacity in 2021 based on background traffic, without any development traffic.

Analysis of the intersection of Geeves Avenue and Princes Highway shows that the right turning movements are delaying the overall operation of this intersection.

2021 Base Model + Development

This analysis considers the operation of each of the three intersections in 2021 when including the expected development traffic. The operation of each intersection is shown in Table 6.4.

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Intersection	Control	Peak	Degree of saturation	Average delay (sec)	95th percentile queue (m)	LOS
Princes Highway/	Signalised	AM	0.66	13	130	А
Bryant Street	Signalised	PM	0.82	26	329	В
Princes Highway/	Signalised	AM	0.94	6	42	A
Geeves Avenue	signalised	PM	1.14	61	162	E
Princes Highway/ Bay Street/ The	Cign gliss d	AM	1.30	54	449	D
Seven Ways/ Tramway Arcade	Signalised	PM	0.90	40	260	С

Table 6.5: 2021 base model + development

As shown in Table 6.4 the intersection of Geeves Avenue/ Princes Highway in the PM peak would operate at capacity in 2021 based on background and development traffic. The right turning movement from Geeves Avenue into Princes Highway would experience significant delays.

Modifications to the Geeves Avenue approach and departure lanes through removing the parking in this section as shown in Figure 6.4 would assist to increase the capacity of the right turning vehicles and therefore improve the overall intersection performance as background traffic increases in the future. This modification would assist in improving the future operation of the Geeves Avenue intersection.



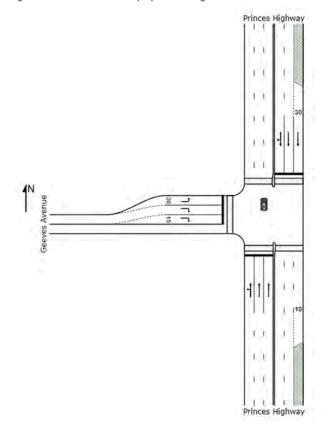


Figure 6.4: Geeves Avenue – proposed configuration

2021 Base + Development Model (Geeves Avenue upgrade)

The intersection of Geeves Avenue and Princes Highway has been modelled based on the proposed upgrade. The expected operation is shown in Table 6.6.

Table 6.6: 2021 base model + development (Geeves Avenue intersection improvements)

Intersection	Control	Peak	Degree of saturation	Average delay (sec)	95th percentile queue (m)	LOS
Princes Highway/	Signalised	AM	0.94	6	40	А
Geeves Avenue	signalisea	PM	0.98	52	122	D

As shown in Table 6.6 the intersection of Geeves Avenue/ Princes Highway in the PM peak would improve from an overall intersection operation of Level of Service E to a Level of Service D. The delays to right turning movements from Geeves Avenue would significantly improve.



6.6.1 Overall Traffic Impact

The planning proposal could be expected to generate an additional 28 vehicle movements during the peak hour from what the existing site is currently generating.

In considering cumulative impacts for potential developments also accessing Geeves Avenue, based on the traffic report by Varga Traffic Planning Pty Ltd for 433-439 Princes Highway, there is not expected to be any net increase in traffic from the planning proposal at this site. It has therefore also been assumed that the development of the sites from 441-467 Princes Highway would not result in any net increase in traffic generation through the intersection of Geeves Avenue and the Princes Highway.

A 2021 base model has been analysed to assess intersection operation whilst factoring in an average 0.4 per cent annual growth rate to Princes Highway through movements, as obtained from the STM model. This determined that the intersection of Geeves Avenue/ Princes Highway in the PM peak and the intersection of Princes Highway/ Bay Street/ Seven Ways/ Tramway Arcade in both AM and PM peaks would be operating near capacity in 2021 based on background traffic, without any development traffic.

In summary, the operation of the surrounding existing intersections is unlikely to be substantially impacted, however minor improvements to the lane configuration on the Geeves Avenue approach to the Princes Highway, as shown in Figure 6.4, are recommended for efficient intersection operation and to address transport needs for the proposed development site, with consideration of its location of the planning proposal it is a prime location for development with a focus on increasing public transport use.



7. Other Considerations

Visitor spaces should be easily accessible from public domain and areas that we well-lit with adequate levels of natural surveillance. For staff and residents, spaces should be secured. Communal shower, changing facilities and lockers should be provided for commercial and retail staff.

7

7.1 Loading and Waste Collection Requirements.

Council's DCP requires that car parking and service/ delivery areas are to be located so that they do not visually dominate either the development or the public domain.

Based on the above proposed loading and service areas will be located underground within the sites.

7.2 Car Wash Facilities

Council's DCP requires that for buildings with five dwellings or more, at least one visitor parking space is to be equipped with car wash facilities. This facility is to be equipped with cold water tap and connected to the sewage system.

Based on the above the planning proposal will provide car wash facilities to a single visitor space in each of the sites where basement car parking is provided.

7.3 Bicycle Parking

Council's DCP provides the following minimum bicycle storage rack requirements:

- Office/retail One bicycle space for every 200 square metres with 15 per cent accessible to visitors
- o Residential One bicycle space for every 10 units.

Based on the above, the planning proposal requires the following bicycle provisions to meet the DCP requirements:

- o Office/ retail 62 spaces (including nine spaces accessible to visitors)
- Residential 25 spaces.

The planning proposal is required to provide at least 87 bicycle parking spaces including a balance for staff/ residents and visitors.

Visitor spaces should be easily accessible from public domain and areas that we well-lit with adequate levels of natural surveillance. For staff and residents, spaces should be secure. Communal shower, changing facilities and lockers should be provided for commercial and retail staff.

7.4 Motorcycle Parking

Council's DCP provides the following minimum motorcycle parking requirements:

- Office/ retail one motorcycle space per 20 car spaces
- Residential one motorcycle space per 15 dwellings.



Based on the above, the planning proposal requires the following bicycle provisions to meet the DCP requirements:

- o Office/Retail-10 spaces
- Residential 17 spaces.

The planning proposal is required to provide at least 27 motorcycle spaces.

7.5 Travel Plans

It is recommended that various user specific travel plans are prepared for the development including:

- o Workplace travel plan
- o Residential traffic plan
- o Visitor traffic plan.

Travel plans are designed to reduce the reliance on private car travel, car ownership, or at least single occupant vehicles to destinations by boosting and encouraging the use of active and sustainable transport modes.

Organisations use travel plans as an effective tool to meet a range of different travel-related goals. Examples include initiatives to reduce traffic congestion and/ or parking demand (both on and off-street), reduce absenteeism, improve staff retention, increase physical activity, improve air quality and to improve morale.

Each site has unique characteristics so the objectives, programs, initiatives and measures contained in the travel plan must be tailored and site specific. Successful travel plans are iterative processes supported by development management and generally delivered by a full-time staff member (or team).

The travel plans would include:

- o A 'reach' transport goal/ target to reduce single occupant vehicle travel demand
- Infrastructure to support walking, cycling, motorcycling and public transport access to the site
- o Programs to reduce drive-alone travel behaviour by staff, visitors and customers
- o Programs to reduce residential car ownership, such as provision of car share services
- o Tenant policies to reduce drive-alone travel demand at the subject site
- o Staff travel coordinator responsibilities
- Monitoring tools and an evaluation program to document performance.

7.6 Construction Traffic Impact

A construction traffic management plan should be prepared prior to works commencing on-site. It is noted that construction access from the rear of the site would potentially impact bus operations and it is recommended that a suitable construction methodology is developed in consultation with the preferred contractor, Roads and Maritime and Transport for NSW.



i

8. Conclusion

Based on the analysis and discussions presented within this report, the following conclusions are made:

- The proposed development generates a statutory parking requirement of 428 spaces, for those uses with nominated rates.
- ii The development proposes to provide a maximum total of 395 car parking spaces across the precinct. Over the precinct, this would result in a shortfall of 33 spaces when compared to DCP requirements. Due to the unique opportunity for direct access to the public transport network, it is considered that 395 parking spaces should be the maximum number provided across the precinct, with possible consideration being given to reduce the retail component of parking further. There is also an opportunity to also reduce resident parking in accordance with the ADG.
- iii Analysis of the pedestrian surveys show that there is a high demand for pedestrian access from the Rockdale station through Tramway Arcade to the Princes Highway, confirming a demand for the pedestrian overbridge and link to the Princes Highway through Site 1.
- iv The proposed parking layout is yet to be determined and would need to be consistent with the dimensional requirements as set out in the Australian/ New Zealand Standard for Off Street Car Parking (AS/NZS2890.1:2004 and AS/NZS2890.6:2009).
- The provision for bicycle facilities motorcycle facilities would be provided in accordance with the DCP.
- vi The access arrangements for the full redevelopment of the precinct (Sites 1, 2 and 3) are proposed to be from a single (two-way) access provided from Geeves Avenue at the northern end of the site. This access would connect through to a centralised loading dock and parking areas for all three sites. However, it is likely that Site 1 will be developed first and therefore a temporary access for Site 1 is proposed. This access would be removed under the ultimate scenario (or restricted to service vehicles only) when Sites 2 and 3 are developed.
- vii The site is expected to generate up to 109 vehicle movements in any peak hour. The existing site is estimated to generate around 81 vehicle movements in any peak hour. Therefore, the net increase of this planning proposal is around 28 vehicle movements in any peak hour.
- viii Assessment of the potential year of opening has been undertaken to consider background traffic growth on the surrounding road network, analysis indicates that in the year 2021 intersections may be operating near capacity without the proposed development.
- ix Potential intersection improvements could be undertaken at the intersection of Geeves Avenue and the Princes Highway to assist in alleviating delay to exiting Geeves Avenue traffic.
- x The sites immediate proximity to Rockdale train station and bus interchange is a prime opportunity to provide a development with a reduced traffic impact and promote public and sustainable transport use.

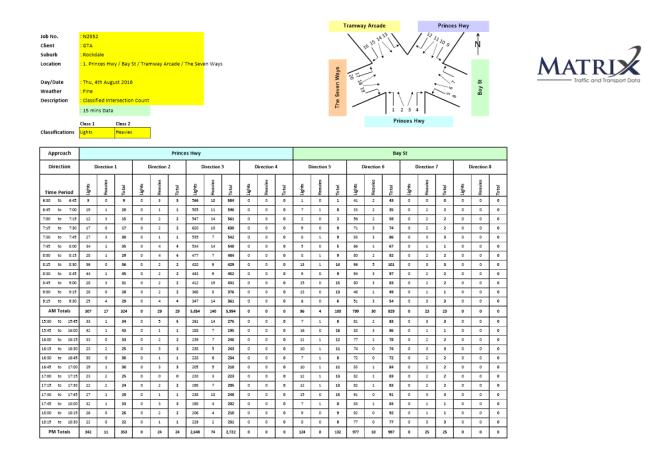


Appendix A



Survey Results





Approach Direction

Time Period 6:30 to 6:45 6:45 to 7:00

 7:00
 to
 7:15

 7:15
 to
 7:30

 7:30
 to
 7:45

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 to
 8:00

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 to
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 to
 8:30

 8:30
 to
 8:45

 8:45
 to
 9:00

9:15 to 9:30

AM Totals

15:30 to 15:45

15:45 to 16:0

16:15 to 16:30 16:30 to 16:45

16:45 to 17:0

17:00 to 17:1

17:15 to 17:30

17:30 to 17:4

18:00 to 18:1

18:15 to 18:30

PM Totals

17:45 to

Direction 9

5

10

16

118

21

18

15 4

9 2 11 406 9

19 2

19 0 19

196 25 221 4,708 94

2 19

404

403

419

424

414 9

395 10

6

7

19

16

21

412

409

426 65

429

423 65

408 73

4,802 983 19 1,002 0 8

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			Prince	es Hwy										1	framwa	y Arcad	e									1	'he Sev	en Way	s				
	Di	rection	10	D	irection	11	D	irection	12	0	irection :	в	D	irection :	14	D	rection 1	15	D	irection 1	16	D	irection 1	7	Di	rection 1	8	D	irection	19	D	irection 2	0
Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lightes	Heavies	Total	Lightes	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Tota	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lightes	Heavies	Total
12	81	9	90	13	1	14	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	1	66	64	2	66	16	1	17
6	79	15	94	10	3	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	2	53	64	6	70	17	1	18
7	86	11	97	22	2	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	2	\$7	70	2	72	9	0	9
9	122	9	131	12	2	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0	37	81	3	84	12	0	12
12	137	9	146	28	1	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	3	63	117	4	121	20	1	21
12	136	10	146	25	2	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	2	60	93	3	96	27	0	27
10	115	13	128	35	1	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	0	59	103	5	108	21	1	22
11	147	13	160	29	1	30	•	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	0	56	132	2	134	31	3	34
14	147	9	156	28	2	30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	1	66	136	2	138	19	1	20
17	128	15	143	32	2	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	1	72	143	2	145	32	1	33
15	163	22	185	40	2	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	3	57	91	2	93	32	2	34
18	146	12	158	22	1	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	3	68	82	3	85	38	1	39
143	1,487	147	1,634	296	20	316	۰	3	3	0	0	0	0	0	0	٥	٥	0	0	0	0	0	0	0	696	18	714	1,176	36	1,212	274	12	286
24	329	13	342	74	2	76	0	2	z	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	52	0	52	56	0	56	23	0	23
26	316	3	321	85	4	89	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	0	35	ങ	2	67	30	1	31
20	384	10	394	88	0	88	0	0	0	0	0	0	٥	0	0	0	0	0	0	0	0	0	0	0	37	0	37	63	2	65	27	1	28
12	364	5	372	86	4	90	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	37	0	37	78	1	79	26	0	26
19	447	4	451	96	1	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	0	45	60	0	60	23	1	24

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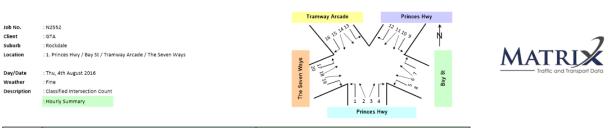
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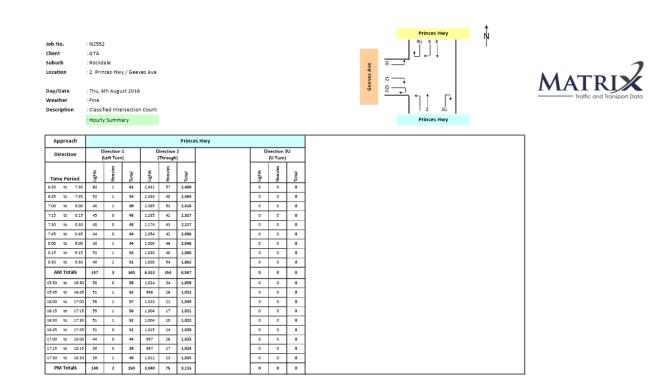


Approach						Prince	s Hwy											Bay	/ St					
Direction	C	Nirection :	1	t	Direction	z	C	irection	3	C	lirection	4	t	Direction	5	C	irection	6	C	irection	7	D	irection	8
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
6:30 to 7:30	57	4	61	0	8	8	2,315	53	2,371	0	0	0	19	1	20	201	9	210	0	6	6	0	0	0
6:45 to 7:45	75	7	82	0	6	6	2,287	42	2,329	0	0	0	26	2	28	243	10	253	0	9	9	0	0	0
7:00 to 8:00	90	7	97	0	9	9	2,236	45	2,281	0	0	0	24	1	25	276	9	285	0	\$	8	0	0	0
7:15 to 8:15	106	,	111	0	11	11	2,166	35	2,204	0	0	0	30	2	32	300	9	309	0	\$	8	0	0	0
7:30 to 8:30	125	3	130	0	11	11	1,966	37	2,003	0	0	0	34	3	37	325	11	336	0	9	9	0	0	0
7:45 to 8:45	142	w	145	0	12	12	1,874	39	1,913	0	0	0	35	2	37	336	11	347	0	8	8	0	0	0
8:00 to 9:00	136	•	141	0	10	10	1,752	44	1,796	0	0	0	45	2	47	350	13	363	0	9	9	0	0	0
8:15 to 9:15	136	4	140	0	\$	8	1,643	45	1,688	0	0	0	50	1	51	318	12	330	0	\$	8	0	0	0
8:30 to 9:30	125	s	133	0	10	10	1,570	50	1,620	0	0	0	43	0	43	273	10	283	0	8	8	0	0	0
AM Totals	307	17	324	0	29	29	5,854	140	5,994	0	0	0	96	4	100	799	30	829	0	23	23	0	0	0
15:30 to 16:30	131	4	135	0	11	11	926	33	959	0	0	0	44	3	47	315	6	321	0	9	9	0	0	0
15:45 to 16:45	128	3	131	0	7	7	893	25	918	0	0	0	44	3	47	306	4	310	0	8	8	0	0	0
16:00 to 17:00	115	3	118	0	9	9	910	23	933	0	0	0	35	4	42	306	2	308	0	9	9	0	0	0
16:15 to 17:15	105	,	110	0	7	7	591	19	910	0	0	0	39	4	43	911	2	313	0	9	9	0	0	0
16:30 to 17:30	104	5	109	0	6	6	851	21	872	0	0	0	41	4	45	319	3	322	0	8	8	0	0	0
16:45 to 17:45	101	6	107	0	6	6	861	25	886	0	0	0	49	3	52	338	3	341	0	9	9	0	0	0
17:00 to 18:00	104	6	110	0	6	6	854	24	878	0	0	0	46	3	49	335	3	341	0	\$	8	0	0	0
17:15 to 18:15	107	4	111	0	8	8	840	25	865	0	0	0	43	2	45	348	2	350	0	7	7	0	0	0
17:30 to 18:30	107	2	109	0	7	7	871	20	891	0	0	0	39	1	40	343	1	344	0	8	8	0	0	0
PM Totals	342	11	353	0	24	24	2,648	74	2,722	0	0	0	124	8	132	977	10	987	0	25	25	0	0	0

tunnesch						Deine	es Hwy											framwa												The Cov						
Approach						Prince	es Hwy										1	ramwa	y Arcad	e										The Sev	en Way	\$				
Direction		Virection	9	D	irection	10	6	Direction	11	0	irection	12	Þ	irection :	в	Þ	irection :	14	D	irection	15	0	irection	16	D	irection 1	17	D	rection	18	D	irection	9	P	irection	20
Time Period	tights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lightes	Heavies	Total	Lights	Heavies	Total	tights	Heavies	Total	Lights	Heavies	Tota	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
6:30 to 7:30	28	6	34	365	44	412	57	s	65	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	206	5	213	279	13	292	54	2	56
6:45 to 7:45	26	8	34	424	44	468	72	8	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203	7	210	332	15	347	58	2	60
7:00 to \$:00	30	10	40	481	39	520	87	7	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	7	217	361	12	373	65	1	69
7:15 to \$:15	35	8	43	510	41	551	100	6	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	214	,	219	394	15	409	80	2	82
7:30 to 8:30	35	10	45	535	45	580	117	5	122	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	233	5	238	445	14	459	99	5	104
7:45 to 8:45	39	8	47	545	45	590	117	6	123	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	238	3	241	464	12	476	98	5	103
8:00 to 9:00	44	8	52	587	50	587	124	6	130	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	251	2	253	514	11	525	103	6	109
8:15 to 9:15	47	10	57	585	59	644	129	7	136	0	2	2	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	246	5	251	502	8	510	114	7	121
8:30 to 9:30	55	9	64	584	58	642	122	7	129	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	255	8	263	452	9	461	121	5	126
AM Totals	118	25	143	1,487	147	1,634	296	20	316	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	696	18	714	1,176	36	1,212	274	12	286
15:30 to 16:30	74	s	82	1,393	36	1,429	333	10	343	0	5	5	•	0	0	0	0	0	0	0	0	0	0	0	0	1	1	161	0	161	262	,	267	106	2	108
15:45 to 16:45	65	9	77	1,511	27	1,538	355	9	364	0	3	3	0	0	0	٥	0	0	٥	0	0	0	0	0	0	1	1	154	0	154	266	5	271	106	3	109
16:00 to 17:00	57	9	66	1,599	30	1,629	353	6	359	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	167	0	167	280	3	283	125	3	128
16:15 to 17:15	56	9	65	1,618	26	1,644	354	8	362	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	175	0	175	285	2	287	124	4	128
16:30 to 17:30	53	11	64	1,660	27	1,687	364	4	368	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	186	1	187	304	1	305	123	,	128
16:45 to 17:45	55	9	64	1,632	30	1,662	333	5	338	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	181	1	182	318	2	320	135	4	139
17:00 to 18:00	57	\$	65	1,652	27	1,679	333	7	340	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166	2	168	301	2	303	115	4	119
17:15 to 18:15	59	s	67	1,663	30	1,693	309	5	314	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172	3	175	315	1	316	119	3	122
17:30 to 18:30	69	6	75	1,655	31	1,686	286	5	291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166	2	168	294	1	295	121	2	123
PM Totals	196	25	221	4,708	94	4,802	983	19	1,002	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	513	3	516	860	7	867	350	9	359

	: Thu, 4 : Fine : Classi	dale nces Hw Ith Augu fied Inte ns Data	ust 2016 ersection	n Count						Princes Hwy	Traffic and Transport De
Approach						Prince					
Direction		Direction (Left Turr			Direction (Through			ction 3 I Turn)	U		
	2	vias	-	2	vies	-	2	si	-		
Time Period	Lights	Heav	Total	Lights	Heav	Total	왜리	Heav	Total		
6:30 to 6:45	20	0	20	611	18	629	0	0	0		
6:45 to 7:00	15	0	15	632	12	644	0	0	0		
7:00 to 7:15	11	1	12	617	17	634	0	0	0		
7:15 to 7:30 7:30 to 7:45	14	0	14	571	10	581	0	0	0		
7:30 to 7:45 7:45 to 8:00	13 10	0	13 10	616 561	9	625 576	0	0	0		
7.45 to 8.00 8.00 to 8:15	10	0	8	581	8	5/6	0	0	0		
8:15 to 8:30	17	0	17	460	11	471	0	0	0		
8:30 to 8:45	9	0	9	496	8	504	0	0	0		
8:45 to 9:00	9	1	10	507	19	526	0	0	0		
9:00 to 9:15	18	0	18	375	10	345	0	0	0		
9:15 to 9:30	13	1	14	430	17	447	0	0	0		
AM Totals	157	3	160	6,413	154	6,567	0	0	0	1	
15:30 to 15:45	19	0	19	287	12	299	0	0	0	1	
15:45 to 16:00	13	0	13	226	10	236	0	0	0		
16:00 to 16:15	11	0	11	257	7	264	0	0	0	1	
16:15 to 16:30	15	0	15	254	,	259	0	•	0	1	
16:30 to 16:45	12	1	13	259	4	263	0	0	0	1	
16:45 to 17:00	18	0	18	258	,	263	0	0	0]	
17:00 to 17:15	10	0	10	233	3	236	0	0	0		
17:15 to 17:30	11	0	11	254	6	260	0	0	0		
17:30 to 17:45	12	0	12	270	10	280	0	0	0		
17:45 to 18:00	11	0	11	240	7	247	0	0	0		
18:00 to 18:15	,	0	5	233	4	237	0	0	0		
18:15 to 18:30	11	1	12	269	2	271	0	0	0	•	
PM Totals	148	z	150	3,040	75	3,115	0	۰	0		

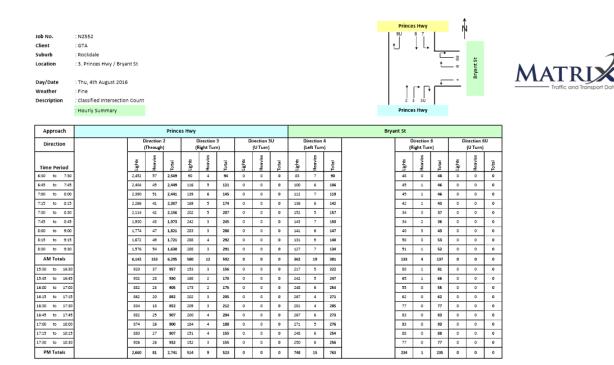
Approach				Prince	s Hwy									Geev	es Ave					
Direction			rection 8 hrough)			irection f ight Turr			rection 9 (U Turn)	U		rection 1 Left Turn				irection 1 light Turi			ection 1 (U Turn)	20
Time Period		Lights	leavies	[otal	lights	leavies	Total	lights	leavies	Total	Lights	leavies	fotal		Lights	Heavies	lotal	Lights	Heavies	Total
6:30 to 6:45		96	10	106	13	0	13	0	0	0	,	1	6		6	4	10	0	0	0
6:45 to 7:00		90	13	103	13	0	13	0	0	0	7	0	7		4	5	9	0	0	0
7:00 to 7:15	1	121	13	134	6	0	6	0	0	0	11	0	11		3	3	6	0	0	0
7:15 to 7:30	1	133	9	142	16	0	16	0	0	0	10	1	11		,	3	8	0	0	0
7:30 to 7:45	1	166	10	176	22	0	22	0	0	0	12	0	12		7	4	11	0	0	0
7:45 to 8:00	1	149	12	161	15	0	15	0	0	0	16	3	19		11	3	14	0	0	0
8:00 to 8:15	1	158	10	168	17	0	17	0	0	0	10	0	10		6	3	9	0	0	0
8:15 to 8:30	1	189	14	203	15	0	15	0	0	0	11	2	13		12	5	17	0	0	0
8:30 to 8:45	1	180	11	191	6	1	7	0	0	0	9	1	10		4	3	7	0	0	0
8:45 to 9:00	1	175	15	190	9	0	9	0	0	0	3	2	5		9	,	14	0	0	0
9:00 to 9:15	1	199	22	221	3	0	3	٥	0	0	11	٥	11		7	3	10	0	0	0
9:15 to 9:30	1	183	12	195	6	0	6	0	0	0	7	1	8		4	4	8	0	0	0
AM Totals	1,	1,839	151	1,990	141	1	142	0	0	0	112	11	123		78	45	123	0	0	0
15:30 to 15:45	3	396	13	409	10	0	10	0	0	0	9	2	11		18	7	25	0	0	0
15:45 to 16:00	4	469	11	480	13	0	13	0	0	0	20	1	21		23	3	26	0	0	0
16:00 to 16:15	4	479	11	490	7	0	7	0	0	0	12	0	12		22	3	25	0	0	0
16:15 to 16:30	4	462	11	473	9	0	9	0	0	0	10	2	12		19	3	22	0	0	0
16:30 to 16:45	,	530	3	533	9	0	9	0	0	0	,	1	e		15	7	25	0	0	0
16:45 to 17:00	4	486	11	497	7	0	7	1	0	1	4	2	6		15	3	19	0	0	0
17:00 to 17:15	4	470	6	476	9	0	9	1	0	1	8	1	9		24	3	27	0	0	0
17:15 to 17:30	,	534	10	544	9	0	9	0	0	0	11	1	12		25	3	28	0	0	0
17:30 to 17:45	4	488	6	494	11	0	11	0	0	0	17	1	18		17	5	22	0	0	0
17:45 to 18:00		502	7	509	10	0	10	1	0	1	9	1	10		19	2	21	0	0	0
18:00 to 18:15	4	480	9	489	8	0	8	0	0	0	14	1	15		23	4	27	0	0	0
18:15 to 18:30	4	473	6	479	9	0	9	1	0	1	3	2	7		20	1	21	0	0	0
PM Totals	5,	5,769	104	5,873	111	۰	111	4	0	4	124	15	139		244	44	288	0	٥	۰



Approach				Prince	s Hwy									Geeve	es Ave					
Direction			irection (Through)			irection light Turr			irection 9 (U Turn)	U		irection 1 Left Turn				irection 1 light Turi			rection 1 (U Turn)	
Time Period		Lights	leavies	lotal	Lights	Heavies	letal	Lights	leavies	Total	Lights	leavies	Total		Lights	icavies	fotal	Lights	Heavies	Total
6:30 to 7:30		440	45	485	48	0	48	0	0	0	33	2	35		18	15	33	0	0	6
6:45 to 7:45		510	45	555	57	0	57	0	0	0	40	1	41		19	15	34	0	0	0
7:00 to 8:00		569	44	613	59	0	59	0	0	0	49	4	53		26	13	39	0	0	•
7:15 to 8:15		606	41	647	70	0	70	0	0	0	48	4	52		29	13	42	0	0	0
7:30 to 8:30		662	46	708	69	0	69	0	0	0	49	,	54		36	15	51	0	0	0
7:45 to 8:45		676	47	723	53	1	54	0	0	0	46	6	52		33	14	47	0	0	0
8:00 to 9:00		702	50	752	47	1	48	0	0	0	33	3	38		31	16	47	0	0	•
8:15 to 9:15		743	62	805	33	1	34	0	0	0	34	,	39		32	16	48	0	0	0
8:30 to 9:30		737	60	797	24	1	25	0	0	0	30	4	34		24	15	39	0	0	0
AM Totals	1	1,839	151	1,990	141	1	142	0	0	0	112	11	123		78	45	123	0	0	0
15:30 to 16:30	1	1,806	46	1,852	39	0	39	0	0	0	51	5	56		82	16	98	0	0	0
15:45 to 16:45	1	1,940	36	1,976	38	0	38	0	0	0	47	4	51		82	16	98	0	0	0
16:00 to 17:00	1	1,957	36	1,993	32	0	32	1	0	1	31	5	36		75	16	91	0	0	0
16:15 to 17:15	1	1,948	31	1,979	34	0	34	2	0	2	27	6	33		77	16	93	0	0	0
16:30 to 17:30		2,020	30	2,050	34	0	34	2	0	2	28	3	33		83	16	99	0	0	0
16:45 to 17:45	1	1,978	33	2,011	36	0	36	2	0	2	40	5	45		82	14	96	0	0	0
17:00 to 18:00	1	1,994	29	2,023	39	0	39	2	0	2	45	4	49		85	13	98	0	٥	0
17:15 to 18:15		2,004	32	2,036	38	0	38	1	0	1	51	4	55		84	14	98	0	0	0
17:30 to 18:30	1	1,943	28	1,971	38	0	38	2	0	2	45	,	50		79	12	91	0	0	0
PM Totals	5	5,769	104	5,873	111	0	111	4	0	4	124	15	139		244	44	288	0	0	0

Job No. Client Suburb Location Day/Date Weather Description Classifications		2016													t	90	зU			Bryant St		MATRIX Troffic and Transport Date
Approach					Prince	s Hwy									Brya	int St						
Direction				ction i rough)			irection light Tur		D	rection : (U Turn)			Direction Left Turr				Rirection tight Tur			irection 6 (U Turn)		
		ž		vies	-s	2	vies	-	ghts	vies	3	æ	vies	-	1	2	vies	B	4	vies	-	
Time Period		4	_	÷	P	ulghts	Ŧ	Total		Fes	P	Lights	Hea	Total		54487	Fea	ê	Lights	Fea	Total	
6:30 to 6:45 6:45 to 7:00		59	_	19	663	14	1	15 19	0	0	0	21 19	1 2	22		10 8	0	10	0	0	0	
6:45 to 7:00 7:00 to 7:15	-	60	_	11	609 621	19 28	0	29	0	0	0	22	1	21 23		15	0	8 15	0	0	0	
7:15 to 7:30	1	60	_	10	616	29	2	31	0	0	0	21	3	24		15	0	15	0	0	0	
7:30 to 7:45		59	_	7	603	40	2	42	0	0	0	38	0	38		7	1	8	0	0	0	
7:45 to 8:00		58	_	17	601	42	1	43	0	0	0	31	3	34		8	0	8	0	0	0	
8:00 to 8:15		48	0	7	487	58	0	58	0	0	0	46	0	46		12	0	12	0	0	0	
8:15 to 8:30	1	45	4	11	465	62	2	64	0	0	0	37	2	39	1	7	2	9	0	0	0	
8:30 to 8:45]	41	2	8	420	80	0	80	0	0	0	29	2	31]	7	0	7	0	0	0	
8:45 to 9:00		42	_	21	449	83	1	84	0	0	0	29	2	31		14	1	15	0	0	0	
9:00 to 9:15		37	-	9	387	63	1	64	0	0	0	36	3	39		22	0	22	0	0	0	
9:15 to 9:30	-	35	-	16	374	62	1	63	•	0	0	33	0	33		8	0	8	0	0	0	
AM Totals	1	6,1	_	153	6,295	580	12	592	0	0	0	362	19	381		133	4	137	0	0	0	
15:30 to 15:45		23	_	13	247	41	1	42	0	0	0	49	1	50		31	0	31	0	0	0	
15:45 to 16:00	-	22	_	10	234	44	1	45	0	0	0	60	1	61		21	1	22	0	0	0	
16:00 to 16:15	-	22	_	7	235 241	32	0	32	0	0	0	64 44	2	66 45		15	0	15	0	0	0	
16:30 to 16:45	1	21	_	4	241	36	0	56		0	0	74	1	75		16	0	15	0	0	0	
16:45 to 17:00	1	20	_	,	209	49	1	50	0	0		66	2	68		11	0	11	0	0	0	
17:00 to 17:15	1	20	_	4	212	61	1	62	0	0	0	83	0	83		22	0	22	0	0	0	
17:15 to 17:30		20	6	,	211	43	1	44	0	0	0	36	1	59		25	0	28	0	0	0	
17:30 to 17:45	1	26	4	11	275	47	1	48	•	0	0	60	3	63	1	22	0	22	0	0	0	
17:45 to 18:00]	19	6	6	202	33	1	34	0	0	0	70	1	71]	21	0	21	0	0	0	
18:00 to 18:15		21	4	5	219	28	1	29	0	0	0	60	1	61		17	0	17	0	0	0	
18:15 to 18:30		23	2	4	236	44	0	44	0	0	0	60	1	61		17	0	17	0	0	0	4
PM Totals		2,6	90	81	2,741	514	9	523	0	0	0	748	15	763		234	1	235	Ø	0	0]

Approach						Prince	Hwy			
Direction		Direction Left Turn			irection Through			Directio (U Tu		
		Heavies	Ĺ		savies		2	ie.	Ť	
Time Period	Lights	Hea	Total	Lights	Hea	Total	Lights	Hea	Total	
6:30 to 6:45	2	0	2	88	9	97	0	0	0	
6:45 to 7:00	5	0	5	83	11	94	0	0	0	
7:00 to 7:15	1	0	1	110	12	122	0	0	0	
7:15 to 7:30	0	0	٥	120	6	126	0	0	0	
7:30 to 7:45	0	0	0	141	9	150	0	0	0	
7:45 to 8:00	2	0	2	141	10	151	0	0	0	
8:00 to 8:15	0	0	0	132	10	142	0	0	0	
8:15 to 8:30	3	2	5	168	12	180	0	0	0	
\$:30 to \$:45	2	0	2	147	10	157	0	0	0	
8:45 to 9:00	,	1	6	158	13	171	0	0	•	_
9:00 to 9:15	8	1	9	162	20	182	0	0	0	_
9:15 to 9:30	10	0	10	159	12	171	0	0	•	_
AM Totals	38	4	42	1,609	134	1,743	0	0	0	
15:30 to 15:45	13	0	13	319	10	329	0	0	0	
15:45 to 16:00	18	2	20	405	12	420	0	0	•	
16:00 to 16:15	,	1	6	392	10	402	0	0	•	
16:15 to 16:30	14	1	15	421	8	429	0	0		
16:30 to 16:45	8	0	8	423	2	425	0	0		
16:45 to 17:00	12	0	12	424	7	431	0	0	•	_
17:00 to 17:15	9	0	9	385	s	393	0	0		
17:15 to 17:30	12	0	12	451	10	461	0	0	•	
17:30 to 17:45	7	0	7	425	4	429	0	0	•	
17:45 to 18:00	13	0	13	395	3	400	0	0	•	
18:00 to 18:15	9	0	9	425	9	434	0	0	•	
18:15 to 18:30	15	0	15	395	5	403	0	0	0	
PM Totals	135	4	139	4,866	90	4,956	0	0	0	



Approach						Prince	Hwy		
Direction		Direction (Left Turr)irection Through			Direction (U Turr	
		-	Ĺ					vies	İ 🗌
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heav	Total
6:30 to 7:30	8	0	8	401	38	439	0	0	0
6:45 to 7:45	6	0	6	454	38	492	0	0	0
7:00 to 8:00	3	0	3	512	37	549	0	0	0
7:15 to 8:15	2	0	2	534	35	569	0	0	0
7:30 to \$:30	,	2	7	582	41	623	0	0	0
7:45 to 8:45	7	2	9	388	42	630	0	0	0
8:00 to 9:00	10	3	13	605	45	650	0	0	0
8:15 to 9:15	18	4	22	635	55	650	0	0	0
8:30 to 9:30	25	2	27	626	55	681	0	0	0
AM Totals	38	4	42	1,609	134	1,743	0	0	0
15:30 to 16:30	50	4	54	1,540	40	1,580	0	0	0
15:45 to 16:45	45	4	49	1,644	32	1,676	0	0	0
16:00 to 17:00	39	2	41	1,660	27	1,687	0	0	0
16:15 to 17:15	43	1	44	1,653	25	1,678	0	0	0
16:30 to 17:30	41	0	41	1,653	27	1,710	0	0	0
16:45 to 17:45	40	0	40	1,685	29	1,714	0	0	0
17:00 to 18:00	41	0	41	1,656	27	1,683	0	0	0
17:15 to 18:15	41	0	41	1,696	28	1,724	0	0	0
17:30 to 18:30	44	0	44	1,643	23	1,666	0	0	0
PM Totals	135	4	139	4,866	90	4,956	•	0	0

Job No. Client Suburb Location Day/Date Weather Description Classifications	: N2552 : GTA : Rockdale : 4. Geeves Ar : Thu, 4th Aug : Thu, 4th Aug : I classified Int : 15 mins Dat Class I Lights	gust 2016 tersection													t	9U	res Ln 8 7 ↓ ↓ ↓ 3∪ res Ln	L t		Geeves Ave		MATRIX Troffic and Transport Data
Approach					Geev	res Ln									Geev	es Ave						
Direction				irection Through			Direction Right Turi			rection : (U Turn)			Direction				Direction Right Tur			irection ((U Turn)		
	1		2	seis	-		sei	_	2		-	2	ie.	-		2	ş	_	2	- 24	_	
Time Period			Lights	Hea	Total	Lights	Fea	Total	Lights	Fea	Total	Lights	Hear	Total		Lights	Hear	Total	Lights	Fea	Total	
6:30 to 6:45 6:45 to 7:00	-		0	0	0	6	5	11 13	0	0	0	8	0	8		1S 21	0	18 21	3	0	3	
7:00 to 7:15	1		0	0	0	8	3	11	0	0	0	7	0	7		7	1	8	1	0	1	
7:15 to 7:30	1		0	0	0	9	4	13	0	0	0	10	0	10		20	0	20	2	0	2	
7:30 to 7:45	1		1	0	1	13	4	17	0	0	0	16	0	16		15	0	18	1	0	1	
7:45 to 8:00]		1	0	1	11	6	17	0	0	0	12	0	12		10	0	10	3	0	3	
8:00 to 8:15			0	0	0	15	4	19	0	0	0	17	0	17		6	0	6	1	0	1	
8:15 to 8:30 8:30 to 8:45			0	0	0	8	6	14	0	0	0	12	0	12		15	0	15 12	3	0	3	
8:30 to 8:45 8:45 to 9:00	-		0	0	0	6	6	12	0	0	0	2	0	2		8	1	32	1 2	1	1 3	
9:00 to 9:15	1		0	0	0	6	4	10	0	0	0	10	0	10		10	0	10	1	0	1	
9:15 to 9:30	1		0	0	0	2	5	7	0	0	0	3	0	3		13	1	14	2	0	2	
AM Totals	1		2	0	2	96	55	151	0	0	0	114	0	114		157	3	160	20	1	21	
15:30 to 15:45	1		3	0	3	2	7	9	0	0	0	,	0	5		19	0	19	3	0	3	
15:45 to 16:00			1	0	1	6	4	10	0	٥	٥	4	0	4		21	0	21	0	0	0	
16:00 to 16:15	-		0	0	٥	2	3	5	0	0	0	1	0	1		15	0	15	1	0	1	
16:15 to 16:30			1	0	1	3	8	11	0	0	0	,	0	5		15	0	18	1	0	1	
16:30 to 16:45	-		0	0	•	,	3	10	0	0	0	3	0	3		16	1	17	1	0	1	
16:45 to 17:00 17:00 to 17:15	-		0	0	0	1	5	6 12	0	0	0	0	0	0		21	0	21 8	5	0	5	
17:15 to 17:30	-		0	0	0	11	4	15	0	0	0	9	0	9		5	0	8	4	0	4	
17:30 to 17:45	1		0	0	•	,	6	11	0	0	0	6	0	6		10	0	10	6	0	6	
17:45 to 18:00	1		0	0	0	8	3	11	0	0	0	7	0	7		14	0	14	4	0	4	
18:00 to 18:15	1		0	0	0	5	5	10	0	0	0	4	0	4		6	0	6	2	0	2	1
18:15 to 18:30			0	0	0	6	,	11	0	0	0	4	0	4		12	1	13	1	0	1	1
PM Totals			5	0	5	62	59	121	0	0	0	53	0	53		168	2	170	34	0	34	1

Approach						Geev	Ln		
Direction		Direction (Left Turn			Direction (Through			Direction (U Turn	
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
6:30 to 6:45	2	0	2	0	0	0	0	0	0
6:45 to 7:00	4	0	4	0	0	0	0	0	•
7:00 to 7:15	1	0	1	0	0	0	0	0	0
7:15 to 7:30	4	0	4	0	0	0	0	0	0
7:30 to 7:45	9	1	10	0	0	0	0	0	0
7:45 to 8:00	11	0	11	0	0	0	0	0	•
8:00 to 8:15	2	0	2	0	0	0	0	0	0
8:15 to 8:30	11	0	11	0	0	0	0	0	0
\$:30 to \$:45	8	1	9	0	0	0	0	0	0
8:45 to 9:00	s	0	8	0	0	0	0	0	•
9:00 to 9:15	7	0	7	0	0	0	0	0	0
9:15 to 9:30	,	0	5	0	0	0	0	0	0
AM Totals	72	2	74	0	0	0	0	0	0
15:30 to 15:45	25	0	25	0	0	0	0	0	0
15:45 to 16:00	34	0	34	0	0	0	0	0	0
16:00 to 16:15	29	0	29	0	0	0	0	0	0
16:15 to 16:30	25	0	25	0	0	0	0	0	0
16:30 to 16:45	16	0	16	0	0	0	0	0	0
16:45 to 17:00	21	0	21	0	0	0	0	0	0
17:00 to 17:15	11	0	11	2	0	2	0	0	•
17:15 to 17:30	18	0	18	0	0	0	0	0	0
17:30 to 17:45	21	0	21	1	0	1	0	0	•
17:45 to 18:00	23	0	23	0	0	0	0	0	•
18:00 to 18:15	22	0	22	0	0	0	0	0	0
18:15 to 18:30	20	0	20	0	0	0	0	0	0
PM Totals	265	0	265	3	0	3	0	0	0

Job No. Client Suburb Location Day/Date Weather Description	: N2552 : GTA : Rockdale : 4. Geeves Ave / Geev : Thu, 4th August 2016 : Fine : Classified Intersection : Hourly Summary	5												,	Geev 9U 				Geeves Ave		MATRIX Traffic and Transport Data
Approach				Geev	res Ln									Geeve	es Ave						
Direction			Direction			Direction			irection			Direction				irection			rection (1
	-	<u> </u>	(Through	5) T	0	Right Tun	n) I	<u> </u>	(U Turn)	<u>'</u>	(Left Tun	n) 1		(F	ight Tur	n)		(U Turn)		1
		Lights	Heavies	otal	rights	Heavies	otal	Lights	Heavies	3	Lights	Heavies	Total		Lights	Heavies	otal	Lights	Heavies	Total	
Time Period 6:30 to 7:30	-	<u>د</u>	<u>₹</u>	P 0	31	- ± 17	_₽ 48	<u>د</u>	- ±	<u>م</u>	33	<u> 문</u> 0	_₽ 33		 66	<u> </u>	_₽ 67	3° 6	운	6 6	1
6:45 to 7:45	-	1	0	1	38	16	54	0	0		41	0	41		65	1	67	4	0	4	1
7:00 to \$:00	-	2	0	2	41	17	58	0	0		45	0	45		55	1	56	7	0	7	1
7:15 to 8:15	1	2	0	2	48	18	66	0	0	0	55	0	55		54	0	54	7	0	7	1
7:30 to \$:30	1	2	0	2	47	20	67	0	0	0	57	0	57		49	0	49	8	0	8	1
7:45 to 8:45	1	1	0	1	38	19	57	0	0	0	43	0	43		42	1	43	8	0	8	1
8:00 to 9:00	1	0	0	•	33	19	52	0	0	0	40	0	40	1	40	1	41	7	1	8	1
8:15 to 9:15	1	0	0	•	24	19	43	0	0	0	33	0	33	1	44	1	45	7	1	8	1
8:30 to 9:30]	0	0	0	18	18	36	0	0	0	24	0	24		42	2	44	6	1	7	
AM Totals		2	0	2	96	55	151	0	0	0	114	0	114		157	3	160	20	1	21	
15:30 to 16:30	1	5	0	5	13	22	35	0	0	0	15	0	15]	73	0	73	5	0	5	
15:45 to 16:45		2	0	2	16	20	36	0	0	0	13	0	13		70	1	71	3	0	3	
16:00 to 17:00		1	0	1	11	21	32	0	0	0	9	0	9		70	1	71	8	0	8	
16:15 to 17:15		1	0	1	17	22	39	0	0	0	13	0	13		63	1	64	13	0	13	
16:30 to 17:30		0	0	•	25	18	43	•	0	0	17	0	17		53	1	54	16	0	16	
16:45 to 17:45		0	0	•	25	19	44	•	0	•	20	0	20		47	0	47	21	0	21	
17:00 to 18:00	4	0	0	•	32	17	49	0	0	0	27	0	27		40	0	40	20	0	20	
17:15 to 18:15	-	0	0	0	29	18	47	0	0	0	26	0	26		38	0	38	16	0	16	
17:30 to 18:30	4	0	0	0	24	19	43	0	0		21	0	21	-	42	1	43	13	0	13	1
PM Totals		5	0	5	62	59	121	0	0	0	53	c	53		168	2	170	34	0	34	1

Approach						Geev	s Ln		
Direction		Direction (Left Turn			Direction (Through			Direction (U Turr	
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
6:30 to 7:30	11	0	11	0	0	0	0	0	0
6:45 to 7:45	15	1	19	0	0	0	0	0	0
7:00 to 8:00	25	1	26	0	0	0	0	0	0
7:15 to 8:15	26	1	27	0	0	0	0	0	0
7:30 to \$:30	33	1	34	0	0	0	0	0	0
7:45 to 8:45	32	1	33	0	0	0	•	0	•
8:00 to 9:00	29	1	30	0	0	0	0	0	0
8:15 to 9:15	34	1	35	0	0	0	0	0	0
\$:30 to 9:30	28	1	29	0	0	0	0	0	•
AM Totals	72	2	74	o	0	0	0	0	0
15:30 to 16:30	113	0	113	0	0	0	0	0	0
15:45 to 16:45	104	0	104	0	0	0	•	0	0
16:00 to 17:00	91	0	91	0	0	0	0	0	0
16:15 to 17:15	78	0	73	2	0	2	0	0	0
16:30 to 17:30	66	0	66	2	0	z	0	0	0
16:45 to 17:45	71	0	71	3	0	3	•	0	0
17:00 to 18:00	73	0	73	3	0	3	0	0	0
17:15 to 18:15	84	0	84	1	0	1	0	0	0
17:30 to 18:30	86	0	86	1	0	1	0	0	0
PM Totals	265	0	265	3	0	3	•	0	0

Appendix B

SIDRA Intersection Results



1651109000 // 31/10/17 Transport Study // Issue: D Interchange Precinct, Geeves Avenue, Rockdale



Site: Princes Hwy/ Geeves Ave - Ex AM

ook Network: Ex AM

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ment P	erformance	e - Veh	icles									
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South:	Princes	Highway											
1	L2	52	2.0	52	2.0	0.677	4.7	LOS A	2.3	16.2	0.06	0.11	48.6
2	T1	2543	2.1	2543	2.1	0.677	0.8	LOS A	4.0	28.6	0.06	0.07	49.3
Approa	ach	2595	2.1	2595	2.1	0.677	0.9	LOS A	4.0	28.6	0.06	0.07	49.2
North:	Princes	Highway											
8	T1	645	7.2	645	7.2	0.371	2.4	LOS A	5.0	37.4	0.14	0.13	42.0
9	R2	62	0.0	62	0.0	0.851	56.0	LOS D	2.4	17.1	0.13	0.79	21.8
Approa	ach	707	6.5	707	6.5	0.851	7.1	LOS A	5.0	37.4	0.14	0.19	31.0
West:	Geeves	Avenue											
10	L2	56	24.5	56	24.5	0.552	69.0	LOS E	3.8	31.9	0.97	0.79	17.5
12	R2	41	0.0	41	0.0	0.163	62.7	LOS E	2.5	17.5	0.92	0.73	18.7
Approa	ach	97	14.1	97	14.1	0.552	66.3	LOS E	3.8	31.9	0.95	0.76	18.0
All Veh	nicles	3399	3.4	3399	3.4	0.851	4.0	LOS A	5.0	37.4	0.11	0.12	34.7

Level of Service (LOS) Method: Delay (RTA NSW). Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ment Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	6.0	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	158	44.9	LOS E			0.74	0.74

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Geeves Ave - Ex PM

中 Network: EX PM

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ment Pe	erformanc	e - Veh	icles									
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/t
South:	Princes	Highway											
1	L2	51	0.0	51	0.0	0.066	4.3	LOS A	0.1	1.0	0.02	0.31	47.2
2	T1	1039	2.3	1039	2.3	0.329	0.5	LOS A	1.0	6.9	0.03	0.04	52.4
Approa	ach	1090	2.2	1090	2.2	0.329	0.7	LOS A	1.0	6.9	0.03	0.05	50.8
North:	Princes I	Highway											
8	T1	2011	1.6	2011	1.6	0.939	38.4	LOS C	17.3	122.4	0.38	0.56	7.5
9	R2	36	0.0	36	0.0	0.939	46.8	LOS D	17.3	122.4	0.27	0.49	25.3
Approa	ach	2047	1.6	2047	1.6	0.939	38.6	LOS C	17.3	122.4	0.38	0.55	8.1
West:	Geeves A	Avenue											
10	L2	45	11.1	45	11.1	0.368	64.4	LOS E	2.8	21.4	0.93	0.73	18.3
12	R2	96	14.6	96	14.6	1.020	187.5	LOS F	11.7	92.4	1.00	1.47	8.3
Approa	ach	141	13.5	141	13.5	1.020	148.2	LOS F	11.7	92.4	0.98	1.23	10.0
All Vel	nicles	3278	2.3	3278	2.3	1.020	30.7	LOS C	17.3	122.4	0.29	0.42	10.9

Level of Service (LOS) Method: Delay (RTA NSW). Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ment Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	50	5.7	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	150	44.8	LOS E			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Geeves Ave - 2021 Base AM

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φφ Network: 2021 Base AM
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Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ment P	erformanc	e - Veh	icles									
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	: Princes	Highway											
1	L2	52	2.0	51	2.0	0.699	4.8	LOS A	2.4	16.8	0.07	0.11	48.6
2	T1	2595	2.1	2589	2.1	0.699	0.8	LOS A	4.4	31.6	0.07	0.07	49.0
Appro	ach	2646	2.1	2641 ^{N1}	2.1	0.699	0.9	LOS A	4.4	31.6	0.07	0.08	49.0
North	Princes	Highway											
8	T1	659	7.2	659	7.2	0.379	2.4	LOS A	5.2	38.7	0.15	0.13	41.9
9	R2	62	0.0	62	0.0	0.880	67.7	LOS E	2.9	20.3	0.16	0.82	19.5
Appro	ach	721	6.6	721	6.6	0.880	8.0	LOS A	5.2	38.7	0.15	0.19	29.2
West:	Geeves	Avenue											
10	L2	56	24.5	56	24.5	0.589	70.2	LOS E	3.8	32.4	0.97	0.81	17.3
12	R2	41	0.0	41	0.0	0.163	62.7	LOS E	2.5	17.5	0.92	0.73	18.7
Appro	ach	97	14.1	97	14.1	0.589	67.0	LOS E	3.8	32.4	0.95	0.78	17.9
All Ve	hicles	3464	3.4	<mark>3459^{N1}</mark>	3.4	0.880	4.2	LOS A	5.2	38.7	0.11	0.12	34.0

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Move	ment Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	6.0	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	158	44.9	LOS E			0.74	0.74

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Geeves Ave - 2021 Base PM

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여 Network: 2021 Base PM
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Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ement Pe	erformanc	e - Veľ	nicles									
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	: Princes	Highway											
1	L2	51	0.0	51	0.0	0.070	4.3	LOS A	0.1	1.0	0.02	0.29	47.4
2	T1	1060	2.3	1060	2.3	0.349	0.5	LOS A	1.1	7.6	0.03	0.04	52.3
Appro	ach	1111	2.2	1111	2.2	0.349	0.7	LOS A	1.1	7.6	0.03	0.05	50.8
North:	Princes	Highway											
8	T1	2052	1.6	2052	1.6	0.968	63.4	LOS E	17.3	122.4	0.73	0.99	4.8
9	R2	36	0.0	36	0.0	0.968	67.9	LOS E	17.3	122.4	0.42	0.73	20.3
Appro	ach	2088	1.6	2088	1.6	0.968	63.5	LOS E	17.3	122.4	0.73	0.98	5.2
West:	Geeves	Avenue											
10	L2	45	11.1	45	11.1	0.368	64.4	LOS E	2.8	21.4	0.93	0.73	18.3
12	R2	96	14.6	96	14.6	1.020	187.5	LOS F	11.7	92.4	1.00	1.47	8.3
Appro	ach	141	13.5	141	13.5	1.020	148.2	LOS F	11.7	92.4	0.98	1.23	10.0
All Ve	hicles	3340	2.3	3340	2.3	1.020	46.2	LOS D	17.3	122.4	0.51	0.69	7.7

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ment Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	50	5.7	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	150	44.8	LOS E			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Geeves Ave - 2021 Base AM + Dev

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φφ Network: 2021 Base AM +Dev
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Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ment P	erformanc	e - Veh	icles									
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/t
South	: Princes	Highway											
1	L2	60	2.0	60	2.0	0.700	4.8	LOS A	2.4	17.0	0.07	0.12	48.5
2	T1	2595	2.1	2588	2.1	0.700	0.8	LOS A	4.4	31.7	0.07	0.08	48.9
Appro	ach	2655	2.1	2648 ^{N1}	2.1	0.700	0.9	LOS A	4.4	31.7	0.07	0.08	48.8
North	Princes	Highway											
8	T1	659	7.2	659	7.2	0.379	2.4	LOS A	5.3	39.6	0.15	0.13	41.6
9	R2	66	0.0	66	0.0	0.943	97.5	LOS F	4.5	31.8	0.28	0.93	15.3
Appro	ach	725	6.5	725	6.5	0.943	11.1	LOS A	5.3	39.6	0.16	0.21	24.8
West:	Geeves	Avenue											
10	L2	66	24.5	66	24.5	0.770	77.1	LOS F	4.9	41.4	0.99	0.93	16.3
12	R2	73	0.0	73	0.0	0.573	64.2	LOS E	4.5	31.8	0.94	0.76	18.4
Appro	ach	139	11.7	139	11.7	0.770	70.4	LOS E	4.9	41.4	0.96	0.84	17.3
All Ve	hicles	3519	3.4	3512 ^{N1}	3.4	0.943	5.8	LOS A	5.3	41.4	0.12	0.13	30.5

Level of Service (LOS) Method: Delay (RTA NSW). Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Move	ment Performance - Pedestrians	S						
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	6.0	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	158	44.9	LOS E			0.74	0.74

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Geeves Ave - 2021 Base PM + Dev

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¢¢ Network: 2021 Base PM +Dev
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Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ment Pe	erformanc	e - Veľ	nicles									
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	Princes	Highway											
1	L2	69	0.0	69	0.0	0.075	4.3	LOS A	0.2	1.1	0.02	0.37	46.8
2	T1	1060	2.3	1060	2.3	0.373	0.5	LOS A	1.2	8.4	0.03	0.04	52.1
Appro	ach	1129	2.2	1129	2.2	0.373	0.7	LOS A	1.2	8.4	0.03	0.06	50.1
North:	Princes	Highway											
8	T1	2052	1.6	2052	1.6	0.981	76.7	LOS F	17.3	122.4	0.85	1.16	4.0
9	R2	42	0.0	42	0.0	0.981	81.7	LOS F	17.3	122.4	0.57	0.93	17.9
Appro	ach	2094	1.6	2094	1.6	0.981	76.8	LOS F	17.3	122.4	0.84	1.15	4.4
West:	Geeves	Avenue											
10	L2	49	11.1	49	11.1	0.485	64.6	LOS E	3.1	23.4	0.94	0.73	18.3
12	R2	108	14.6	108	14.6	1.144	375.5	LOS F	20.6	162.3	1.00	1.92	4.5
Appro	ach	157	13.5	157	13.5	1.144	278.5	LOS F	20.6	162.3	0.98	1.55	5.9
All Vel	hicles	3380	2.3	3380	2.3	1.144	60.7	LOS E	20.6	162.3	0.58	0.81	6.3

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ment Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	50	5.7	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	150	44.8	LOS E			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Geeves Ave - 2021 Base AM + Dev + New Layout

φφ Network: 2021 Base AM +Dev + New Layout

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ement P	erformanc	e - Veh	nicles									
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/t
South	: Princes	Highway											
1	L2	60	2.0	60	2.0	0.700	4.8	LOS A	2.4	17.0	0.07	0.12	48.
2	T1	2595	2.1	2588	2.1	0.700	0.8	LOS A	4.4	31.7	0.07	0.08	48.
Appro	ach	2655	2.1	2648 ^{N1}	2.1	0.700	0.9	LOS A	4.4	31.7	0.07	0.08	48.
North:	Princes	Highway											
8	T1	659	7.2	659	7.2	0.379	2.4	LOS A	5.3	39.6	0.15	0.13	41.0
9	R2	66	0.0	66	0.0	0.943	97.5	LOS F	4.5	31.8	0.28	0.92	15.
Appro	ach	725	6.5	725	6.5	0.943	11.1	LOS A	5.3	39.6	0.16	0.21	24.
West:	Geeves	Avenue											
10	L2	66	24.5	66	24.5	0.618	71.6	LOS F	4.6	39.3	0.99	0.83	17.
12	R2	73	0.0	73	0.0	0.144	62.5	LOS E	2.2	15.4	0.92	0.73	18.
Appro	ach	139	11.7	139	11.7	0.618	66.8	LOS E	4.6	39.3	0.95	0.78	17.
All Ve	hicles	3519	3.4	3512 ^{N1}	3.4	0.943	5.6	LOS A	5.3	39.6	0.12	0.13	30.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D). HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Move	ment Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back o Pedestrian ped	f Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	6.0	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	158	44.9	LOS E			0.74	0.74

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Geeves Ave - 2021 Base PM + Dev + New Layout

¢¢ Network: 2021 Base PM +Dev + New Layout

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ement Pe	erformanc	e - Vel	nicles									
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/t
South	: Princes	Highway											
1	L2	69	0.0	69	0.0	0.079	4.3	LOS A	0.2	1.2	0.02	0.35	46.9
2	T1	1060	2.3	1060	2.3	0.394	0.5	LOS A	1.3	9.2	0.03	0.05	51.9
Appro	ach	1129	2.2	1129	2.2	0.394	0.7	LOS A	1.3	9.2	0.03	0.06	50.0
North	Princes	Highway											
8	T1	2052	1.6	2052	1.6	0.982	77.8	LOS F	17.3	122.4	0.86	1.17	4.0
9	R2	42	0.0	42	0.0	0.982	82.7	LOS F	17.3	122.4	0.58	0.95	17.8
Appro	ach	2094	1.6	2094	1.6	0.982	77.9	LOS F	17.3	122.4	0.85	1.17	4.3
West:	Geeves	Avenue											
10	L2	49	11.1	49	11.1	0.221	64.6	LOS E	3.1	23.4	0.94	0.74	18.3
12	R2	108	14.6	108	14.6	0.513	69.9	LOS E	3.7	28.9	0.97	0.78	17.4
Appro	ach	157	13.5	157	13.5	0.513	68.3	LOS E	3.7	28.9	0.96	0.77	17.6
All Ve	hicles	3380	2.3	3380	2.3	0.982	51.7	LOS D	17.3	122.4	0.58	0.78	7.2

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay. Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D). HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ment Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	50	5.7	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	150	44.8	LOS E			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Bryant St - 2021 Base AM + Dev

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φφ Network: 2021 Base AM +Dev
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Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ment Pe	erformanc	e - Veľ	nicles									
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/t
South	Princes	Highway											
8	T1	2622	2.1	2622	2.1	0.659	2.9	LOS A	17.2	122.4	0.19	0.23	52.1
9	R2	166	4.1	166	4.1	0.659	8.4	LOS A	7.9	56.5	0.19	0.36	45.8
Appro	ach	2788	2.2	2788	2.2	0.659	3.3	LOS A	17.2	122.4	0.19	0.23	51.4
East: I	Bryant St	reet											
10	L2	131	0.8	131	0.8	0.356	29.7	LOS C	5.8	43.4	0.56	0.68	27.8
12	R2	49	15.2	49	15.2	0.356	63.1	LOS E	5.8	43.4	0.94	0.78	23.3
Appro	ach	180	4.8	180	4.8	0.356	38.9	LOS C	5.8	43.4	0.67	0.71	26.0
North:	Princes	Highway											
1	L2	4	0.0	4	0.0	0.123	48.9	LOS D	3.0	22.3	0.81	0.64	28.7
2	T1	591	6.7	591	6.7	0.617	49.0	LOS D	17.5	129.5	0.92	0.78	15.0
Appro	ach	595	6.7	595	6.7	0.617	49.0	LOS D	17.5	129.5	0.92	0.78	15.2
All Vel	hicles	3563	3.1	3563	3.1	0.659	12.7	LOS A	17.5	129.5	0.34	0.35	37.0

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ment Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	East Full Crossing	53	44.9	LOS E	0.2	0.2	0.80	0.80
P1	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pe	destrians	158	57.8	LOS E			0.91	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Bryant St - 2021 Base PM + Dev

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¢¢ Network: 2021 Base PM +Dev
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Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ment Pe	erformance	e - Veľ	nicles									
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Arriva Total veh/h	I Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/t
South	: Princes	Highway											
8	T1	975	2.8	975	2.8	0.601	2.0	LOS A	7.1	51.1	0.13	0.12	54.7
9	R2	223	2.0	223	2.0	0.635	60.0	LOS E	14.4	102.4	1.00	1.03	20.5
Appro	ach	1198	2.6	1198	2.6	0.635	12.8	LOS A	14.4	102.4	0.30	0.29	37.7
East:	Bryant St	reet											
10	L2	300	2.5	300	2.5	0.824	65.5	LOS E	15.6	111.7	0.96	0.94	18.1
12	R2	89	0.0	89	0.0	0.824	75.7	LOS F	12.4	87.6	1.00	0.93	21.5
Appro	ach	389	2.0	389	2.0	0.824	67.8	LOS E	15.6	111.7	0.97	0.94	19.0
North:	Princes	Highway											
1	L2	43	0.0	43	0.0	0.792	33.0	LOS C	26.1	185.2	0.84	0.80	34.3
2	T1	1841	1.7	1841	1.7	0.792	25.2	LOS B	46.3	329.0	0.84	0.79	23.6
Appro	ach	1884	1.7	1884	1.7	0.792	25.4	LOS B	46.3	329.0	0.84	0.79	24.0
All Ve	hicles	3472	2.0	3472	2.0	0.824	25.8	LOS B	46.3	329.0	0.67	0.63	26.4

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ment Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	East Full Crossing	53	15.1	LOS B	0.1	0.1	0.47	0.47
P1	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pe	destrians	158	47.9	LOS E			0.79	0.79

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Bay St/ Sevenways/ Tramway Arc - 2021 Base ♦♦ Network: 2021 Base AM +Dev AM + Dev

Princes / Bay / Seven / Tramway

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Maura	mont D		a.a. \/ak										_
Mov	OD	erformano Demano			I Flows	Deg.	Average	Level of	95% Back	of Oueue	Prop.	Effective	Average
ID	Mov	Total	VH	Total	HV	Satn	Delay	Service	Vehicles	Distance	Queued		Speed
		veh/h		veh/h			sec		veh			per veh	km/t
South	: Princes	Highway											
1b	L3	104	7.2	104	7.2	0.890	55.5	LOS D	39.4	287.6	0.93	1.02	21.0
1	L2	11	100.0	11	100. 0	0.890	60.8	LOS E	39.4	287.6	0.93	1.02	11.0
2	T1	2456	2.0	2456	2.0	0.890	33.9	LOS C	63.1	448.8	0.94	0.93	18.3
Appro		2571	2.6	2571	2.6	0.890	35.0	LOS C	63.1	448.8	0.94	0.93	18.2
East:	Bay Stree	et											
4	L2	27	4.0	27	4.0	0.152	52.6	LOS D	3.4	24.5	0.84	0.73	19.
4a	L1	306	3.2	306	3.2	0.686	57.0	LOS E	17.0	122.2	0.95	0.82	18.
5	T1	9	100.0	9	100. 0	0.187	92.6	LOS F	0.7	8.9	0.99	0.68	9.
Appro	ach	343	5.9	343	5.9	0.686	57.6	LOS E	17.0	122.2	0.95	0.81	17.
North:	Princes	Highway											
7	L2	55	25.0	55	25.0	0.083	6.0	LOS A	0.4	2.9	0.10	0.39	38.6
8	T1	583	0.0	583	0.0	0.407	2.2	LOS A	3.7	25.7	0.11	0.11	53.2
9a	R1	107	0.0	107	0.0	0.983	99.7	LOS F	8.8	61.8	1.00	0.98	9.
Appro	ach	745	1.8	745	1.8	0.983	16.5	LOS B	8.8	61.8	0.24	0.26	31.
South	West: Th	e Seven W	ays										
30a	L1	235	3.2	235	3.2	1.302	326.1	LOS F	38.2	274.7	1.00	1.48	2.
32a	R1	401	3.2	401	3.2	0.852	76.3	LOS F	15.4	110.9	1.00	0.96	14.
32b	R3	75	1.4	75	1.4	0.342	66.9	LOS E	4.7	33.5	0.95	0.77	17.
Appro	ach	711	3.0	711	3.0	1.302	157.9	LOS F	38.2	274.7	0.99	1.11	7.
All Ve	hicles	4369	2.8	4369	2.8	1.302	53.6	LOS D	63.1	448.8	0.83	0.84	14.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ment Performance - Pedestrians							
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	f Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	12.0	LOS B	0.1	0.1	0.42	0.42
P3	North Full Crossing	53	55.9	LOS E	0.2	0.2	0.89	0.89
P4	West Full Crossing	53	35.1	LOS D	0.1	0.1	0.84	0.84
P8	SouthWest Full Crossing	53	21.2	LOS C	0.1	0.1	0.55	0.55
All Pe	destrians	263	37.7	LOS D			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Bay St/ Sevenways/ Tramway Arc - 2021 Base PM + Dev

Princes / Bay / Seven / Tramway

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ment_P	erforman	ce - Veh	nicles									_
Mov ID	OD Mov	Demano Total veh/h			I Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/t
South	: Princes	Highway											
1b	L3	110	60.0	110	60.0	0.205	20.6	LOS B	3.4	37.0	0.58	0.74	30.
1	L2	7	100.0	7	100. 0	0.205	25.3	LOS B	3.4	37.0	0.58	0.74	12.
2	T1	918	2.8	918	2.8	0.868	57.1	LOS E	36.3	260.2	0.97	0.97	12.
Appro		1035	9.6	1035	9.6	0.868	53.0	LOS D	36.3	260.2	0.93	0.95	13.
East:	Bay Stre												
4	L2	52	5.8	52	5.8	0.199	55.9	LOS D	4.1	29.9	0.87	0.75	18.
4a	L1	348	0.9	348	0.9	0.896	75.4	LOS F	25.2	177.6	0.99	1.01	15
5	T1	10	100.0	10	100. 0	0.148	88.9	LOS F	0.7	9.0	0.98	0.69	9
Appro	ach	410	3.9	410	3.9	0.896	73.3	LOS F	25.2	177.6	0.98	0.97	15.
North:	Princes	Highway											
7	L2	66	13.6	66	13.6	0.852	41.1	LOS C	13.6	97.9	0.89	0.86	16
8	T1	1705	1.8	1705	1.8	0.852	21.4	LOS B	13.8	97.9	0.71	0.68	27
9a	R1	348	1.5	348	1.5	0.852	48.3	LOS D	13.7	97.9	0.97	0.90	17.
9	R2	4	100.0	4	100. 0	0.852	52.7	LOS D	13.7	97.9	0.97	0.90	9.
Appro	ach	2123	2.3	2123	2.3	0.852	26.5	LOS B	13.8	97.9	0.76	0.72	24
South	West: Th	ie Seven W	ays										
30a	L1	190	0.5	190	0.5	0.215	19.0	LOS B	5.6	39.7	0.63	0.71	26
32a	R1	327	0.6	327	0.6	0.744	59.5	LOS E	14.6	102.8	0.94	0.83	17.
32b	R3	142	2.9	142	2.9	0.297	46.9	LOS D	7.4	53.3	0.81	0.79	22
Appro	ach	659	1.1	659	1.1	0.744	45.1	LOS D	14.6	102.8	0.82	0.78	20
All Vel	hicles	4227	4.0	4227	4.0	0.896	40.4	LOS C	36.3	260.2	0.83	0.81	19

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

The results of iterative calculations indicate a somewhat unstable solution. See the Diagnostics section in the Detailed Output report.

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	58.6	LOS E	0.2	0.2	0.92	0.92
P2	East Full Crossing	50	17.0	LOS B	0.1	0.1	0.49	0.49
P3	North Full Crossing	50	46.5	LOS E	0.2	0.2	0.82	0.82
P4	West Full Crossing	50	46.5	LOS E	0.2	0.2	0.82	0.82
P8	SouthWest Full Crossing	50	49.0	LOS E	0.2	0.2	0.84	0.84
All Pe	destrians	250	43.5	LOS E			0.78	0.78

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements. SIDRA INTERSECTION 6.1 | Copyright © 2000-2015 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: GTA CONSULTANTS | Processed: Thursday, 18 May 2017 4:18:18 PM Project: P:\16S1100-1199\16S1109000 507-511 Princes Highway Rockdale\Modelling\170518 Sidras\170518sid-16S1109000-2021 Base+Dev.sip6

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Reference: #16S1109000

1 March 2018

Fivex Level 17, 275 Alfred Street NORTH SYDNEY NSW 2060

Attention: Mr. Lesli Berger (Managing Director)

Dear Lesli

RE: LETTER ADDENDUM TO ADDRESS COUNCIL COMMENTS 511 PRINCES HIGHWAY, ROCKDALE

This letter provides a response to comments provided by Bayside Council (Council) on the Planning Proposal for the land identified as the 'Transport Interchange Precinct' located on Geeves Avenue, Rockdale.

This letter will form an addendum to the report "Interchange Precinct, Greeves Avenue, Rockdale – Transport Study" (Transport Report) - GTA dated 31 October 2017 and should be read in conjunction with the report.

This letter also provides an update to the land use areas previously provided in the Transport Report and traffic modelling within this addendum is based on the following:

Table 1: Proposed Development	
Land use	Total size
Residential	236 apartments
Retail	4,425 m² GFA [1]
Commercial	968 m² GFA [1]

[1] GFA = Gross floor area

Based on the land use areas in Table 1, parking rates have been recalculated based on Council's Development Control Plan (DCP) and Roads and Maritime Services (Roads and Maritime) rates as shown in Table 2 and Table 3.

VIC | NSW | QLD ACT | SA | WA

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Item 5.2 - Attachment 9



		DCP		511 Princes lighway		Mid site	End site		
Description	Use	parking rate	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	
	Studio		10				*****C38**52#60	1997 - 1992 M. A. Marine and A. M.	
	1 Bed	1 space/unit	19	19	22	22	20	20	
	2 Bed		42	42	44	44	48	48	
Residential	3 Bed	2 spaces / unit	12	24	17	34	12	24	
	Visitor	1 space / 5 units	73	15	83	17	80	16	
	Su	b-Total	100		117		108		
Retail / Com	mercial	l space/40 m² GFA	2,858	72	1,348	34	1,187	30	
Individual Tota	I			172		151	138		
Precinct Total						461			

Table 2: DCP Parking requirements

Table 3: Roads and Maritime - Residential Parking Requirements

	Use	Parking rate	507 – 511 Princes Highway			Mid site	End site			
Description			Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement		
	Studio	0.4 spaces			- 108.07.10890.04580					
	1 Bed	/unit	. 19	8	22	9	20	8		
Residential	2 Bed	0.7 spaces / unit	42	30	44	31	48	34		
	3 Bed	1.2 spaces / unit	12	15	17	21	12	15		
	Visitor	1 space per 5 units	73	15	83	17	80	16		
Residential Total		68		78		73				
Precinc	Residenti	al Total	219							

Table 3 indicates that the application of the Roads and Maritime based residential parking rates would equate to a residential parking demand of 219 car spaces across the precinct. This is less than the DCP residential car parking requirement of 325 spaces. Therefore, in accordance with the Apartment Design Guide (ADG), the Roads and Maritime parking provision would be applicable to the proposed residential component of the development.

Including the retail / commercial component this would equate to a total requirement of 356 spaces.

180301Ltr-16S1109000 507-511 Princes Highway, Rockdale Final.docx

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As outlined in the Transport Report, consideration is recommended to remove the retail parking requirement from Site 1 due to its unique ability to connect directly into the station through a pedestrian walkway (overbridge). This would reduce the overall parking by 73 spaces and therefore result in an overall parking requirement of 283 spaces.

Planning Comments

Council's comments relating to Transport and GTA's responses are as follows.

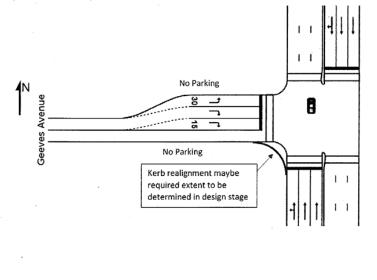
1.8 Geeves Avenue Road Improvements

Please be more descriptive of the 'minor improvements to the lane configuration on the Geeves Avenue approach'.

Response:

The intersection of Geeves Avenue and Princes Highway has been modelled as a network with the intersection to the north and south on the Princes Highway. In isolation this intersection would operate well in the future, however the impact of surrounding intersections needs to be considered. Through removing parking on this section of Geeves Avenue additional traffic lanes can be added on the Geeves Avenue approach to allow more right turning traffic to get through the intersection in the allocated green time. This would result in the loss of around six (time restricted) parking spaces and two loading zones. The parking and loading zone on the southern side would currently be used for the existing development. These modifications would assist to increase the capacity of the right turning vehicles and therefore improve the overall intersection performance as background traffic increases in the future. This proposed intersection layout is shown in Figure 1, please note this is a SIDRA layout representation and not a concept design.

Figure 1 – Proposed Layout Geeves Avenue



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Urban Design

2.5 Bicycle parking

The Planning Proposal promotes sustainable transport modes. The proposal incorporates a range of through-site links for pedestrians to and from the station. In table 5 - 1.1.4 it is stated that it will promote walking and cycling in line with Council's strategy active living, however further consideration needs to be undertaken to ensure suitable cycle links (shared or on road) are integrated into the existing Active Transport Network. Any future DA will need to that any bicycle parking provided on site is accessible to residents, workers and the community.

Response:

Section 7.3 of the Transport Report indicates that at least 87 bicycle parking spaces are to be provided for staff, residents and visitors of the site as per the DCP. There are currently no designated bicycle routes immediately surrounding the site on the eastern side of the railway line. The nearest on road facility is located on Railway Street on the western side of the railway line. Access from the site would be through the station or via The Seven Ways road which connects to Railway Street.

180301Ltr-16S1109000 507-511 Princes Highway, Rockdale Final.docx

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Transport

3.1 Temporary/ final vehicle access

The volumes of development-generated traffic expected to be turning into and out of both the temporary and ultimate scenario site accesses have been identified as an issue. There are concerns that access location proposed during the temporary scenario would result in conflicts between development traffic, buses and pedestrians accessing the Rockdale Station Bus Interchange and railway station entrance on Geeves Avenue. A Pedestrian Impact Statement should also be provided.

Response:

Section 5 of the Transport Report covers the site access arrangements, while Table 6.2 sets out the traffic generation estimates of the planning proposal. It is expected that 81 vehicle trips per hour are to be generated by the Planning Proposal for the weekday peak hour. Temporary access to Site 1 would only be provided should Site 1 be developed ahead of Sites 2 and 3. Site 1 would generate around 16 vehicle trips in the peak hour (excluding retail as per Section 5.4).

The current pedestrian activity in and around the site, between the Princes Highway and the station / bus interchange has been surveyed and reported on in Section 2.6 of the Transport Report. The existing pedestrian crossing connecting the station/bus interchange with the sites internal walkway through to Princes Highway will remain as a key pedestrian connection and is why the access location for the completed development is recommended to not be on the western side of the site. The minimal traffic expected from the temporary access to Site 1 is not likely to provide an adverse impact to the interchange or pedestrian movements around the site. In the ultimate scenario the development will provide an opportunity for improved pedestrian facilities through the potential connection to the station over Geeves Avenue.

3.2 Final vehicle access to intersection

There are also concerns that the revised access location for the ultimate scenario is too close to the existing Princes Highway/ Greeves Avenue signalised intersection. It is recommended that the ultimate access be relocated to the western side of the site, given the proximity to the Princes Highway/Geeves Avenue signalised intersection and subsequent sight line limitations. The access should be located to the north of the pedestrian crossing on Geeves Avenue as to reduce traffic volumes travelling over the crossing. Parking removal to accommodate intersection capacity is also a concern.

Response:

Transport for NSW has recommended that the vehicle access be consolidated for all three sites and requested that conflict between motorists and pedestrian/bus movements along the Rockdale Interchange (Geeves Avenue) should be minimised as much as possible. With the requirements of on-site garbage collection, access from the northern side is required to obtain ramp requirements to get trucks to the basement level, this combined with minimising impact with the bus interchange and pedestrian access to the station has resulted in the proposed location on the northern side of the site.

On street parking on the northern section is likely to need to be removed to improve the operation of the Geeves Avenue / Princes Highway intersection to accommodate forecasted growth and

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reduce impacts to bus operations from the interchange regardless of the proposed development. The removal of this parking would also provide improved sight lines for the proposed access. There is unlikely to be any queuing because of the development and if it did occur, it would be accommodated within the development and not within Geeves Avenue for both the entry and exit.

3.3 Basement layout

Figure 5.1 of the TIA identifies the site accesses for both the temporary and ultimate scenarios. The internal parking layout for Site 1 appears to be too tight to support service vehicle access. Servicing needs more thought/evidence of ability to achieve success, including swept path checks.

Response:

The basement layout for Site 1 on its own is constrained and intended to be temporary. A detailed design will be prepared for the Development Application.

3.4 Car parking

While the TIA acknowledges the commentary provided in the NSW Department of Planning and Environment's Apartment Design Guide regarding the acceptable levels of car parking provision, parking rates less than those specified in the RMS Guide to Traffic Generating Development (2002) should be considered given the development's unique location. The subject site was identified by Council in the Rockdale Masterplan (2013) as having a crucial role in the overall development of Rockdale's sustainable transport infrastructure. Given no on-site parking is provided for the existing land uses on the site, it is considered appropriate not to provide any retail parking provision for the proposed development.

Response:

The Transport Report tests various development parking scenarios and potential maximum rates. GTA agrees that the proposed development could support reduced parking.

3.5 Existing parking

Table 6.2 of the TIA provides estimated traffic generation for the development. The methodology considers that no on-site parking presently exists and that most of the access to the existing land uses is by pedestrians. As such, the inclusion of existing retail trips in the expected traffic generation should be removed.

Response:

In providing a conservative assessment the modelling in the Transport Report did not reduce the traffic generation by the potential existing traffic generation as outlined in Section 6.3 and Table 6.3.

Table 6.1 of the Transport Report shows a reduction in the existing retail traffic generation to show that there could be some traffic already on the surrounding road network associated with the existing site, that would not be there under the proposed development.

Table 1 provides the traffic generation used in the SIDRA modelling. The retail and commercial areas have been conservatively assessed on gross floor area.

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Table 1 Proposed Traffic Generation

		Size	Weeko	iay AM	Weekday PM		
Land use	Total size	(excl. Site 1 Retail)	Trip rate	vtph [2]	Trip rate	vtph ^[2]	
Residential	236 apartments		0.19 per apartment	45	0.15 per apartment	36	
Retail / Commercial	5,393 m² GFA	1,890 m² GFA	23 per 1,000 m ² GLFA	81	23 per 1,000 m ^{2 [1]} GLFA	81	
To	tal			126		117	

[1] 23 trips per 1,000 m² = 46 trips per 1,000 m² x 0.5 (for trip containment) [2] Vehicle trips per hour (vtph)

3.6 Traffic modelling to 2031

The traffic assessment has only considered the year of opening (i.e. 2021) and has not considered the 10-year design horizon (i.e. year 2031). There should be an estimation of year 2031 (i.e. 10-year design horizon) design traffic volumes and modelling of this scenario in SIDRA intersection.

Response:

Additional modelling has been undertaken to assess the 10-year horizon. Background traffic growth has been obtained from the Sydney Strategic Travel Model (STM) for the years 2016 and 2036 for the three analysed intersections to determine the expected background traffic growth in both the AM and PM peak hour periods. The average compound annual growth rate is about 0.4 per cent.

These intersections have been modelled together as a network. The SIDRA results for the 2031 without and with development are provided in Table 2 and Table 3 respectively.

Intersection	Control	Peak	Degree of saturation	Average delay (sec)	95th percentile queue (m)	LOS
Princes Highway/	Signalised	АМ	0.68	13	136	А
Bryant Street	Signalised	РМ	0.94	47	479	D
Princes Highway/		АМ	0.91	4	41	А
Geeves Avenue	Signalised	РМ	1.01	73	122	F
Princes Highway/ Bay Street/ The	et/The		1.46	71	482	F
Seven Ways/ Iramway Arcade	Signalised	РМ	0.91	44	288	D

Table 2 2031 base model (without development)

Table 2 indicates that in the PM peak particularly the Princes Highway adjacent to the development will be operating near or at capacity in 2031.

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The Princes Highway during the AM peak period would operate satisfactorily through the intersections of Bryant Street and Geeves Avenue, however would be operating over capacity through the Bays Street/Seven Ways intersection.

Table 3 2031 base model (with development)

Intersection	Control	Peak	Degree of saturation	Average delay (sec)	95th percentile queue (m)	los
Princes Highway/	Signalised	АМ	0.69	13	136	A
Bryant Street	Signalisea -	РМ	1.05	90	585	F
Princes Highway/ Geeves Avenue		АМ	1.21	10	105	А
	Signalised	РМ	1.05	102	122	F
Princes Highway/ Bay Street/ The	Ginnalizad	AM	1.53	80	519	F
Seven Ways/ Tramway Arcade	Signalised -	РМ	0.92	42	286	с

As the road network is operating near or over capacity without the development, adding any development traffic impacts the operation.

However, it should be noted that the NSW Government is progressing the development of the F6 Extension Stage 1, which will provide connection from Southern Sydney to the wider Sydney network, improving travel times and easing congestion on the local road network. Stage 1 will assist in the reduction of traffic congestion particularly on the Princes Highway through Arncliffe, Rockdale, Banksia and the Grand Parade, Brighton Le Sands. Based on this it is expected that by 2031 traffic volumes on the Princes Highway will have reduced and therefore the road network surrounding the site will be improved from that projected in the modelling results.

I trust this addendum addresses Council's comments regarding the Transport Report for the Planning Proposal stage.

Should you have any queries or require any further information, please do not hesitate to contact me on (02) 8448 1800.

Yours sincerely GTA CONSULTANTS

Karen McNatty Associate encl. Attachment A – SIDRA Results

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Attachment A

SIDRA Results

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Site: Princes Hwy/ Bryant St - 2031 Base AM New Layout

¢¢ Network: 2031 Base AM

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Mov	OD	Demand	Flows	Arrival	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
ID	Mov	Total veh/h	HV %	Total veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh	Distance m	Queued		
South	Princes	Highway						and the set of					
8	T1	2729	2.1	2701	2.1	0.677	2.8	LOS A	17.2	122.4	0.19	0.22	52.3
9	R2	163	4.1	161	4.1	0.677	8.5	LOS A	8.1	58.2	0.20	0.37	45.8
Appro	ach	2893	2.2	2863 ^{N1}	2.2	0.677	3.2	LOS A	17.2	122.4	0.19	0.23	51.6
East:	Bryant St	reet											A. Ster
10	L2	134	0.8	134	0.8	0.367	29.5	LOS C	5.9	44.7	0.56	0.68	27.9
12	R2	52	15.2	52	15.2	0.367	63.3	LOS E	5.9	44.7	0.94	0.78	23.3
Appro	ach	185	4.8	185	4.8	0.367	38.9	LOS C	5.9	44.7	0.67	0.71	26.0
North	Princes I	Highway	1.1933					8 L. 1			CORDER NO.		12000
1	L2	5	0.0	5	0.0	0.129	48.9	LOS D	3.2	23.3	0.81	0.64	28.7
2	T1	615	6.7	615	6.7	0.644	49.4	LOS D	18.4	136.3	0.93	0.78	14.9
Appro	ach	620	6.7	620	6.7	0.644	49.4	LOS D	18.4	136.3	0.93	0.78	15.1
All Ve	hicles	3698	3.1	3668 ^{N1}	3.1	0.677	12.8	LOSA	18,4	136.3	0.34	0.35	37.0

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay. Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	East Full Crossing	53	44.9	LOS E	0.2	0.2	0.80	0.80
P1	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pe	destrians	158	57.8	LOS E			0.91	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Bryant St - 2031 Base PM Clearway

¢¢ Network: 2031 Base PM

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Mov	OD	Demand	Flows	Arrival	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
ID	Mov	Total veh/h	HV %	Total veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh	Distance m	Queued	Stop Rate per veh	Speed km/h
South	: Princes	Highway											
8	T1	1015	2.8	1015	2.8	0.340	1.6	LOS A	5.2	37.0	0.10	0.09	55.7
9	R2	229	2.0	229	2.0	0.733	86.3	LOS F	16.1	114.6	1.00	1.04	16.6
Appro	bach	1244	2.6	1244	2.6	0.733	17.2	LOS B	16.1	114.6	0.27	0.27	33.7
East:	Bryant St	reet	anna.	NAM.					<i>MALWERT</i>		anne an	ger en	96569A
10	L2	306	2.5	306	2.5	0.918	85.8	LOS F	19.2	137.3	0.98	1.05	15.1
12	R2	94	0.0	94	0.0	0.918	90.4	LOS F	14.2	100.3	1.00	1.04	19.3
Appro	bach	400	1.9	400	1.9	0.918	86.9	LOS F	19.2	137.3	0.99	1.05	16.2
North	Princes	Highway				an. An an the				YARA YARA		COMPANY.	742 j. j.)
1	L2	45	0.0	45	0.0	0.913	58.8	LOS E	43.7	309.7	0.96	1.06	26.1
2	T1	1917	1.7	1917	1.7	0.913	47.6	LOS D	62.6	444.6	0.96	1.03	15.3
Аррго	bach	1962	1.7	1962	1.7	0.913	47.9	LOS D	62.6	444.6	0.96	1.03	15.7

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Accelik M3D). HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

The results of iterative calculations indicate a somewhat unstable solution. See the Diagnostics section in the Detailed Output report.

Mov		Demand	Average	Level of	Average Back	of Queue	Prop.	Effective
ID	Description	Flow ped/h	Delay sec	Service	Pedestrian ped	Distance m	Queued	Stop Rate per ped
P3	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	East Full Crossing	53	14.2	LOS B	0.1	0.1	0.45	0.45
P1	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Peo	destrians	158	47.6	LOS E			0.79	0.79

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Geeves Ave - 2031 Base AM New Layout

¢¢ Network: 2031 Base AM

Signals - Fixed Time Coordinated · Cycle Time = 140 seconds (Network Cycle Time)

Mov.	OD	Demand	Flows	Arrival	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop	Effective	Average
ID	Μον	Total veh/h	HV %	Total veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh	Distance m		Stop Rate	Speed
South	h: Princes	Highway				1.1.1.1		++		Strategy and the second			
1	L2	52	2.0	51	2.0	0.717	4.8	LOSA	2.6	18.2	0.07	0.12	48.6
2	T1	2701	2.1	2657	2.1	0.717	0.8	LOS A	4.8	34.3	0.07	0.08	48.8
Appro	bach	2753	2.1	2707 ^{N1}	2.1	0.717	0.9	LOS A	4.8	34.3	0.07	0.08	48.8
North	: Princes I	lighway			9605.25V	alla an			540-700-06-04 1	54-867-867	STOCKED ST	Autoritati	enerti
8	T1	686	7.2	686	7.2	0.394	2.4	LOSA	5.5	41.0	0.15	0.13	41.7
9	R2	62	0.0	62	0.0	0.911	81.8	LOS F	3.5	24.3	0.20	. 0.86	. 17.3
Appro	bach	748	6.6	748	6.6	0.911	9.0	LOSA	5.5	41.0	0.15	0.19	27.4
West	Geeves A	venue	1156	886.4799	Roll M	1791763	State 1				Section.		an a
10	L2	56	24.5	56	24.5	0.520	69.5	LOS E	3.8	32.1	0.97	0.78	17.4
12	R2	41	0.0	41	0.0	0.081	61.7	LOS E	1.2	8.6	0.91	0.70	18.8
Appro	bach	97	14.1	97	14.1	0.520	66.2	LOS E	3.8	32.1	0.94	0.75	18.0
All Ve	hicles	3598	3.4	3552 ^{N1}	3.4	0.911	4,4	LOSA	5.5	41.0	0.11	0.12	33.4

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay. Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
24	West Full Crossing	53	6.0	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	158	44.9	LOS E	yat filiziti		0.74	0.74

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movement.

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00 Network: 2031 Base PM Site: Princes Hwy/ Geeves Ave - 2031 Base PM Clearway

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Mov	OD	Demand	Flows	Arrival	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
ID	Mov	Total veh/h	HV %	Total veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh	Distance m	Queued	Stop Rate per veh	Speed km/h
South	: Princes			No.									
1	L2	51	0.0	51	0.0	0.296	4.4	LOS A	0.8	5.9	0.03	0.09	49.0
2	T1	1104	2.3	1104	2.3	0.296	0.5	LOS A	0.8	6.0	0.03	0.05	51.8
Appro	ach	1155	2.2	1155	2.2	0.296	0.6	LOSA	0.8	6.0	0.03	0.05	50.9
North:	Princes	Highway	1200		en de					2373 8 49	i de se	NI S CAR	20. CO
8	T1	2136	1.6	2136	1.6	1.007	104.4	LOS F	17.3	122.4	1.00	1.44	· 3.0
9	R2	36	0.0	36	0.0	1.007	108.8	LOS F	17.3	122.4	1.00	1.46	14.6
Appro	ach	2172	1.6	2172	1.6	1.007	104.5	LOS F	17.3	122.4	1.00	1.44	3.3
West:	Geeves	Avenue	963.AS	1.1897	ang p			1993		1927-del			1.1.2.2.2.2
10	L2	45	11.1	45	11.1	0.203	64.4	LOS E	2.8	21.4	0.93	0.74	18.3
12	R2	96	14.6	96	14.6	0.444	69.3	LOS E	3.2	25.4	0.97	0.77	17.5
Appro	ach	141	13.5	141	13.5	0.444	67.8	LOS E	3.2	25.4	0.96	0.76	17.7
All Vel	hicles	3468	2.3	3468	2.3	1.007	68.4	LOS E	17.3	122.4	0.68	0.95	5.4

Level of Service (LOS) Method: Delay (RTA NSW). Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay. Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Mov		Demand	Average	Level of	Average Back	of Queue	Prop.	Effective
ID	Description	Flow ped/h	Delay sec	Service	Pedestrian ped	Distance m	Queued	Stop Rate per ped
P1	South Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	50	5.7	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	150	44.8	LOS E			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay for all pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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¢¢ Network: 2031 Base AM

MOVEMENT SUMMARY

B Site: Princes Hwy/ Bay St/ Sevenways/ Tramway Arc - 2031 Base AM New Layout

Princes / Bay / Seven / Tramway Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Mov	OD	erformand						r na crea francis					
ID	Mov	Demano Total veh/h	HV HV	Total veh/h	I Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Speed
South	: Princes					1.1.1	Juli		Terre Carrie			per ven	KUD
1b	L3	109	7.2	109	7.2	0.903	58.0	LOS E	42.5	310.2	0.94	1.04	20.
1	L2	12	100.0	12	100. 0	0.903	63.2	LOS E	42.5	310.2	0.94	1.04	10.
2	T1	2549	2.0	2549	2.0	0.903	35.4	LOS C	67.7	481.8	0.95	0.95	17.
Appro	bach	2671	2.6	2671	2.6	0.903	36.5	LOS C	67.7	481.8	0.95	0.96	17.
East:	Bay Stree	et .						5010 S.T					
4	L2	27	4.0	27	4.0	0.152	52.6	LOS D	3.4	24.5	0.84	0.73	19.0
4a	L1	306	3.2	306	3.2	0.686	57.0	LOS E	17.0	122.2	0.95	0.82	18.6
5	T1	9	100.0	9	100. 0	0.187	92.6	LOS F	0.7	8.9	0.99	0.68	9.
Appro	ach	343	5.9	343	5.9	0.686	57.6	LOS E	17.0	122.2	0.95	0.81	17.
North:	Princes	Highway		S20.	116-528	6.0.50							NATERNA
7	L2	58	25.0	58	25.0	0.083	5.3	LOSA	0.2	1.9	0.06	0.39	39.
8	T1	582	0.0	582	0.0	0.407	1.8	LOSA	3.1	21.5	0.09	0.10	54.
9a	R1	105	0.0	105	0.0	1.285	343.4	LOS F	14.0	97.9	1.00	1.38	3.1
Appro	ach	745	1.9	745	1.9	1.285	50.3	LOS D	14.0	97.9	0.22	0.30	15.9
South	West: The	Seven Wa	ays			4010120					0845-00		
30a	L1	244	3.2	244	3.2	1.463	466.1	LOS F	47.8	344.2	1.00	1.59	1.8
32a	R1	418	3.2	418	3.2	0.988	109.4	LOS F	19.8	142.8	1.00	1.17	11.3
32b	R3	78	1.4	78	1.4	0.357	67.0	LOS E	4.9	35.0	0.95	0.77	17.
Appro	ach	740	3.0	740	3.0	1.463	222.6	LOS F	47.8	344.2	0.99	. 1.27	5.4
All Vel	hicles	4499	2.8	4499	2.8	1.463	71.0	LOS F	67.7	481.8	0.83	0.89	12.0

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Accelik M3D). HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian	of Queue Distance m	Prop. Queued	Effective Stop Rate
					ped			per ped
P1 .	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	12.0	LOS B	0.1	0.1	0.42	0.42
P3	North Full Crossing	53	55.9	LOS E	0.2	0.2	0.89	0.89
P4	West Full Crossing	53	35.1	LOS D	0.1	0.1	0.84	0.84
P8	SouthWest Full Crossing	• 53	20.1	LOS C	0.1	0.1	0.54	0.54
All Pe	destrians	263	37.5	LOS D			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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00 Network: 2031 Base PM

MOVEMENT SUMMARY

B Site: Princes Hwy/ Bay St/ Sevenways/ Tramway Arc - 2031 Base PM Clearway

Princes / Bay / Seven / Tramway Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Mov	OD	erformand Demand			Flows	Deg.	Average	Level of	05% Back	of Queue	Prop.	Effective	Auorao
ID	Mov	Total veh/h	HV	Total veh/h	HV %	Satn v/c	Delay	Service	Vehicles veh	Distance		Stop Rate per veh	Speed
South	: Princes	Highway				0.100.00				Sala Salarah S			
1b	L3	115	60.0	115	60.0	0.872	75.3	LOS F	25.4	213.8	1.00	1.07	16.3
1	L2	8	100.0	8	100. 0	0.872	80.0	LOS F	25.4	213.8	1.00	1.07	10.3
2	T1	941	2.8	941	2.8	0.872	64.2	LOS E	31.3	224.6	0.98	1.01	11.3
Appro	ach	1064	9.7	1064	9.7	0.872	65.6	LOS E	31.3	224.6	0.98	1.02	11.9
East:	Bay Stree	et				1.13.5%			1 (j. 1			1920 - Al	
4	L2	57	5.8	57	5.8	0.202	55.0	LOS D	4.3	31.2	0.87	0.75	18.2
4a	L1	363	0.9	363	0.9	0.911	78.0	LOS F	27.2	191.5	0.99	1.04	14.9
5	T1	11	100.0	11	100. 0	0.186	90.9	LOS F	. 0.8	10.1	0.99	0.69	9.0
Appro	ach	431	4.1	431	4.1	0.911	75.3	LOS F	27.2	191.5	0.98	0.99	14.8
North:	Princes I	Highway	1990 (M	aline e			100000			Reference in			
7	L2	69	13.6	69	13.6	0.889	56.4	LOS D	13.6	97.9	0.96	0.95	12.8
8	T1	1766	1.8	1766	1.8	0.889	29.6	LOS C	13.8	97.9	0.79	0.77	22.9
9a	R1	360	1.5	360	1.5	0.889	52.9	LOS D	13.7	97.9	0.98	0.94	16.0
9	R2	5	100.0	5	100. 0	0.889	57.3	LOS E	13.7	97.9	0.98	0.94	8.9
Appro	ach	2200	2.3	2200	2.3	0.889	34.3	LOS C	13.8	97.9	0.82	0.80	20.8
South	West: The	e Seven Wa	ays										939 S.M
30a	L1	194	0.5	194	0.5	0.195	15.8	LOS B	5.0	35.2	0.56	0.69	28.9
32a	R1	341	0.6	341	0.6	0.757	59.1	LOS E	15.2	106.9	0.94	0.83	18.0
32b	R3	148	2.9	148	2.9	0.309	47.1	LOS D	7.8	55.8	0.82	0.79	22.3
Appro	ach	683	1.1	683	1.1	0.757	44.2	LOS D	15.2	106.9	0.80	0.78	20.4
All Vel	nicles	4378	4.1	4378	4.1	0.911	47.5	LOS D	31.3	224.6	0.87	0.87	17.2

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back Pedestrian	of Queue Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	50	57.7	LOS E	0.2	0.2	0.91	0.91
P2	East Full Crossing	50	17.0	LOS B	0.1	0.1	0.49	0.49
P3	North Full Crossing	50	46.5	LOS E	0.2	0.2	0.82	0.82
P4	West Full Crossing	50	45.7	LOS E	0.2	0.2	0.81	0.81
P8	SouthWest Full Crossing	50	55.0	LOS E	0.2	0.2	0.89	0.89
All Pe	destrians	250	44.4	LOS E		신방 물을 벗	0.78	0.78

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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🚦 Site: Princes Hwy/ Bryant St - 2031 Base AM + Dev + New Layout 🔶 Network: 2031 Base + Dev AM

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Mov	OD	erformanc Demand		Arrival	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
ID	Mov	Total veh/h	HV	Total veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh	Distance m		Stop Rate	
South	: Princes	Highway						\$2.00 m					a and
8	T1	2745	2.1	2722	2.1	0.694	3.2	LOS A	17.2	122.4	0.21	0.24	51.6
9	R2	163	4.1	162	4.1	0.694	9.1	LOS A	9.0	64.7	0.22	0.40	45.2
Appro	bach	2908	2.2	2883 ^{N1}	2.2	0.694	3.5	LOSA	17.2	122.4	0.21	0.25	50.9
East:	Bryant Str	reet				0.000.000	100 - CAR	9.6° (1.4%					
10	L2	134	0.8	134	0.8	0.379	32.8	LOS C	6.2	46.6	0.61	0.69	26.5
12	R2	52	15.2	52	15.2	0.379	63.4	LOS E	6.2	46.6	0.95	0.78	23.3
Appro	ach	185	4.8	185	4.8	0.379	41.3	LOSC	6.2	46.6	0.71	0.72	25.2
North	Princes I	Highway		in the second		d Nile Int	24388382			1110000004	N. C.	STARS.	- C
1	L2	5	0.0	5	0.0	0.134	43.5	LOS D	3.7	27.2	0.77	0.61	30.4
2	T1	633	6.7	633	6.7	0.669	44.6	LOS D	18.3	135.5	0.90	0.77	16.1
Appro	ach	638	6.7	638	6.7	0.669	44.6	LOS D	18.3	135.5	0.90	0.77	16.3
AHAZA	hicles	3732	3.1	3706 ^{N1}	3.1	0.694	12.5	LOSA	18.3	135.5	0.35	0.36	37.3

Level of Service (LOS) Method: Delay (RTA NSW).

Level of Service (LOS) Method: Delay (KTA NSV). Vehicle movement LOS values are based on average delay per movement Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay. Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	East Full Crossing	53	39.5	LOS D	0.2	0.2	0.75	0.75
P1	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pe	destrians	158	56.0	LOS E			0.89	0.89

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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B Site: Princes Hwy/ Bryant St - 2031 Base PM + Dev CLEARWAYS 00 Network: 2031 BAse + Dev PM

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Mov	OD	Demand F	lows	Arrival	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
ID	Mov	Total veh/h		Total veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh	Distance m	Queued	Stop Rate per veh	Speed km/h
South	: Princes				1221.349		a state i de l				and the second	Cardina de	
8	T1	1032	2.8	1032	2.8	0.649	2.4	LOS A	9.0	64.6	0.16	0.15	53.8
9	R2	229	2.0	229	2.0	1.014	64.0	LOS E	17.2	122.4	1.00	0.96	20.1
Appro	ach	1261	2.6	1261	2.6	1.014	13.6	LOS A	17.2	122.4	0.31	0.30	36.9
East:	Bryant St	reet		649 <u>8</u> 6	háide de la com		nanot		nie ie de la com		91,539,59		
10	L2	306	2.5	306	2.5	0.985	115.1	LOS F	21.5	154.1	1.00	1.16	12.2
12	R2	94	0.0	94	0.0	0.985	114.2	LOS F	17.2	121.5	1.00	1.14	16.6
Annro	ach	400	1.9	400	1.9	0.985	114.9	LOS F	21.5	154.1	1.00	1.15	13.3
, thus												and a state of a second	
•••	Princes	Highway								~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
	Princes L2	Highway 45	0.0	45	0.0	1.052	137.6	LOS F	82.5	585.2	1.00	1.47	15.0
North 1	WEIGHT BUCKER		0.0 1.7	45 1933	0.0 1.7	1.052 1.052	137.6 132.7	LOS F LOS F	82.5 82.5	585.2 585.2	1.00 1.00	1.47 1.49	15.0 6.6
	L2 T1	45											

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	East Full Crossing	53	11.6	LOS B	0.1	0.1	0.41	0.41
P1	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pe	destrians	158	46.7	LOS E			0.78	0.78

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Site: Princes Hwy/ Geeves Ave - 2031 Base AM + Dev + New ¢¢ Network: 2031 Base + Dev AM Layout

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Mov	OD	Demand	Flows	Arrival	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
ID	Mov	Total veh/h	HV %	Total veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh	Distance		Stop Rate per veh	
South	: Princes	Highway											
1	L2	105	2.0	104	2.0	0.728	4.8	LOSA	2.8	19.9	0.08	0.16	48.2
2	, T1	2701	2.1	2668	2.1	0.728	0.9	LOS A	5.1	36.1	0.08	0.09	48.1
Appro	ach	2806	2.1	2772 ^{N1}	2.1	0.728	1.0	LOS A	5.1	36.1	0.08	0.09	48.1
North:	Princes	Highway 1					1932-944						
8	T1	686	7.2	686	7.2	0.394	2.5	LOS A	5.7	42.5	0.15	0.14	41.3
9	R2	80	0.0	80	0.0	1.205	285.9	LOS F	15.0	105.1	1.00	1.48	6.5
Appro	ach	766	6.4	766	6.4	1.205	32.1	LOS C	15.0	105.1	0.24	0.28	12.5
West:	Geeves /	Avenue					i you, a thank Mariy) Shi ka shakara						
10	L2	72	24.5	72	24.5	0.667	73.1	LOS F	5.1	43.2	1.00	0.86	16.9
12	R2	88	0.0	88	0.0	0.175	62.8	LOS E	2.7	18.9	0.92	0.74	18.6
Appro	ach	160	11.0	160	11.0	0.667	67.4	LOS E	5.1	43.2	0.96	0.79	17.8
All Ve	hicles	3733	3.4	3699 ^{N1}	3.4	1.205	10.3	LOSA	15.0	105.1	0.15	0.16	23.4

Level of Service (LOS) Method: Delay (RTA NSW). Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay. Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Mov	Description	Demand	Average		Average Back		Prop.	Effective
ID	Description	Flow ped/h	Delay sec	Service	Pedestrian ped	Distance m	Queued	Stop Rate per ped
P1	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	6.0	LOSA	0.1	0.1	0.29	0.29
All Pe	destrians	158	44.9	LOS E			0.74	0000

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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¢φ Network: 2031 BAse + Dev PM Site: Princes Hwy/ Geeves Ave - 2031 Base PM + Dev + New Layout

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Move	ment Pe	erformanc	e - Veh	icles									
Mov ID	OD Mov	Demand Total veh/h	HV	Arrivai Total veh/h	I Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued		Average Speed km/t
South	: Princes							1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				perven	
1	L2	94	0.0	94	0.0	0.086	4.3	LOS A	0.2	1.3	0.02	0.43	46.3
2	T1	1104	2.3	1104	2.3	0.430	0.5	LOS A	1.5	10.6	0.04	0.05	51.8
Appro	ach	1198	2.1	1198	2.1	0.430	0.8	LOS A	1.5	10.6	0.04	0.08	49.4
North:	Princes	Highway		14. B.S.		波赫塔					1012000	03713200	(NYNA)
8	T1	2136	1.6	2136	1.6	1.047	159.5	LOS F	17.3	122.4	1.00	1.71	2.0
9	R2	51	0.0	51	0.0	1.047	166.2	LOS F	17.3	122.4	1.00	1.72	10.5
Appro	ach	2187	1.6	2187	1.6	1.047	159.6	LOS F	17.3	122.4	1.00	1.71	2.2
West:	Geeves A	Avenue	71. FA		14345		20-0-0-0.00	STEP 26			w.		
10	L2	61	11.1	61	11.1	0.276	65.2	LOS E	3.8	29.4	0.94	0.76	18.2
12	R2	143	14.6	143	14.6	0.860	86.8	LOS F	5.7	44.5	1.00	1.05	15.0
Appro	ach	204	13.5	204	13.5	0.860	80.3	LOS F	5.7	44.5	0.98	0.96	15.8
All Vel	hicles	3589	2.5	3589	2.5	1.047	102.1	LOS F	17.3	122.4	0.68	1.12	4.2

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	50	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	50	5.7	LOS A	0.1	0.1	0.29	0.29
All Pe	destrians	150	44.8	LOS E			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay for all pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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🖥 Site: Princes Hwy/ Bay St/ Sevenways/ Tramway Arc - 2031 Base 🛛 🔶 Network: 2031 Base + Dev AM AM + Dev + New Layout

Princes / Bay / Seven / Tramway Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Mov ID	OD Mov	Demano Total veh/h	I Flows HV %	Arriva Total veh/h	l Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Speed
South	Princes						000			September 1		perven	All 1
1b	L3	109	7.2	109	7.2	0.918	63.4	LOS E	45.5	331.9	0.96	1.08	19.6
1	L2	12	100.0	12	100. 0	0.918	68.6	LOS E	45.5	331.9	0.96	1.08	10.7
2	T1	2593	2.0	2593	2.0	0.918	39.7	LOS C	72.9	518.7	0.97	0.99	16.3
Appro	ach	2714	2.6	2714	2.6	0.918	40.9	LOS C	72.9	518.7	0.97	0.99	16.4
East:	Bay Stree	:t	\$137M								ALC: NO		5.000000
4	L2	27	4.0	27	4.0	0.152	52.6	LOS D	3.4	24.5	0.84	0.73	19.0
4a	L1	306	3.2	306	3.2	0.686	57.0	LOS E	17.0	122.2	0.95	0.82	18.6
5	T1	9	100.0	9	100. 0	0.187	92.6	LOS F	0.7	8.9	0.99	0.68	. 9.0
Appro	ach	343	5.9	343	5.9	0.686	57.6	LOS E	17.0	122.2	0.95	0.81	17.8
North:	Princes	Highway				1.5-2.58	en an						
7	L2	58	25.0	58	25.0	0.088	5.3	LOS A	0.3	2.1	0.06	0.37	39.9
8	T1	620	0.0	620	0.0	0.431	1.8	LOS A	3.2	22.5	0.09	0.10	54.4
9a	R1	115	0.0	115	0.0	1.400	447.1	LOS F	14.0	97.9	1.00	1.53	2.4
Appro	ach	793	1.8	793	1.8	1.400	66.5	LOS E	14.0	97.9	0.22	0.33	12.9
South	Nest: The	Seven W	ays								1940-8255.S	9 - 1 - A - A	1977-799 8
30a	L1	256	3.2	256	3.2	1.532	528.3	LOS F	53.2	382.8	1.00	1.65	1.6
32a	R1	418	3.2	418	3.2	0.990	110.4	LOS F	20.0	143.7	1.00	1.18	11.2
32b	R3	78	1.4	78	1.4	0.357	67.0	LOS E	4.9	35.0	0.95	0.77	17.7
Appro	ach	752	3.0	752	3.0	1.532	248.1	LOS F	53.2	382.8	0.99	1.30	4.9
All Vel	iicles	4601	2.8	4601	2.8	1.532	80.4	LOS F	72.9	518.7	0.84	0.91	10.8

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D). HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per pec
P1	South Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	. 0.96
P2	East Full Crossing	53	12.0	LOS B	0.1	0.1	0.42	0.42
P3	North Full Crossing	53	55.9	LOS E	0.2	0.2	0.89	0.89
P4	West Full Crossing	53	35.1	LOS D	0.1	0.1	0.84	0.84
P8	SouthWest Full Crossing	53	20.1	LOS C	0.1	0.1	0.54	0.54
All Pe	destrians	263	37.5	LOS D			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: P:\16S1100-1199\16S1109000 507-511 Princes Highway Rockdale\Modelling\180226 Sidras - (KM Copy)\180209sid-16S1109000-2031 Base and Base+Dev New Layout2.sip6

🚦 Site: Princes Hwy/ Bay St/ Sevenways/ Tramway Arc - 2031 Base 🛛 🔶 Network: 2031 BAse + Dev PM PM + Dev + New Layout

Princes / Bay / Seven / Tramway Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network Cycle Time)

Mov	OD	Demand	Flows	Arriva	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Averag
ID	Mov	Total	HV	Total	HV	Satn	Delay	Service	Vehicles	Distance		Stop Rate	Speed
South	: Princes	veh/h	%	veh/h	%	v/c	Sec		veh	m		per veh	km/
1b	L3	115	60.0	. 115	60.0	0.222	21.0	LOS B	3.8	40.4	0.59	0.74	30.
1	L2	8	100.0	. 115	100.	0.222	21.0	LOS B	3.8 3.8	40.4	0.59		
	LZ	0	100.0	0	0	0.222	20.0	LUSB	3.0	40.4	0.59	0.74	12.
2	T1	976	2.8	976	2.8	0.885	58.8	LOS E	39.8	285.6	0.97	1.00	12.
Appro	ach	1099	9.5	1099	9.5	0.885	54.7	LOS D	39.8	285.6	0.93	0.97	13.
East:	Bay Stree	t.					00017668	1947 BAR			7.4.5 .6. 5		1014-016
4	L2	57	5.8	57	5.8	0.154	47.0	LOS D	3.9	28.4	0.80	0.74	20.
4a	L1	363	0.9	363	0.9	0.696	52.4	LOS D	20.9	147.3	0.94	0.83	19.
5	T1	11	100.0	11	100. 0	0.163	89.1	LOS F	0.8	10.0	0.98	0.70	9.
Appro	ach	431	4.1	431	4.1	0.696	52.6	LOS D	20.9	147.3	0.92	0.82	18.
North:	Princes I	lighway		(1236) C			0000000						744 E.A.
7	L2	69	13.6	69	13.6	0.863	41.7	LOS C	13.6	97.9	0.90	0.87	16.
8	T1	1804	1.8	1804	1.8	0.863	21.9	LOS B	13.8	97.9	0.73	0.70	27.
9a	R1	370	1.5	370	1.5	0.863	56.8	LOS E	13.7	97.9	0.98	0.93	15.
9	R2	5	100.0	5	100. 0	0.863	61.2	LOS E	13.7	97.9	0.98	0.93	8.
Appro	ach	2248	2.3	2248	2.3	0.863	28.3	LOS B	13.8	97.9	0.78	0.74	23.
South	West: The	Seven Wa	ays		100000								
30a	L1	203	0.5	203	0.5	0.237	20.1	LOS B	6.3	44.2	0.65	0.72	25.
32a	R1	341	0.6	341	0.6	0.920	77.2	LOS F	18.7	131.7	0.98	0.99	14.
32b	R3	148	2.9	148	2.9	0.541	64.6	LOS E	9.4	67.5	0.96	0.81	18.
Appro	ach	692	1.1	692	1.1	0.920	57.8	LOS E	18.7	131.7	0.88	0.87	17.
All Ve	hicles	4470	4.1	4470	4.1	0.920	41.7	LOS C	39.8	285.6	0.84	0.82	18.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akceptik M3D). HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation. The results of iterative calculations indicate a somewhat unstable solution. See the Diagnostics section in the Detailed Output report.

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	50	62.4	LOS F	0.2	0.2	0.94	0.94
P2	East Full Crossing	50	15.1	LOS B	0.1	0.1	0.47	0.47
P3	North Full Crossing	50	49.8	LOS E	0.2	0.2	0.84	0.84
P4	West Full Crossing	50	49.8	LOS E	0.2	0.2	0.84	0.84
P8	SouthWest Full Crossing	50	47.3	LOS E	0.2	0.2	0.82	0.82
All Pe	destrians	250	44.9	LOS E			0.78	0.78

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Reference: #16S1109000/N137232

17 December 2018

Fivex Level 17, 275 Alfred Street NORTH SYDNEY NSW 2060

Attention: Mr. Lesli Berger (Managing Director)

Dear Lesli

RE: LETTER TO ADDRESS COUNCIL COMMENTS 511 PRINCES HIGHWAY, ROCKDALE

This letter provides a revised assessment of changes made to the Planning Proposal to address comments provided by Bayside Council (Council) on 29 October 2018 for the land identified as the 'Transport Interchange Precinct' located on Geeves Avenue, Rockdale.

This letter should be read in conjunction with the following GTA documents:

180308Ltr-16S1109000 507-511 Princes Highway, Rockdale Final (Transport Addendum)
 Interchange Precinct, Greeves Avenue, Rockdale – Transport Study" (Transport Report)
 - GTA dated 31 October 2017

This letter also provides an update to the land use areas and associated traffic and parking assessment as outlined in Table 1.

Table 1: Proposed Development (December 2018)

Land use	Total size
Residential	246 apartments
Retail	4,015 m ² GFA ^[1]
Commercial	377 m ² GFA ^[1]

GFA = Gross floor area

Based on the land use areas in Table 1, parking rates have been recalculated considering Council's Development Control Plan (DCP) and Roads and Maritime Services (Roads and Maritime) sub-regional residential rates as shown in Table 2 and Table 3.

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				Site 1		Site 2		Site 3	
Description	Use	DCP parking rate	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	
	Studio		25	25	19	10	~ ~ ~	~	
	1 Bed	1 space/unit	25	25	19	19	26	26	
	2 Bed		48	48	44	44	53	- 53	
Residential	3 Bed	2 spaces / unit	12	24	10	20	9	18	
	Visitor	1 space / 5 units	85	17	73	15 -	88	18	
	S	ub-Total		114		98		115	
	Resid	tential Total				327			
Retail / Com	mercial	1 space/40 m² GFA	1,695	43	1,746	44	951	24	
Individual Tot	Individual Total			157		142	139		
Precinct Tota	1		438						

Table 2: DCP Parking requirements

Table 3: Roads and Maritime - Residential Parking Requirements (sub-regional)

			in the second second	Site 1		Site 2		Site 3	
Description	Use	Parking rate	Unifs/ GFA	Parking requirement	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	
	Studio	0.6	25	15	19	10	~		
	1 Bed	spaces/unit	25	15	19	12	26	16	
Residential	2 Bed	0.9 spaces/unit	48	44	44	40	53	48	
	3 Bed	1.4 spaces /unit	12	17	10	14	9	13	
	Visitor	1 space per 5 units	85	17	73	15	88	18	
Residential Total				93		81	95		
Precinct Reside	ential Total		269						

Table 3 indicates that the application of the Roads and Maritime based residential parking rates would equate to a residential parking demand of 269 car spaces across the precinct. This is less than the DCP residential car parking requirement of 327 spaces.

As outlined in the Transport Report, consideration is recommended to remove or reduce the retail parking requirement due to its proximity to the station and bus interchange. The existing retail within the site only provides minimal parking with around 25 parking spaces allocated to around 3500 square metres of retail/commercial, this equates to a rate of around one parking space to 140 square metres GFA. Due to the sites location it is anticipated that the retail component of this development would most likely service walk by trips rather than be a vehicle destination. Based on

this it is recommended the parking provision rate for the retail /commercial component be reduced or even removed. For the purpose of this assessment a reduction rate of 50 per cent has been applied, resulting in a rate of one space to 80 square metres GFA as outlined in Table 4, this is more than the existing parking provision.

Table 4: Retail Parking Recommendation

		Parking rate		Site 1		Site 2		Site 3	
Description	Use	(50% reduction)	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	Units/ GFA	Parking requirement	
Retail / Commercial		1 space/80 m² GFA	1,695	22	1,746	22	951	12	
Precinct Retai	il/Comm	ercial Total	56						

This would reduce the overall parking by 56 spaces. Therefore, the entire Precinct under this Planning Proposal is likely to provide a parking supply range between 325 and 383 parking spaces.

Council Comments

Council's comments relating to Transport and GTA's responses are as follows.

1. Geeves Avenue and Princes Highway Intersection

The proposed removal of loading zones (in particular the northern side of Geeves Avenue) would need to consider the location of the next closest loading zone in proximity to the lots on the northern side of Geeves Avenue. It is noted that a loading zone is located along Geeves Lane which provides rear servicing to these lots. This loading zone is restricted to use between 10am and 3pm only.

Response:

A loading space would be removed from the northern side of Geeves Avenue. It is noted that there are several loading zones located on Geeves Lane between 10am and 3pm that currently service sites 433 to 467 Princes Highway, these are located between 30 to 130 metres of the existing loading zone. The loading zone on the southern side of Geeves Avenue would be replaced with loading docks within the precinct basement.

2. Temporary/ final vehicle access

A detailed explanation should be provided to clearly identify the constraints associated with providing access from the western side to the basement. The GTA response notes that the access must be provided on the northern side of the subject site to allow for heavy vehicle access to the basement, however it does not provide a clear justification as to why access from the western side of the site cannot be achieved. Again, whilst vehicle access is something that will be finalised in a future DA, Council will need to be convinced that the best and safest possible access can be achieved in any future development.

Response:

Temporary Access Arrangements

It is proposed that temporary access to all sites be achievable should they be developed separately. Sites 1 and 2 need to be provided from the western side of development until such time that the entire precinct is developed. In order to reduce the impact of the temporary access arrangements on the western side of Geeves Avenue opposite the bus interchange and station entrance it is recommended that the access location for Sites 1 and 2 be designed so that they can be combined as shown in Figure 1 and Figure 2.

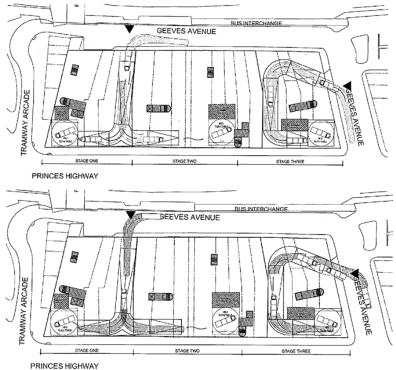


Figure 1 – Geeves Avenue temporary access Option 1 (entry and exit)

Source: Eeles Trelease

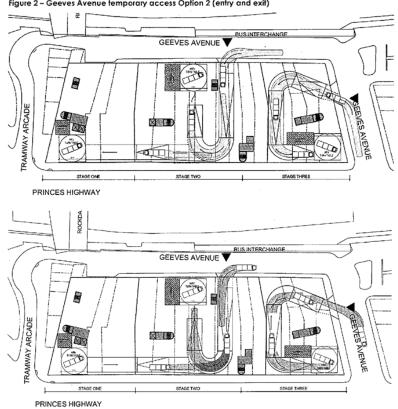


Figure 2 – Geeves Avenue temporary access Option 2 (entry and exit)

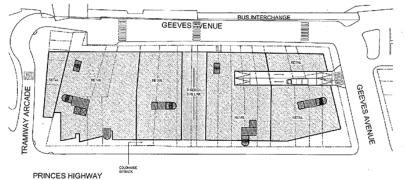
Source: Eeles Trelease

Both options provide access to all sites, the access arrangements for Sites 1 and 2 would be dependent on which site was developed first.

Final Access Arrangements

In addition to the ramp requirements outlined in the Transport Addendum, due to the high pedestrian connectivity between the station, bus interchange and through site pedestrian link, vehicle access for the final scenario is recommended from the northern side of the precinct on Geeves Avenue as shown in Figure 3. The proposed access location reduces vehicles from the highly pedestrianised section of Geeves Avenue adjacent to the station and bus interchange therefore minimising possible pedestrian/vehicle conflicts.





Source: Eeles Trelease

It is noted that the temporary and final access arrangements will be developed further through the development application process.

I trust this letter addresses Council's additional comments regarding traffic and transport for the Planning Proposal stage.

Should you have any queries or require any further information, please do not hesitate to contact me on (02) 8448 1800.

Yours sincerely GTA CONSULTANTS

Karen McNatty Associate Director

7.5 rockdale town centre

7.5 Rockdale Town Centre

Explanation

A Masterplan for the future role and character of Rockdale Town Centre was developed with the community and adopted by Council.

This section of the DCP provides detailed building design and built form controls to complement Rockdale LEP 2011 and facilitate the implementation of the Rockdale Town Centre Masterplan vision.

These controls work in conjunction with the Rockdale LEP Height of Buildings Map and Design Excellence and Competition clause which establishes development standards for height and further building envelope controls within the Town Centre.

This section applies to the area of land zoned B2 Local Centre and B4 Mixed Use in Rockdale Town Centre, including any roads and open space within this area. It supersedes the 'Development setback' controls in Part 5.3 Mixed Use for developments within the affected area. All other sections of Part 5.3 Mixed Use and DCP still apply, however where there are any discrepancies, the standards of this Part should be applied.

In addition to provisions of this DCP, any development in the Rockdale Town Centre must also be consistent with the adopted vision of the Rockdale Town Centre Masterplan and accompanying Public Domain Plan, including the Design Code and Technical Manual.

The controls in this section of the DCP are based on the vision and strategies in the Masterplan. Thorough urban design analysis and modelling as well as economic testing has informed the development of the Masterplan and the LEP and DCP controls for the Centre.

The strategies and plans in the Masterplan take into account the Centre's high levels of public transport service, the need to accommodate population growth, the economics of redevelopment in town centres, and the constraints placed on redevelopment by parking and servicing requirements.

The Masterplan is concerned primarily with establishing the Centre as an enjoyable and pleasant place through a convenient and pedestrian friendly street network with high levels of activity, that is attractive and interesting. To this end, this section of the DCP focuses on ensuring the desired role and character of streets and precincts in the Centre is achieved by the activation and engagement with the street by the layout and uses of buildings, as well as how the form and character of buildings affects the desired feel and experience of the public domain.

Befitting such a well served transport orientated centre, the controls in the section of the DCP also allow design flexibility and make redevelopment more viable by reducing inhibitions on development. They also encourage innovative solutions to housing supply, employment opportunities, and environmental sustainability.

Rockdale DCP 2011 09|2

7.5 Rockdale Town Centre

7.5.1 Building use and function

This section is concerned with ensuring the intended role and function of streets and precincts within the Centre are achieved.

It covers how the function and layout of the building contributes to the activation and vibrancy of the Centre as well as the provision of high quality and diverse housing choice, retail and commercial opportunities, and sustainable building design.

This section complements the permissible land uses set out in Rockdale LEP 2011. It controls how these uses are arranged and located within developments to ensure buildings interact with the street to achieve their desired role.

Objectives

- A. To ensure new development increases the level of activity and vibrancy of the Centre and positively addresses and engages with the public domain.
- B. To ensure new development is sustainable by minimising its environmental impact and being able to accommodate future changes to land use demands and social demographics.
- C. To provide higher density housing within the Town Centre with high levels of amenity.
- D. To ensure efficient carparking and vehicle access which maximises the Centre's existing service lane network and public parking, and does not detract from the quality and extent of retail services or street activity.

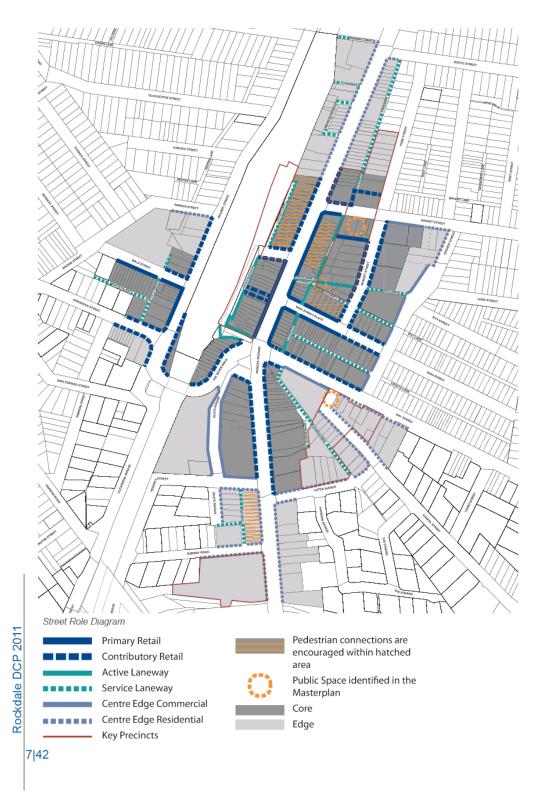
Street Role

The appropriate location and design of ground floor uses and access points for a development is a product of the intended role and function of the various streets in the Centre.

 The following diagram illustrates the role of all streets in the Centre. Developments are to comply with the standards for ground floor building uses and access locations set out in the following table for all street frontages.

Rockdale DCP 2011

7.5 Rockdale Town Centre



7.5 Rockdale Town Centre

Street role	Description	Standard
		 Minimum 80% of the ground floor frontage to be activated by retail and business premises
Primary Retail	High activity with continuous	 Residential lobbies can occupy no more than 20% of the total ground floor frontage
	ground floor retailing	 No ground floor residential permitted
	retaining	No vehicle access permitted
		No service access permitted
		 Ground floor frontage to be activated by retail and business premises
		 Residential lobbies permitted off Street frontage
Contributory Retail	High activity with continuous active	 No ground floor residential permitted (Except for properties under Schedule 1 in the RLEP 2011)
Retail	frontages	 No vehicle access permitted unless the development has no other street frontage
		 No service access permitted unless the development has no other street frontage
Active Laneway	Vibrant space activated by the co-location of pedestrian activity and service functions	 Ground floor frontage to be activated by retail and business premises Residential lobbies should be accessed off active laneways No ground floor residential permitted Vehicle access permitted Service access permitted
Service Laneway	Primarily serves service function and provides vehicle access	 Active retail and business premises encouraged along the ground floor frontage Residential lobbies may be accessed off service lane No ground floor residential Vehicle access should be provided from service lane Service access should be provided from service lanes
Centre Edge Commercial	Provides additional retail and commercial opportunities at the edge of the Centre	 Ground floor frontage to be activated by retail and business premises Access to residential lobbies permitted and encouraged No ground floor residential (Except for properties under Schedule 1 in the RLEP 2011) Vehicle access permitted where the development does not front a Service Laneway or Centre Edge Residential street Service access permitted where the development does not front a Service Laneway or Centre Edge Residential street
Centre Edge Residential	High density residential at the edge of the Centre with opportunities for retail or commercial uses	 Active retail uses permitted on the ground floor frontage Access to residential lobbies should be from this frontage Ground floor residential with direct street access permitted Vehicle access permitted where the development does not front a Service Laneway Service access permitted where the development does not front a Service Laneway

7.5 Rockdale Town Centre

Pedestrian connection

Pedestrian movement within the centre is encouraged by retaining or providing additional pedestrian connections between Princes Highway or King Street Place and laneways. This will contribute to a vibrant pedestrian environment.

Therefore, provision of through site pedestrian links is encouraged within the area indicated on the Street Role Diagram.

 Applicants are encouraged to liaise with Council to deliver a pedestrian link; in return Council may consider flexibility in the application of development standards or development controls.

New public open space

The Masterplan identifies a number of public open spaces in the Town Centre as shown in the Street Role Diagram.

2. Development fronts the public spaces identified in the Street Role Diagram must have a active retail frontage.

Residential apartment design

Given the Centre's high frequency and choice of public transport service and the available range of retailing, greater population density in the Centre is encouraged. Increased population within the Centre's walking catchment will also add to the Centre's activity and vibrancy. Rockdale Town Centre is the ideal location to provide dense inner city style apartment living for a variety of household demographics.

- A diversity of housing choice is to be offered by mixed use developments by providing a variety of apartment types and sizes. Innovative solutions to meeting current and future housing demands and changing household structures is encouraged. This includes but is not limited to:
 - a. 3 bedroom units which can be divided into a 2 bedroom unit and studio unit, sharing a common entry,
 - b. 2 or 3 bedroom units with all bedrooms having ensuites,
 - Units with large home office space which is separable from private living areas,
 - d. Operable internal walls to allow multiple rooms or larger single rooms to be created as needed,

Parking and loading

Rockdale DCP 2011

7.5 Rockdale Town Centre

Rockdale Town Centre benefits from an extensive laneway network which provides opportunities for convenient servicing of developments. The Centre also has a supply of on and off street public carparking to service visitors. These attributes reduce the demand on individual developments to provide visitor and shopper parking as well as loading and service space.

- 4. Shared vehicular access between developments, especially along Active Laneways, is encouraged.
- 5. No on site loading bay is required for developments with less than $1000m^2$ of retail space.
- 6. Where no loading bay is provided on site, all retail tenancies are to have access to a street or lane with a marked loading bay, either directly or via a common retail servicing space separate from the residential basement parking area.
- Visitor carparking provided on site must be provided behind a security gate or shutter accessed via intercom.
- Despite the requirements of the Parking and Loading Technical Specification, developments which contain residential accommodation are only required to provide on-site loading for removalists for a small rigid vehicle.

Commercial Space

Given the anticipated growth of the Centre there is likely to be an increasing demand for commercial office space over time. Commercial space, home offices and units able to be converted to commercial suites in the future should be considered in new developments.

- Where permitted, ground level residential units which are directly accessible from the street should include spaces suitable for use as a home office.
- Innovative solutions to provide the flexibility to meet future commercial space demand are encouraged. This includes but is not limited to:
 - a. A series of large studio apartments on the same floor which could be fitted out for commercial use.
 - b. Two storey units designed so that one floor could operate as a home office separate from the private living spaces.
 - c. Utilising space within podiums to provide commercial tenancies where the building footprint is deeper than permissible for residential units.
 - d. Wrapping any above ground carparking in commercial space rather than residential units.

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7.5 Rockdale Town Centre

- a. Splitting lobbies to provide both residential and commercial use on the same floor, providing the commercial space adjoining any railway or busy road and the residential space where the outlook is more amenable.
- For those areas in the B2 Local Area (Refer to Schedule 1 in Rockdale LEP 2011), where ground floor residential apartments are permitted, the design of commercial/retail spaces should not be compromised. They should have enough space for sufficient internal circulation movement and able to accommodate a greater range of retail/commercial uses. This includes but is not limited to:
 - a. Commercial/retail uses must have a street frontage.
 - b. Each commercial/retail unit should be at least 6m in width and 13m in depth.

Communal open space and landscape design

The density and intensity of develop envisaged in the Centre means that opportunities should be sought to utilise space within developments for communal use with soft landscaping to improve the amenity for residents and the character of the Centre.

- A minimum of 25% of the site area is dedicated for communal open space. At least one of the communal open spaces must be large enough for recreational uses.
- 3. At least 50% of the communal open space should be soft landscaping.
- 4. Refer to Part 4.3.3 Communal Open Space for design specifications.
- A portion of the roof top of mixed use developments should communal open space are containing soft landscaping, accessible by all residents. It is to include adequate drainage and have access to Greywater or Rainwater.
- All soft landscaping areas in a development must have access to Greywater or Rainwater to meet their watering needs.

Rockdale DCP 2011 97|2

7.5 Rockdale Town Centre

7.5.2 Building form and character

This section is concerned with ensuring the intended character of streets and precincts within the Centre is achieved

It covers how the form and character of buildings affects the quality and feel of streets and public spaces; how the height and separation of buildings creates as sense of space as well as how the modelling and articulation of buildings improves the Centre's appearance and adds interest to the built environment.

This section complements the maximum building height controls in Rockdale LEP 2011. It sets out within this height limit the permissible envelope of development to ensure adequate separation between buildings and appropriate size and scale for streets and open space.

This section also provides basic built form guidance for sites that are affected by clause 6.14 Design Excellence and Competition in Rockdale LEP 2011.

Objectives

- A. To ensure building heights relate to street widths to create a scale to the public domain which improves the sense of space and experience for the user.
- B. To ensure there is adequate separation between buildings to maintain a sense of openness and allow sunlight to penetrate into the public domain.
- C. To create buildings which interface with the street and provide a positive contribution to the built environment.
- D. Ensure the appearance of buildings adds to the richness and experience of the Centre.

7.5 Rockdale Town Centre

Setbacks

- All developments in the town centre are to be built to the street edge on the lower level. The street edge is the street frontage boundary or where stipulated in the following table, the identified front setback.
- 2. All developments are to build to the side boundary and abut adjoining developments at the street edge and front build to line.
- Portions of buildings away from the street edge may be setback from the side boundary. Where this is the case they must be setback far enough from the side boundary for adequate building separation to be achieved or be able to be equitably achieved with future adjoining redevelopment.

Street	Setback
Green Gateway (Arterial Edge)	3 metres
King Lane	1 metre (Western side)
	3 metres (Eastern side)
Centre Edge Residential streets	2 metres
Interchange Precinct (Princes Highway West between Tramway Arcade and Geeves Avenue	3 metre retail level setback for colonnade
Interchange Precinct (Tramway Arcade and Geeves Avenue)	Dedication for local road widening as per Rockdale LEP 2011. Width of dedication is 2.5m

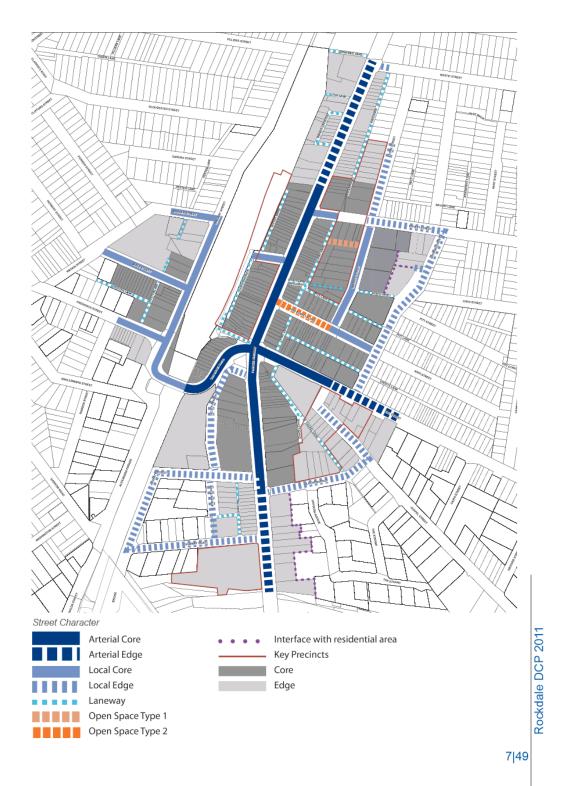
Street Character

The appropriate street setbacks, building separation, and facade modelling and articulation are products of the intended character of the various streets and spaces in the Centre.

- 4. The Street Character diagram designates the character type of all streets in the Centre. Developments are to comply with the building envelopes and desired future character of the corresponding street type for all street frontages as per the following street sections and standards.
- Unless otherwise stated the setbacks illustrated in the street sections are build to line, meaning that the facade of buildings must be built to this line to create a consistent, continuous and definite street edge.

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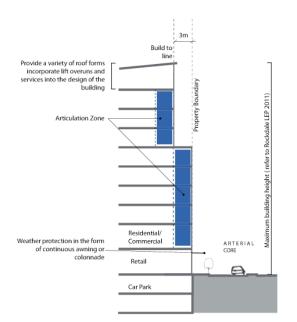
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7.5 Rockdale Town Centre

Arterial Core

Strong bold buildings with facades designed with regard to the speed of observer that read a single composition, containing large scale elements and features.



- For Arterial Road frontages of any development as designated by the Street Character diagram, the building envelop is (as per the section above):
 - a. Lower 6 storeys are to be built to the property boundary
 - b. Levels above the 6th storey are to built to the building line setback 3m from the front property boundary
 - c. The portion of the building above the 6th floor is to have a side setback of at least 4.5m, a separation between buildings of at least 9m, and a maximum building length of 40m.
 - d. Continuous weather protection (ie awning) should be applied to all development.
 - e. The design of the street wall buildings should complement the proportion/scale of the neighbouring street wall buildings.

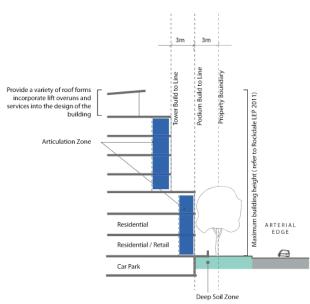


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Arterial Edge

Street edge defined by modulated built form transitioning from the strong urban character in the Centre core to the more spacious and open character of the surrounding residential area.

Building will have regard to the high speeds of observers and be clearly read as a strong podium upon which sits a lighter, modulated building allowing vistas between buildings to the skyline beyond.



- For Arterial Edge Road frontages of any development as designated by the Street Character diagram, the building envelop is (as per the section above):
 - Lower 3 storeys are to be setback 3m from the property boundary to support the landscape frontage of the Green Gateway.
 - b. Levels above the 3rd storey are to be setback at least 6m from the property boundary.
 - c. The portion of the building above the 3rd floor is to have a side setback of at least 4.5m, a separation between buildings of at least 9m, and a maximum facade length of 40m.
 - A minimum 9m rear setback is to be provided where development shares a boundary with a residential property.
 - e. The design of the street wall buildings should complement the proportion/scale of the neighbouring street wall buildings.
- 3. Comply with Arterial Edge-Green Gateway Style Sheet for the 3m frontage landscape design specifications.

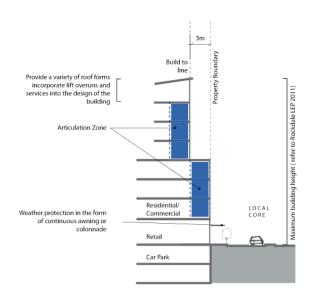
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Local Core

Strong street edge defined by units addressing and overlooking the street. A solid urban character with robust materials and interest and variation provided by modulation or stepping of the facade achieved behind balconies or through the depth of openings to maintain a strong street wall.



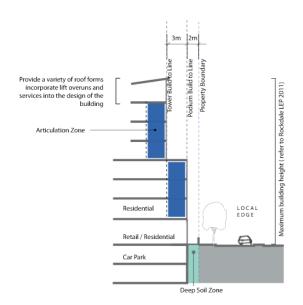
- For Local Core frontages of any development as designated by the Street Character diagram, the building envelop is (as per the section above):
 - a. Lower 4 storeys are to be built to the property boundary.
 - b. Levels above the 4th storey are to be setback at least 3m.
 - A minimum 9m rear setback is to be provided where development shares a boundary with a residential property.
 - d. The design of the street wall buildings should complement the proportion/scale of the neighbouring street wall buildings.
 - e. Continuous weather protection (ie awning) should be applied to all development.



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Local Edge

Street edge defined by modulated built form transitioning from the strong urban character in the Centre core to the more spacious and open character of the surrounding residential area.



- For Local Edge frontages of any development as designated by the Street Character diagram, the building envelop is to be (as per the section above):
 - a. Lower 4 storeys are to be setback 2m from the property boundary
 - b. Levels above the 4th storey are to be setback at least 3m from the lower build to line.
- 3. A minimum 9m rear setback is to be provided where development shares a boundary with a residential property.

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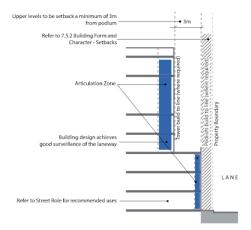
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Laneway

Strong street edge definition on lower levels creating a human scale to the narrow laneways with upper level units providing passive surveillance of the space. The whole podium will have a direct relationship with the lane and be composed to create interest and engage with laneway users.

Open Space Type 1

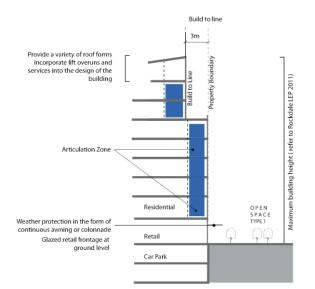


- For Laneway frontages of any development as designated by the Street Character diagram, the building envelop is to be (as per the section above):
 - a. Lower 3 storeys are to be built to the property boundary or setback as required in by the Street Setback Table.
 - b. Levels above the 3rd storey are to be setback at least 3m

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A definite edge to the open space with an internal layout and facade design with encourages interaction between occupants of the building and the street. Building activity visible from the open space, adding to the sense of vibrancy and creating further visual interes



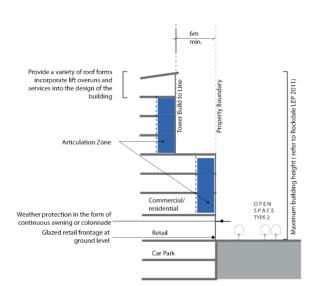
- For Open Space Type 1 frontages of any development as designated by the Street Character diagram, the building envelop is to be (as per the section above):
 - a. Lower 6 storeys are to be built to the property boundary.
 - b. Levels above the 6th storey are to be setback at least 3m.
 - c. Continuous weather protection (ie awning) should be applied to all development.
 - d. Glazed retail frontage should be provided at ground level.

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Open Space Type 2

A definite edge to the open space with an internal layout and facade design with encourages interaction between occupants of the building and the street. Building activity visible from the open space, adding to the sense of vibrancy and creating further visual interest. Sufficient solar access to King Street Place is vital to the success of this public space.



- For Open Space Type 2 frontages of any development as designated by the Street Character diagram, the building envelop is to be (as per the section above):
 - a. Lower 4 storeys are to be built to the property boundary.
 - b. Levels above the 4th storey are to be set back at least 6m to maximise solar access to King Street Place.
 - c. The portion of building above the 4th floor is to have a side setback of at least 4.5m, a separation between buildings of at least 9m, and a maximum facade length of 40m.
 - Future development must maintain at least 3 hours of sunlight between 9am and 3pm on 22 June (winter solstice) to King Street Place.
 - e. Continuous weather protection (ie awning) should be applied to all development.
 - f. Glazed retail frontage should be provided at ground level.

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7.5.3 Key Precincts

In addition to the building design and built form controls which apply across the Centre, there are also a number of Key precincts which have additional requirements. These precincts are illustrated on the Street Role and Street Character diagrams.

The following controls are required in addition to any setback, envelope and building design controls in Parts 7.5.1 and 7.5.2.

The Rockdale Town Centre Masterplan envisages significant improvement and expansion to the public domain network through the redevelopment of these precincts. Particular regard should be given to the relevant section of the Rockdale Town Centre Masterplan's Structure Plan and the Public Domain Plan for these precincts.

Town Heart and Civic Precinct

The Town Heart and Civic Precinct is defined as properties at 2, 2A Byrant Street, 19-25 York Street, 444,446, 448 Princes Highway, 1 5, 9, 9A, 18 Byrant street and 1 Market Street Rockdale.

- 1. A new Town Square is to be provided fronting Bryant Street as per the requirements of Parts 7.5.1 & 7.5.2, the Masterplan, and Public Domain Plan.
- 2. A public open space is to be provided at the corner of King Lane and Pitt Lane. Buildings fronting this public open space are to be designed with a 'Contributory Retail' role as per Part 7.5.1, and an 'Open Space'Type 1 frontage as per Part 7.5.2.
- 3. The ground floor of development in this precinct is to be for the purpose of a Food Providore Market. Vehicle access, servicing, and access to upper level uses is to be provided as per Part 7.5.1. The Market is to be designed in consultation with Council and:
 - a. Be accessible by pedestrians from multiple points on King Lane, Market Street, Pitt Lane, and the new Town Park.
 - b. Have its primary and secondary address and access from the new Town Park and open space at the corner of King Lane and Pitt Lane respectively.
 - c. Include a variety of spaces to cater for long term, short term, and temporary market tennants which address the surrounding street frontages as well as the internal market space.
 - d. Have a floor to finished ceiling height of at least 4.5 metres.

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Chapel Street Precinct

The Chapel Street Precinct is defined as properties at No.s 13, 15-19, 21 and 21A Bay Street and 1-9 and 11 Chapel Street and 1 and 3 Chapel Lane: and No.s 6, 8, 10 and 12 Lister Avenue.

- This Precinct is subject to clause 6.14 Design Excellence and Competition Clause in Rockdale LEP 2011. The purpose of a design competition is to deliver the highest standard of architectural and urban design over the Chapel Street Precinct. Refer to Council's Design Competition Guideline - Chapel Street Precinct for further information.
- Public roads and pedestrian links are to be included in the redevelopment of this precinct and dedicated to Council which achieve:
 - a. Vehicle access to Chapel Lane from either Lister Avenue or Chapel Street,
 - b. Pedestrian access from Chapel Street to the new public open space and Bay Street,
 - c. Pedestrian access between Bay Street and Chapel Lane
- 3. At least 40 public carspaces are to be provided at-grade in a single location, either on or off street. These spaces are to be dedicated to Council.
- 4. A new public open space is to be provided fronting Bay Street. Buildings fronting this public open space are to be designed with a 'Contributory Retail' role as per Part 7.5.1, and an 'Open Space' frontage as per Part 7.5.2. The space is to be publicly accessible by pedestrians from both Chapel Street and the new public carparking. It is to be located either:
 - a. Adjoining the side boundary of Chapel of 1 Bay Street, or
 - b. Opposite the termination of George Street.

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The Southern Gateway Precinct: 591-597 Prince Highway, Rockdale

This Southern Gateway Precinct is defined as 591-597 Princes Highway, Rockdale.

- A new public domain with an area of at least 1,950m² is to be provided centrally on the site and fronting Subway Road. The public domain is to be privately owned and maintained but must be subject to an easement in favour of Council for it use by the general public;
- Pedestrian links are to be provided through the site as generally depicted in Rockdale Town Centre Public Domain Plan 2012;
- 3. Ground floor uses are to address and activate the public domain as well as road frontages where possible;
- Unless stated otherwise, building setbacks are to be in accordance with Figure 1;
- 5. Not limiting the requirements of Clause 7.5.2, Arterial Edge:
 - a. Setback from property boundary
 - ii. A minimum 3m setback to level 3
 - iii. A minimum 6m setback above level 3
- 6. The length of the façade along the Arterial Edge frontage may exceed the maximum 40m if it is demonstrated that the street wall achieved is complementary to the proportion/scale of the neighbouring street wall buildings. To facilitate this:
 - a. The levels above level 3 may project up to 3m into the required setback for a maximum of 30% of the length of the building.
 - b. The building must comply with Arterial Edge-Green Gateway Style Sheet.
- Despite Clause 7.5.2, Local Edge the following minimum setbacks to the site are required:
 - a. Setback from property boundary
 - ii. A minimum 3m setback to level 3
 - iii. A minimum 6m setback above level 3
- 8. A continuous façade along the Muddy Creek frontage should be avoided where possible. Where the façade length exceeds 50m, a high degree of articulation is required to reduce the impact of the building. A combination of design solutions such as breaks in the building, varying heights, blades and alternative finishes and treatments can be used to achieve a suitable outcome.

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