Borst & Conacher ARCHITECTS
ABN 39 130 701 076

Design Excellence Report

For

Proposed New Development
DA 2013/1419

At

10-18 Regent Street
Wollongong NSW

For

GENERAL INFRASTRUCTURE GROUP PTY LTD

Prepared by
Borst & Conacher Architects Pty Ltd

April 2015

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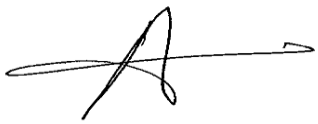
CONTENTS

This document was prepared by Mr Andrew Conacher, NSW Board of Architects Registration Number 4414 in accordance with notes issued by Wollongong City Council to discuss aspects of design excellence as applied to this project.

Dated:



.....
Signed: A Conacher

The assistance of the following is acknowledged:

Mr David Shalala: General Infrastructure Group Pty Ltd

Mr David Laing: }Cardno (Wollongong)
Mr Daniel Thompson: }

Mr Scott Millikan: PR Design Co

1.0 DESIGN EXCELLENCE: History & Development of Concept

The consideration of building design and the broader built environment is well established; the most familiar and concise expression of this concept can be attributed to the first century BC Roman architect Vitruvius, for his maxim “Commodity, Firmness and Delight”, which can be translated as Usefulness, Soundness and Pleasing to the Senses.

Other, more recent definitions include:
“Place, Time Purpose” Ian McKay
“A house should kiss the ground lightly” Glenn Murcutt

These definitions are all focussed on the building itself, ie rather than within its context.

This attitude arose historically due to a perceived “gulf” between major all architectural works—eg urban institutional buildings both secular and sectarian and mansions situated on country estates commissioned by the State, Church or Aristocracy, and the considerably more humble buildings of the masses.

The rise of increasing urbanisation and the democratisation of wealth eventually gave birth to a reconsideration of buildings in their context.

In this respect, a pioneering work “Good Manners in Architecture” by Trystan Edwards (1946) influenced British Post War planning.

> *“This Book asks the novel question, How do buildings behave towards one another? It contrasts the selfish building, the presumptuous building and the rude building with the polite and sociable building; and it invites the public to act as arbiter upon their conflicting claims.”*[1]

It began to be recognised that buildings should respond to the surrounding context, both in terms of their physical envelope and also in terms of the surrounding area’s history, style, materiality etc.

Retaining the previous built character of an area was not given a high priority during Post World War 2 rebuilding and the inevitable backlash against Modernist, International Style Architecture (which increasingly responded to a global context, rather than a local context), resulted in a growing recognition of the importance of ‘vernacular architecture’; as well as the character of townscapes.

While planners took up this holistic approach, architects generally still saw their creations more as heroic, monumental expressions of their own, or their client’s, character and praiseworthy qualities.

Pioneering planning work by, for example, David Winterbottom at Wollongong City Council in the early 1980’s began to address this initiative in a legislative manner by incorporating more “qualitative” assessment and controls, designed not only to improve privacy and solar access, but also intended to ensure better manners between buildings.

An “Architects Advisory Panel” was also established in 1980.

The concept of a building being required to respond to its immediate physical context was resisted by the architectural profession generally who felt that their “hero” status and creativity would be compromised by these new planning controls and believed (often not unreasonably!) that assessing authorities lacked personnel with the appropriate skills and experience to assess their proposals in a suitable manner. In response some Councils have established design review panels.

1 Good and Bad Manners in Architecture by Trystan Edwards, 1946

The advent of SEPP 65 and the associated “Residential Flat Design Code” neatly solved this problem, by putting the onus on the designer to self assess the project.

While the SEPP is currently only applicable to residential flat developments, greater than a minimum size, its methodology, as set out below, goes some way to addressing this aesthetic impasse, and as a result, has now been, at least, informally adopted in the assessment of other medium to large scale projects of all types. This is the proposed methodology for this report

2.0 STATUTORY REQUIREMENTS

Following the adoption of SEPP 65 and the associated Code in 2002 planning legislation has evolved to address more qualitative issues. This is now embodied in the NSW Department of Planning, Design Excellence Guidelines, which noted that

> *"Good building design should positively contribute to the overall architectural quality of the city and provide buildings **appropriate to their context**"*
>
> *In some circumstances, it is noted that this contribution may be as an **iconic or landmark** building.*

Confusingly, the thrust of this document was to institute design competitions, which is not appropriate in most cases, however the concept of "Design Excellence" has been subsequently included in LEPs (see below).

In commenting on the application of the above, Frank Stanisic in "the Rise and Rise of Urban Housing in Sydney" first published in Architecture Australia commented:

> *"The results are promising. Architectural designs are generally aesthetically distinctive and conceptually clear, if a little cautious to satisfy the sometimes untidy array of distinguished and client-selected jury panellists. The secret business of completion assessment is not documented or revealed."*[2]

He comments further:

> *"Aesthetics are central to the autonomy of architecture and the quest for better housing. Aesthetics are where ideas about internal configuration and external expression meet, giving clarity and distinction to a project. They unify form, structure, performance and expression. Innovation lies as much in aesthetics as it does in typological investigation. Whether the aesthetic is based on environmental performance, ecology, orientation, abstraction, patterning or the geometries of nature, it unifies the design and appearance of the building."*

22B Design Excellence: Wollongong city Centre LEP

(1) This clause applies to development involving the construction of a new building or external alterations to an existing building.
(2) Consent must not be granted to development to which this clause applies unless, in the opinion of the consent authority, the proposed development exhibits design excellence.
(3) In considering whether development to which this clause applies exhibits design excellence, the consent authority must have regard to the following matters:
- *(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,*
- *(b) whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,*
- *(c) whether the proposed development detrimentally impacts on view corridors,*
- *(d) whether the proposed development detrimentally overshadows an area shown distinctively coloured and numbered on the Sun Plane Protection Map,*
- *(e) how the proposed development addresses the following matters:*
  - *(i) the suitability of the land for development,*
  - *(ii) existing and proposed uses and use mix,*
  - *(iii) heritage issues and streetscape constraints,*
  - *(iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site*

[2] Good and Bad Manners in Architecture by Trystan Edwards, 1946

or on neighbouring sites in terms of separation, setbacks, amenity and urban form,

(v) bulk, massing and modulation of buildings,

(vi) street frontage heights,

(vii) environmental impacts such as sustainable design, overshadowing, wind and reflectivity,

(viii) the achievement of the principles of ecologically sustainable development,

(ix) pedestrian, cycle, vehicular and service access, circulation and requirements,

(x) impact on, and any proposed improvements to, the public domain.

(4) Consent must not be granted to the following development to which this Plan applies unless an architectural design competition has been held in relation to the proposed development:

(a) development for which an architectural design competition is required as part of a concept plan approved by the Minister under Division 3 of Part 3A of the Act,

(b) development in respect of a building that is, or will be, greater than 35 metres in height,

(c) development having a capital value of more than $1,000,000 on a key site, being a site shown edged heavy black and distinctively coloured on the Key Sites Map,

(d) development for which the applicant has chosen to have such a competition.

(5) Subclause (4) does not apply if the Director-General certifies in writing that the development is one for which an architectural design competition is not required.

(6) The consent authority may grant consent to the erection or alteration of a building to which this clause applies that has a floor space ratio of up to 10 per cent greater than that allowed by clause 22 or a height of up to 10 per cent greater than that allowed by clause 21, but only if:

(a) the design of the building or alteration is the result of an architectural design competition, and

(b) the concurrence of the Director-General has been obtained to the development application.

(7) In determining whether to provide his or her concurrence to the development application, the Director-General is to take into account the matters set out in subclause (3) and whether the development that is the subject of the application has exhibited design excellence.

(8) In this clause:
"architectural design competition" means a competitive process conducted in accordance with procedures approved by the Director-General from time to time.

Note: Clauses 4, 5, 6 do not apply in this case.

3.0 SEPP 65: RESIDENTIAL FLAT DESIGN CODE

Note: residential portions (other than hotel usage) are subject to the SEPP 65 RDFC and are dealt with elsewhere.

As noted elsewhere, the principles and methodology embodied in the Residential Flat Design Code, due to the successful outcomes achieved, are now commonly used to evaluate the design qualities of other building types.

(a) Clauses 9 to 18 of the SEPP 65, set out 10 Design Quality Principles as follows:

Principle 1: Context
Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area. Responding to context involves identifying the desirable elements of a location's current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.

Principle 2: Scale
Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings. Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

Principle 3: Built Form
Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

Principle 4: Density
Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents). Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

Principle 5: Resource Energy and Water Efficiency
Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction. Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

Principle 6: Landscape
Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

Principle 7: Amenity
Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

Principle 8: Safety and Security
Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.

Principle 9: Social Dimensions
Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.

Principle 10: Aesthetics
Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.

(b) Contextual Study: a pre design site analysis is also required of the area surrounding the subject site.

(c) A design quality statement is also required.

4.0 DA 2013/1419: ISSUES ARISING DURING ASSESSMENT

Issues Identified During Assessment

Note: these have been set out below in roughly chronological order, they are summarised as follows:

(a) Council Correspondence 5/12/13

i. "The development should comply with the applicable development Controls. A height variation will not be supported".

(b) DRP Meeting 24/4/14

i. "The site's immediate context is in a state of transition".
ii. A contextual study demonstrating how the proposed tower and its podium relate to its future context is an essential step in determining and justifying an appropriate building from.
iii. Provision of quality public space with high urban amenity is referenced from the Peter Robinson report.
iv. "Break the form of the wide frontages of the tower to assist in mitigating its bulk".
v. The strategy to create **two simple slender glass facades to define the tower could potentially create a clear simple modern aesthetic**. The slender edge treatment of the two glass facades will be a particularly important factor.

Provision of detail of the edge treatment around the treatment of the facade is recommended.

(c) Wollongong DRP Meeting 6/11/14

i. Context: a contextual study is required. A built form study that shows how the design of the proposal will respond to its current and future context.
ii. "Essential architectural and urban design strategies are still lacking"
iii. How will a new streetscape be created?
iv. The development of an exciting new building with a distinctive expression developed to resolve the clear proportional and scale challenges that the distant views reveal.
v. The base of the building should provide an active connection to Wollongong's retail precinct.
vi. The squat proportions of the proposal should be reconsidered to provide two more distinct elements with more slender proportions.
vii. Major entries are not clearly expressed.
viii. The relationship between podium and tower appears awkward and poorly scaled.
ix. Express the taller proportions of the tower by allowing it to come closer to the ground.
x. "create a clean simple modern aesthetic".
xi. The basic form of the building should be established through detailed contextual study.
xii. An improved connection with the public domain is required.

(d) Southern Joint Regional Planning Panel (JRPP) Meeting 11/12/14

1a) "demonstrate compliance with SEPP 65"
1b) "improved relationship with public domain—specifically hotel drop off point"
1c) "detailed response to Design Review Panel (DRP) comments
2) **"undertake a documented peer review"**

(e) **Summary**

Council's concern can be summarised as follows:

i. The building's aesthetic treatment and appearance
ii. The building's context
iii. The building's engagement with the streetscape
iv. Code compliance

5.0 RESPONSE

Note: generally, the RFDC 10 Design Quality Principles have been applied in this case, Consideration of WLEP 2007 Reg 22B "Design Excellence" is also included.

Context: (refer to Statement of Environmental Effect for a more complete description).

With the exception of the 9 storey office building adjacent to and north of the subject site, there are no other adjacent buildings similar to this proposal.

The SEPP and associated RFDC are generally focussed on the insertion of new buildings into an already developed urban environment. (This is extensively covered in "Relating to the Local Content of the RFDC"

In this case, the character of the surrounding precinct consists of buildings ranging from domestic to low rise (3 storeys) residential and commercial buildings (up to 9 storey office buildings).

There is no common appearance or character eg style, form, use of materials in the surrounding precinct, the 2006 Urban Design Analysis Report prepared by Peter Robinson in 2006 noted that

> *"The area around the subject site is very mixed in its uses", "The area would best be described as a secondary fringe commercial area with some residential". "There is little, if any, design quality in the area".*[3]

(a) Height
As an alternative strategy, Council have requested a contextual study. This has now been provided and indicates the proportions of the currently permissible building envelopes. These diagrams indicate:

i. the maximum permissible building envelopes for Regent Street and Rawson Street, in this case the height limit is 80m.
ii. similarly for Crown Street. In this case, the height limit is 120m.
iii. tower approved for GPT shopping residential centre, corner Crown and Keira Streets

The 10 to 18 Regent Street site is the most elevated site in Wollongong CBD; any building constructed on the site will be prominent, however future development in Crown, Regent and Rawson Streets will, substantially reduce the current proposal's impact and visibility over the medium to long term.

(b) Volume
With the exception of a side boundary setback to the northern boundary, the proposal is within the required building envelope, It is assumed at this stage that adjacent future developments will also be compliant and approaching or achieving the maximum permissible f.s.r.

Summary
The present context is less relevant than the proposed future context. This precinct is undergoing rapid change, being centrally located in Wollongong CBD and it is apparent that while this development will be "out of context" physically in the short term, it will be the forerunner for future similar permissible development.

Scale
The provision of a podium reduces the perimeter height of the proposed building to a height similar to the adjacent northern building.

Both the podium and tower facades are intensively detailed with glazing bars, screens and projecting elements so that the overall building form is reduced in scale, ie there are no large scale blank areas to the building surface and the three dimensionality of the facade treatment will create

[3] "Urban Design Assessment" Peter Robinson & Associates

mobile areas of light and shade as well as a degree of visual interest, detailing acting as decoration.

Built Form
The proposed building consists of two closely related formal elements.

i. Podium: At street level, the form of the building is shaped to permit an active streetscape interaction between public and private space ("form follows function"). The Council's driveway requirements resulting in curved forms are modelled and repeated as a theme in the shape of the podium footprint.

ii. Previous Panel comments have been heeded and the form and appearance of the podium is now more closely integrated with the podium.

- Form: the curved themes employed in the podium are repeated in the tower
- Materials and finishes: the same treatment is now employed for both forms.

Density
The proposed floor space ratio is complaint with LEP requirements. It is reasonable to assume that other adjacent development, both existing and in future will also be complying.

Resource Energy, Water Efficiency
A BASIX certificate has been provided for the residential portion of the proposal.

Successful and competitive operation of hospitality and commercial premises requires minimisation of ongoing energy costs.

Pending finalisation of the proposal, a Section J Report will be prepared for the Construction Certificate phase of the project.

Section J requirements for projects of this type and scale are (deliberately) demanding and will reduce future operational costs, resulting in a more competitive business model.

Landscape
This issue can be subdivided into 2 parts

i. "soft landscaping" due to the nature of the development, "soft landscaping" in the public domain is modest in extent, this results from:
   - "safer by design" and vandalism issues
   - poor solar access at street level (south and east orientation)
ii. "hard landscaping" this includes paving treatments to forecourts, ramps, walkways and steps.

Careful consideration has been given to materiality concerning maintenance slip resistance and integration with the design aspects of the built form.

"Safer by Design"
External areas will be well lit and easy to supervise actively and passively ie without "hidden corners".

Steps and ramps achieve compliance with the BCA and AS 1428.

Amenity
"Desirable", "Useful", "Pleasant", "Attractive" are common definitions of this term, however the sense of being both useful and pleasant are thereby contributing to the experience of residents and visitors is intended focus.

Concern has been previously raised concerning the amenity of:

i. the streetscape interface, ie to make it more pedestrian friendly. In this case, the applicant has worked in consultation with Council's Traffic Engineers to develop a "shared" zone which both activates the streetscape, while also allowing safe vehicular movements. Vehicular and pedestrian pathways have been "smoothed" in plan to provide better pedestrian flow.

An outdoor seating area has been provided to the cafe located on the south east corner of the proposal, to activate the corner of Rawson and Regent Streets.

Differences in cafe floor levels and footpath levels (sloping) have been reduced as far as practicable, while ensuring disabled access within the cafe.

ii. Internal Planning Generally

- Concern has been raised regarding the functional layout of the hospitality and other commercial spaces
  Depending on the management practice of the selected facility operator, this layout is subject to internal functional review. Note: this is not anticipated to affect the building's external envelope.

- Planning of Residential Units. A document has been submitted addressing the proposal's response to the Principles and "Rules of Thumb" as set out i the RFDC.

Safety and Security
As noted above, "Safer by Design" principles as follows:

i. Surveillance

Surveillance is about creating environments to keep users under observation. It aims to provide opportunities for people engaged in their normal daily business to observe the space around them.

Natural surveillance means creating clear sightlines by designing the placement of physical features, such a way so that maximum visibility and positive interaction occurs among all users of the space.

In this case quality surveillance has been achieved by implementing the following:

- Public spaces can be observed from nearby buildings
- Clear sightlines exist between public and private places
- Effective lighting of public places is provided
- "Hidden corners" that facilitate entrapment are eliminated
- Appropriate landscaping is used to prevent offenders finding a place to hide or entrap victims

ii. Access Control

Access control is about decreasing opportunities for crime, by controlling access and by creating a perception of risk to a potential offender. Physical and symbolic barriers can be used to arrange the movement of people.

In this case effective access control has been achieved by creating:

- Footpaths that direct pedestrians into safe areas
- Public spaces which attract people into the area and discourage intruders
- Restricted access to internal areas or high-risk areas like car parks (by doors, shrubs, fences and gates)

iii. Territorial Reinforcement

Territorial reinforcement is about clearly defining private space from semi-public and public space in order to create a sense of ownership. The created ownership shows that the owner has a vested interest in the location, which in turn challenges intruders.

Pavement treatment, signs, lighting and landscaping has been used to define public, semi-public and private space.

Territorial reinforcement has been achieved through:

- Design with a clear distinction public and private spaces by using physical barriers (eg fences) and symbolic barriers (eg vegetation)
- A forecourt design and encourages people to gather in a public space

iv. Space Management/Maintenance

Space management involves the formal supervision, control and care of urban space. A well-maintained public urban environment assists in sustaining confidence and helping to control vandalism, crime or fear of crime.

Space management strategies including the following will be implemented.

- Site cleanliness
- Vandal resistant materials and fixtures
- Rapid repair of vandalism and graffiti
- Well maintained landscaping
- Well maintained pedestrian and car park lighting
- Well maintained public infrastructure (eg seats, signs, bollards etc)

Social Dimensions

It is noted in the Panel Comments that this precinct is, or will become, an extension of the Wollongong CBD experience. Despite its street access from the east, the precinct will achieve high visibility from the form of the proposed development.

The proposed “mixed uses” ie hospitality commercial and residential, all provide destinations for the public and the proposal as a whole will provide activation to this area to a degree and manner not presently experienced.

The concept of a highly visible destination is pivotal in attracting people to this precinct.

Aesthetics

As Stanisic observed above;

> *“Aesthetics are central to the autonomy of architecture and the quest for better (housing). Aesthetics are where ideas about internal configuration and external expression meet, giving clarity and distinction to a project. They unify form, structure, performance and expression. Innovation lies as much in aesthetics as it does in typological investigation. Whether the aesthetic is based on environmental performance, ecology, orientation, abstraction, patterning or the geometries of nature, it unifies the design and appearance of the building.*
>
> *Aesthetics is a defence against the constant threat of erosion to design integrity and should be used by architects to advance architectural investigation in the face of distractions and prescriptions.*

6.0 APPLICANT'S STATEMENT ON AESTHETICS

Note: the following comments apply to both the podium and tower.

(a) Hotel Entry

The predominately glazed ground floor façade follows the sweeping lines of the pedestrian concourse to draw to the plaza at the corners of Regent & Rawson Street which acts as a focal point.

The glazing across the extent of the hotel entry will be clear to maximise transparency and visual access with dark grey (Notre dame) powder coated aluminium frames.

A new awning has been provided over the layback extending from the building line above. The framing of the awning will be powder coated aluminium to match the rest of the building with glazed panels similar to those uses on the GPT development to provide colour but also allow light to penetrate to the concourse.

(b) Podium

Generally forms, materials and finishes have now been better integrated with the tower structure.

(c) Tower Façade

The tower façade has been redesigned to reduce the visual bulk of the building when perceived from both the East and West. These facades are now similar in appearance, and emphasise the sculptural aspect of the tower by achieving a visual harmony when viewed from the North and South.

The East and West facades have now been split into distinct visual elements, the clean transparent southern half is juxtaposed by the angled and fragmented northern half. This is visually signified by the dark recessed vertical spine which divides the two facades on both sides of the building. Key to this contrast will be the play of light off the two halves of the façade, which will be visible from distances where the tower can be seen as a single element. The smooth graduations of light reflected from the curved southern half will be a distinct variation the fragmented north, where the angled facets of glass will reflect differently throughout the day and seasons, creating an ever changing pattern, while the more recessive spine provides a separation between the two façade treatments.

The glazing choice for the 3 elements will also assist in differentiating them.

i. The clean southern side will have a light blue tint to the glass as with the previous design to transition the colour toward the skyline.
ii. The spine will have a visibly dark grey tint to emphasise its recessive nature,
iii. The angled portion of the glazing will have a reflective coating within the relevant SAA reflectivity guidelines, in order to enhance the sunlight's interaction with the buildings form.

All the glazing will be detailed to tie in with the rest of the building, with the individual elements framed to sit between the floor slabs, the floor slabs will be capped in an aluminium profile powder coated in Notre Dame (or similar) to match the mullions and transoms.

The projection of the glazing now follows the slope of Regent Street and the hill on which it sits, providing the building with a more natural culmination which reflects the escarpment in the background.

Framing to windows and projections, such as sun control devices will be expressed with dark grey (Notre dame) powder coated aluminum frames that are subtly expressed on all facades and façade elements.

There will be a degree of 3 dimensional modeling to the façade and associated elements to provide visual interest, however horizontal ledges which will attract dirt and vermin will be avoided.

Summary: the proposed dark grey elements and detailing will provide a unifying frame for the expression of the three differing glazing treatments.

The north and south portions of the façade have been expressed, in the northern (sunny) case, by expressed angular elements, designed to reduce the apparent bulk of the building by reflecting daylight and sunlight in a 'prismatic' manner, which will change with the passage of the sun, changes in cloud cover etc.

The southern façade, directly illuminated in the early mornings and later afternoons, will provide a more controlled response to atmospheric conditions. The subtle curve will "scatter" intense "hot spots" and reduce their impact.

6.1 Summary

The evolution of the proposal's facade has involved useful input from:
i. consultants
ii. Council Officers
iii. Council Panels, DRP & JRRP

These contributions are acknowledged and have been critical in arriving at an improved outcome.

It is considered that:
i. Council's requirements for this project
ii. The building's aesthetic treatment and appearance
iii. The building's context
iv. The building's engagement with the streetscape
v. Code compliance
vi. Council's requirements for Design Excellence have been satisfied

In preparing conditions for Development Approval, it is suggested that clauses, such as those used by Cit of Sydney to ensure ongoing design integrity be considered for this (and any other) project.

This will assist in ensuring that built outcomes are closely representative of the approved proposal.

7.0 REFERENCES

"Urban Design Assessment" Peter Robinson & Associates

Wollongong City Centre Local Environmental Plan 2007 – REG 22B Design Excellence
http://www5.austii.edu.au/au/legis/nsw.repealed_reg/wcclep2007462/s22b.html

Residential Flat Design Code: Appendix 1: SEPP 65 Design Quality Principles.
http://www.planning.nsw.gov.au/programservices/pdf/designcode/appendices.pdf

Good and Bad Manners in Architecture by Trystan Edwards, 1946

8.0 APPENDICES

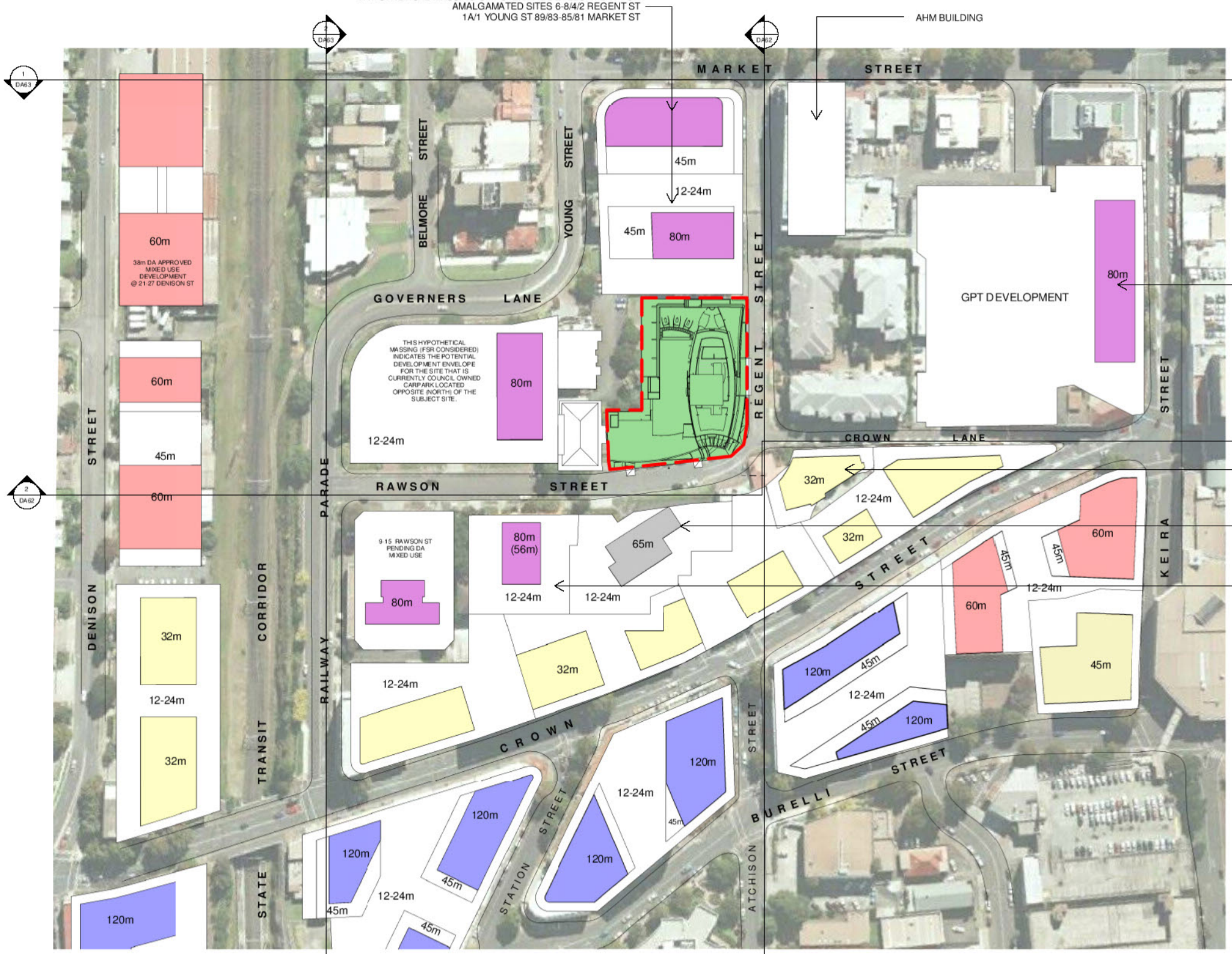
Addendum 1 – Future Contextual Plans

NOT FOR CONSTRUCTION

FOR DA APPROVAL

AMENDMENTS

No	Revision Description	Date	BY:
A	FEB. REVISION	02.02.15	SH,RB ,BB



LEGEND:

- SUBJECT DEVELOPMENT
- 32m HEIGHT CONTROL
- 45m HEIGHT CONTROL
- 60m HEIGHT CONTROL
- 65m HEIGHT CONTROL
- 80m HEIGHT CONTROL
- 120m HEIGHT CONTROL

1 CONTEXT PLAN (FUTURE)
1 : 1000

MIXED USE PROJECT- REGENCY TOWER

REGENT ST, WOLLONGONG

CONTEXTUAL PLAN (FUTURE)

REGENT STREET DEVELOPMENTS P/L. 013-014

DA58-A

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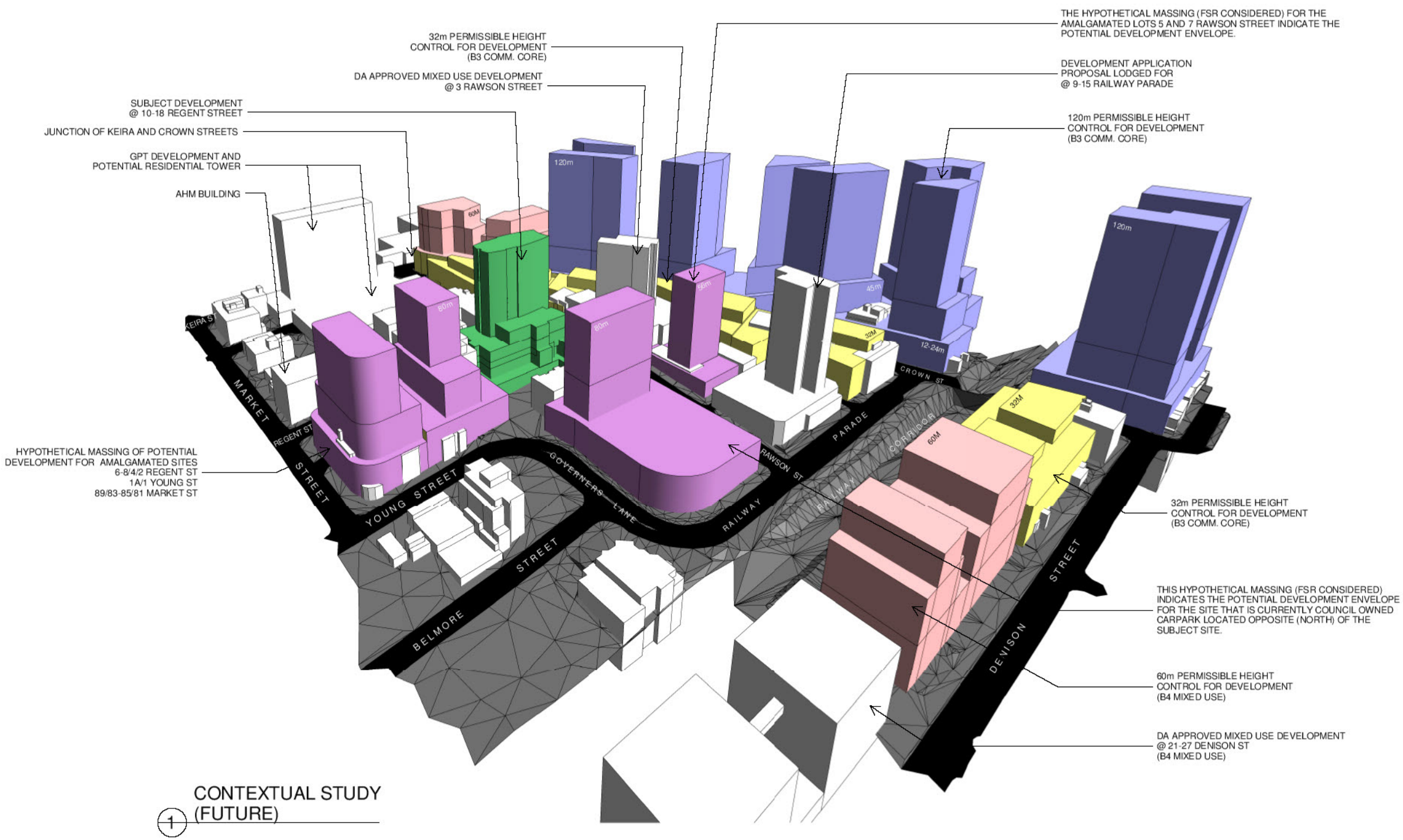
NOT FOR CONSTRUCTION

FOR DA APPROVAL

AMENDMENTS

No	Revision Description	Date	BY:
A	FEB. REVISION	02.02.15	SH,RB ,BB



1 CONTEXTUAL STUDY (FUTURE)

MIXED USE PROJECT- REGENCY TOWER

REGENT ST, WOLLONGONG

CONTEXTUAL PERSPECTIVE (FUTURE)

REGENT STREET DEVELOPMENTS P/L. 013-014

DA59-A

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A	FEB. REVISION	02.02.15	SH,RB ,BB

CONTEXT PLAN (PRESENT)
1 : 1000

LEGEND:

- SUBJECT DEVELOPMENT
- 32m HEIGHT CONTROL
- 45m HEIGHT CONTROL
- 60m HEIGHT CONTROL
- 65m HEIGHT CONTROL
- 80m HEIGHT CONTROL
- 120m HEIGHT CONTROL

MIXED USE PROJECT- REGENCY TOWER
REGENT ST, WOLLONGONG

CONTEXTUAL PLAN (PRESENT)

REGENT STREET DEVELOPMENTS P/L. 013-014

DA60-A

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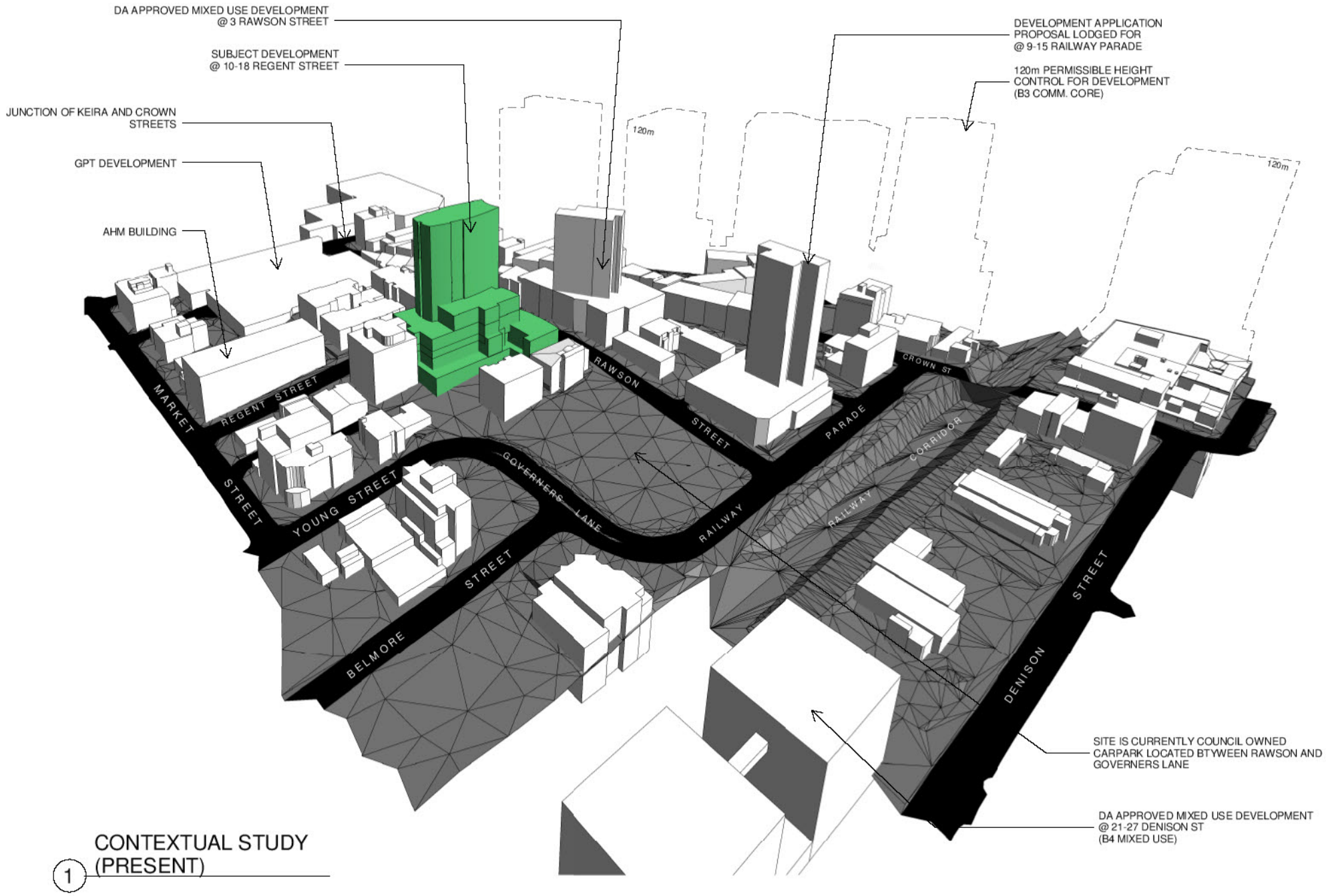

1 CONTEXTUAL STUDY (PRESENT)

MIXED USE PROJECT- REGENCY TOWER
REGENT ST, WOLLONGONG

CONTEXTUAL PERSPECTIVE (PRESENT)

REGENT STREET DEVELOPMENTS P/L. 013-014

DA61-A

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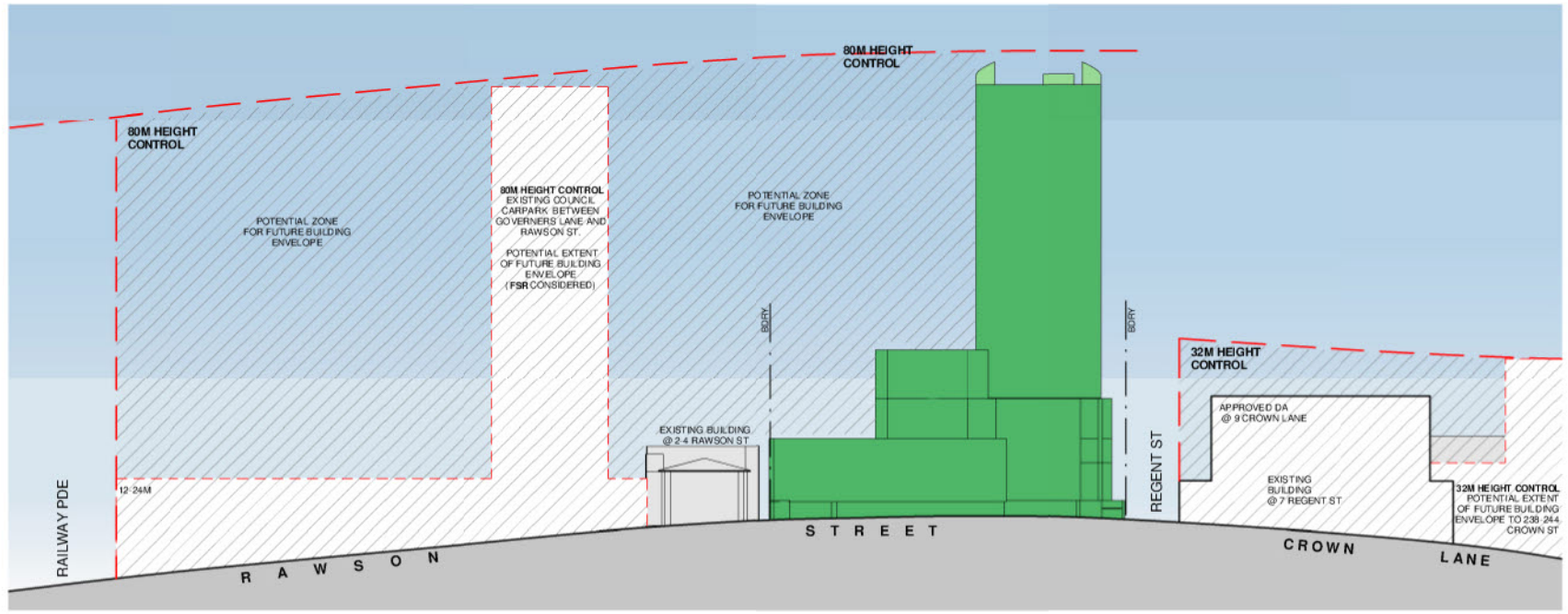

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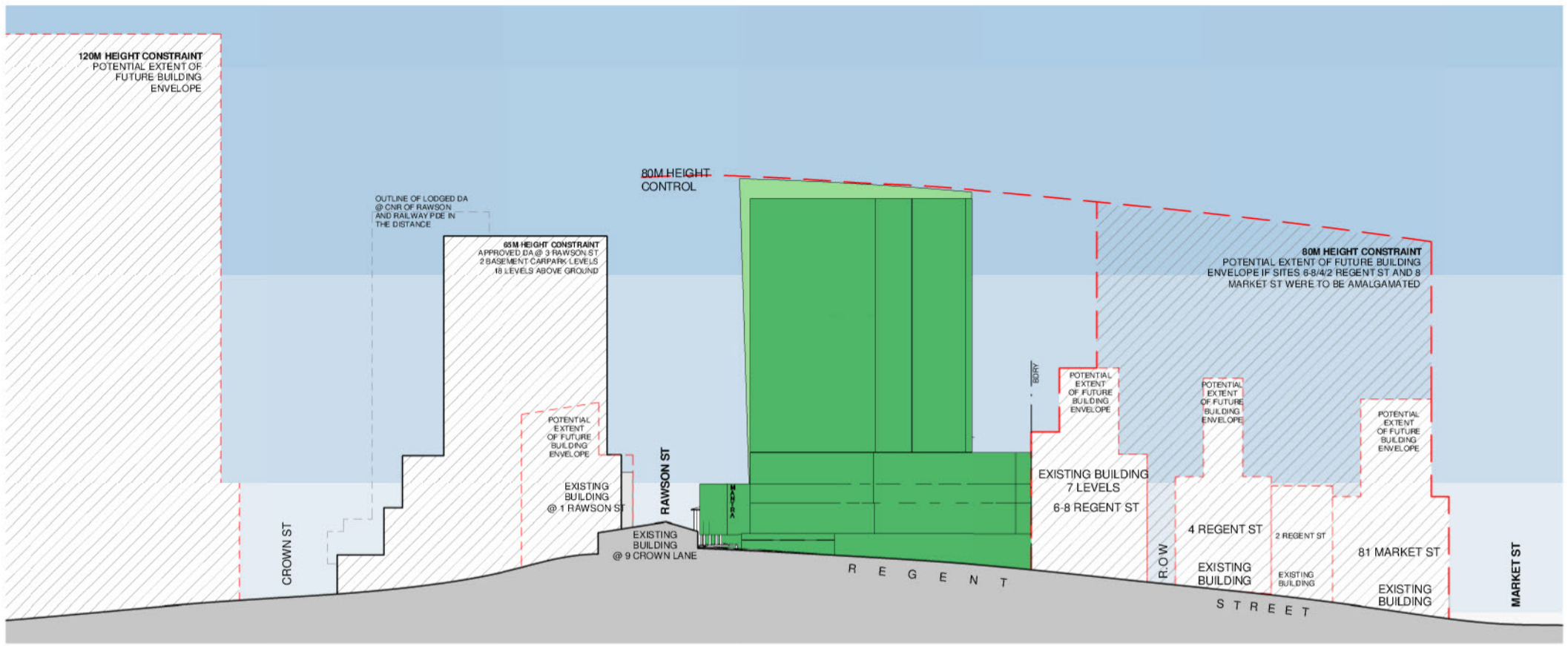

1 CONTEXTUAL STUDY- REGENT ST
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MIXED USE PROJECT- REGENCY TOWER

REGENT ST, WOLLONGONG

CONTEXTUAL STREET SECTIONS

REGENT STREET DEVELOPMENTS P/L. 013-014

DA62-A

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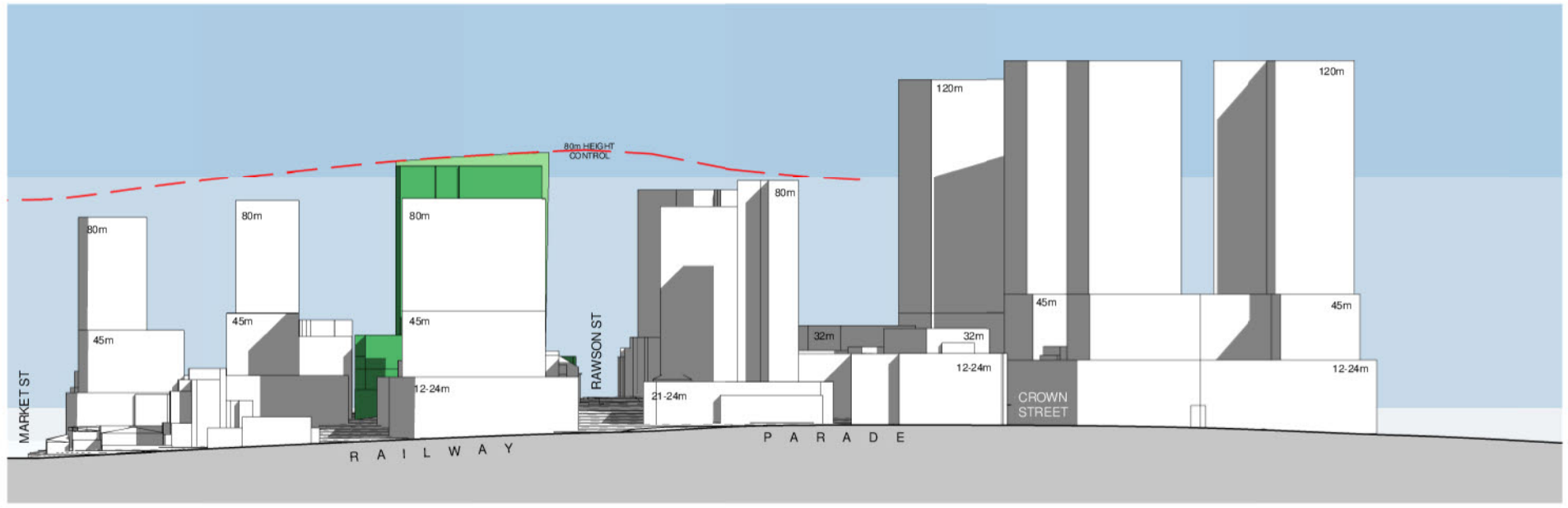

2 CONTEXT STUDY- RAILWAY PARADE
1 : 1000

1 CONTEXT STUDY - MARKET ST
1 : 1000

MIXED USE PROJECT- REGENCY TOWER
REGENT ST, WOLLONGONG

CONTEXTUAL STREET SECTIONS

REGENT STREET DEVELOPMENTS P/L. 013-014
DA63-

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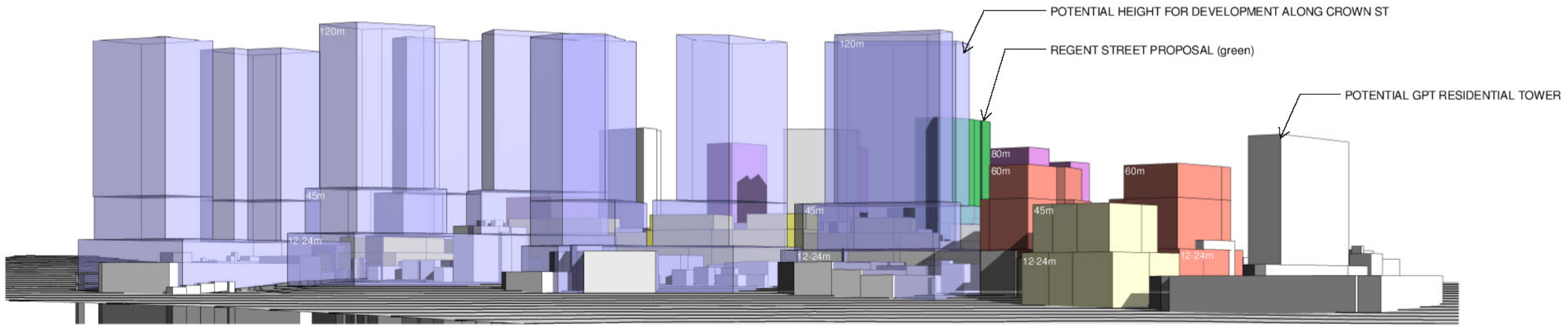
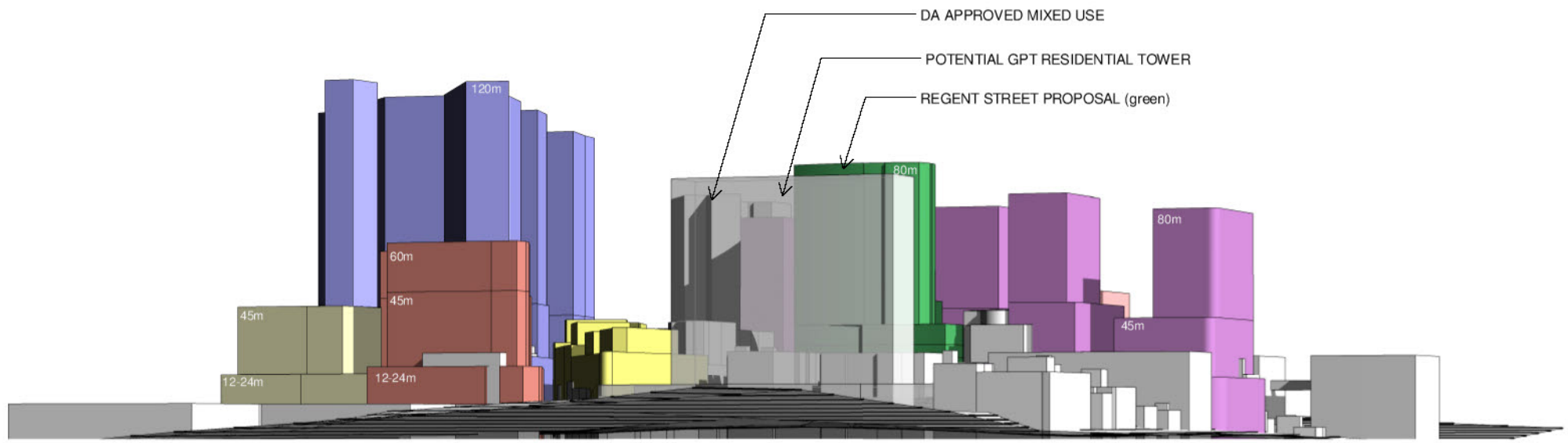


2 VIEW FROM VIKINGS OVAL



1 VIEW FROM FLAGSTAFF HILL

MIXED USE PROJECT- REGENCY TOWER

REGENT ST, WOLLONGONG

CONTEXT SITING

REGENT STREET DEVELOPMENTS P/L. 013-014

DA64-

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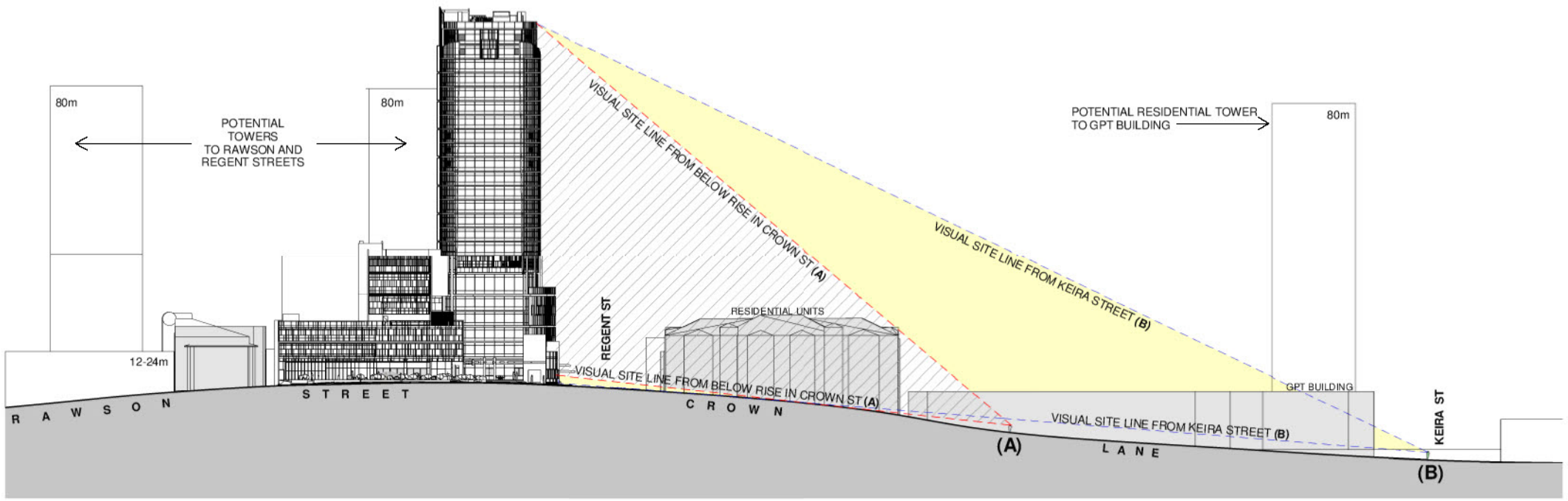

1 CONTEXTUAL SECTION
- CROWN LANE
1 : 600

MIXED USE PROJECT- REGENCY TOWER

REGENT ST, WOLLONGONG

VISUAL SITE LINES - CROWN LANE

REGENT STREET DEVELOPMENTS P/L. 013-014

DA65-

1:600 @ A1 1:1200 @ A3

25/02/2015 11:53:50 AM

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Addendum 2 – 3D Modelling in Urban Context

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AMENDMENTS

No	Revision Description	Date	BY:
A	DA ISSUE	22.11.30	DC/SH
B	DRP REVISION	01.07.14	SH/DC
C	DA Amended Issue	13.08.14	SH
D	DA Additional Height Info Requested WCC	07.10.14	SH
E	WCC Review	29.10.14	SH/G W/RB
F	DA Amended Issue	30.10.14	SH/G W/RB
G	DA Proposed Amendements for DRP	10.02.15	SH/RB

MIXED USE PROJECT- REGENCY TOWER

REGENT ST, WOLLONGONG

Alternative E

REGENT STREET DEVELOPMENTS P/L. 013-014

V05-G

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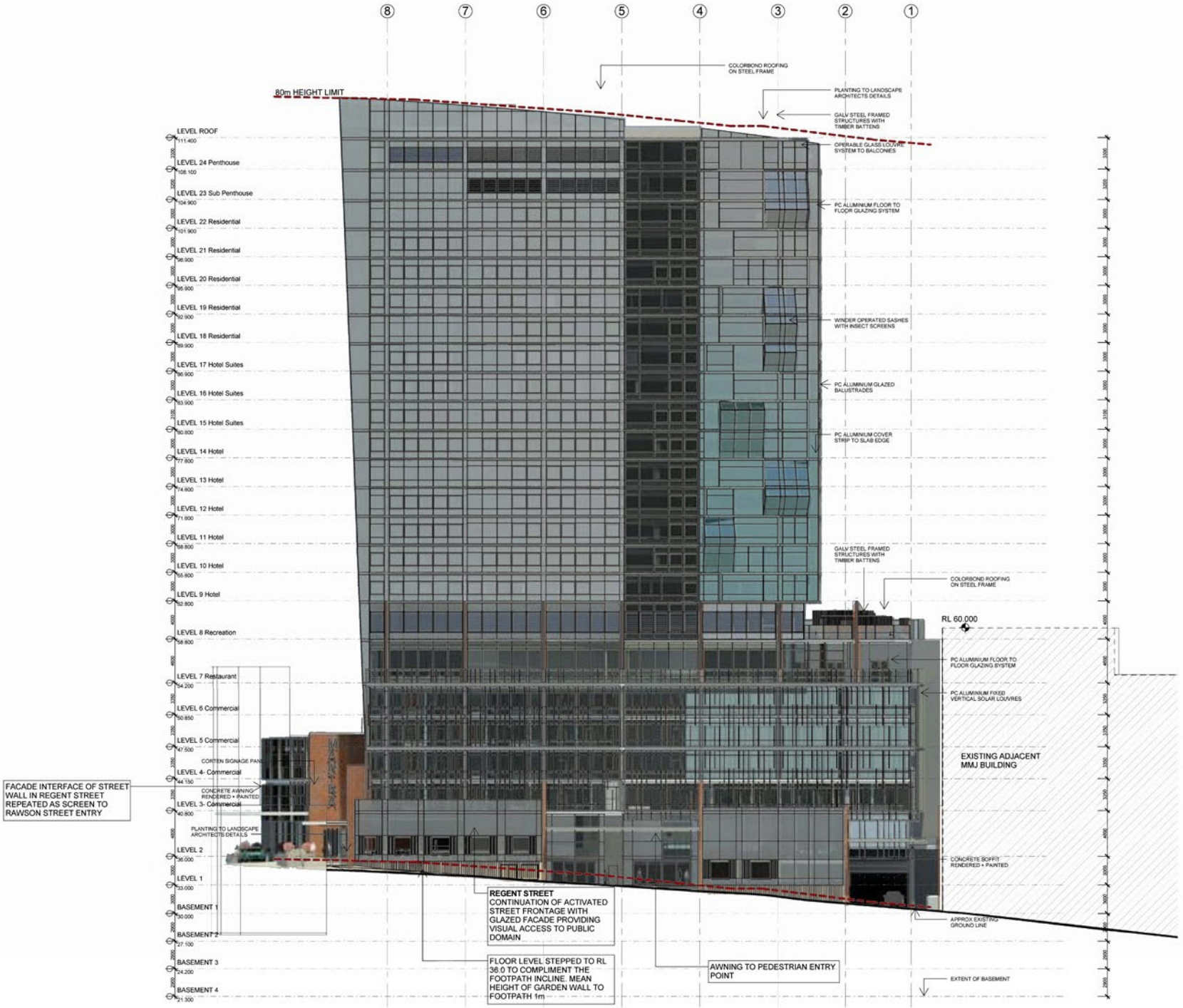

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AMENDMENTS

No	Revision Description	Date	BY:
A	DA ISSUE	22.11.30	DC/SH
B	DRP REVISION	01.07.14	SH/DC
C	DA Amended Issue	13.06.14	SH
D	DA Additional Height Info Requested WCC	07.10.14	SH
E	WCC Review	29.10.14	SH/G W/RB
F	DA Amended Issue	30.10.14	SH/G W/RB
G	DA Proposed Amendements for DRP	10.02.15	SH/RB

1:200 @ A1 1:400 @ A3

MIXED USE PROJECT- REGENCY TOWER

REGENT ST, WOLLONGONG

EAST

REGENT STREET DEVELOPMENTS P/L. 013-014

DA32-G

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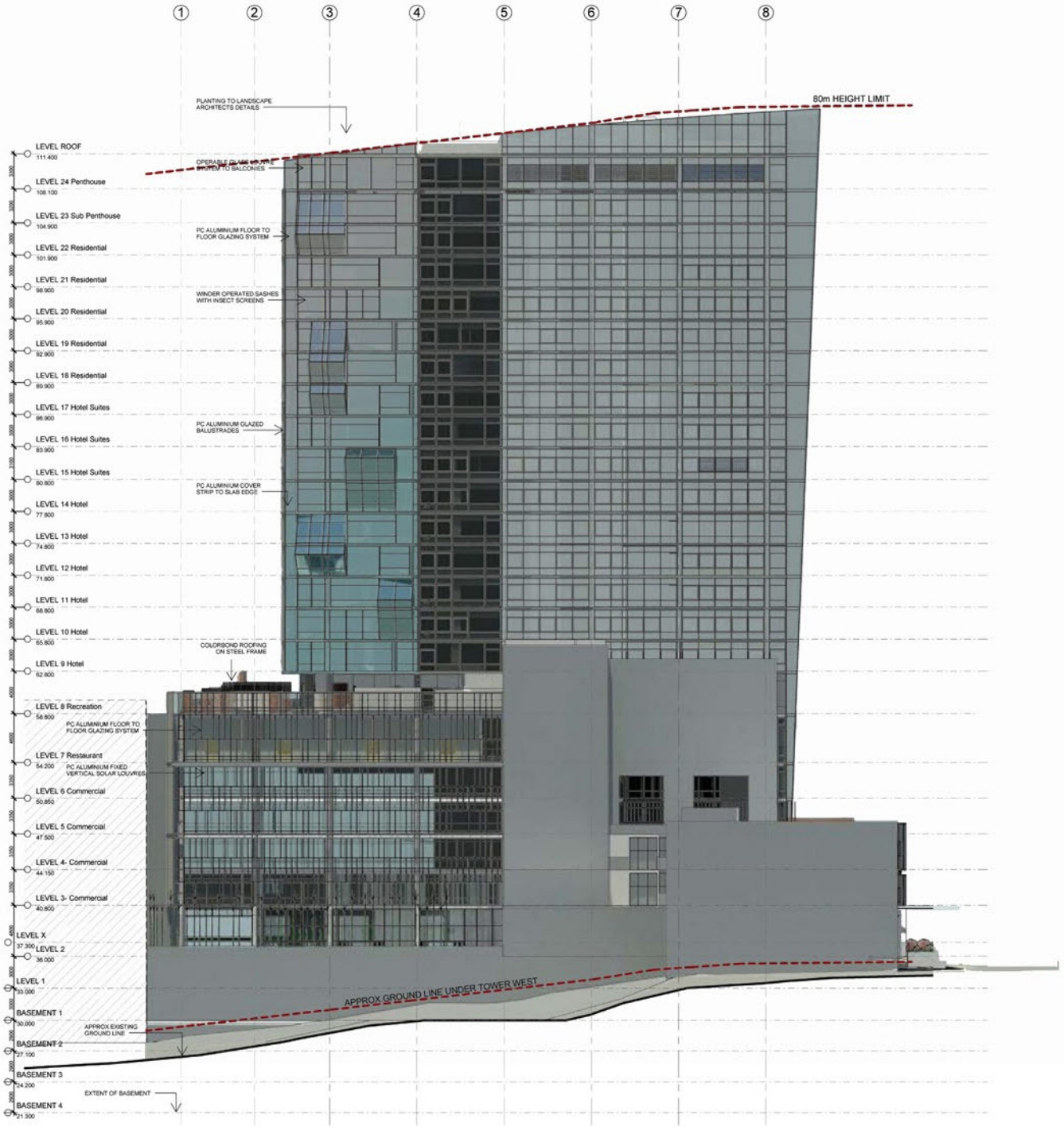

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FOR DA APPROVAL

AMENDMENTS

No	Revision Description	Date	BY:
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B	DRP REVISION	01.07.14	SH/DC
C	DA Amended Issue	13.06.14	SH
D	DA Additional Height Info Requested WCC	07.10.14	SH
E	WCC Review	29.10.14	SH,G W,RB
F	DA Amended Issue	30.10.14	SH,G W,RB
G	DA Proposed Amendements for DRP	10.02.15	SH,RB

4 0 4 8 12 16

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9/02/2015 8:28:36 AM

MIXED USE PROJECT- REGENCY TOWER

REGENT ST, WOLLONGONG

WEST

REGENT STREET DEVELOPMENTS P/L. 013-014

DA34-G

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Addendum 3 – Photomontage, Alternative Scheme selected by PRD

View of proposal from South

View of proposal from East

View of proposal from North-East

View of proposal from West

Addendum 4 – SEPP 65

PRD
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Nominated Architect
Peter Rasa AIA
Registration No. 6316

REGENCY TOWER
Proposed Commercial/Residential Development
Regent Street
Wollongong

Design Quality Principles

1. Context

The site is located within the Commercial Core area as designated in LEP2009, and in an area which provides redevelopment opportunities given its age, standard and variety of built forms. The site is located on the corner of Regent and Rawson Streets, which is a topographically and visually dominant position within the Commercial Core. Development of the site will acknowledge this position and reinforce the prominence of the locality.

Development within the immediate area is characterised by land use including commercial and residential. The built form exhibits variety, ranging from converted dwellings to 8 level commercial office blocks. The built form generally addresses the street, with a range of setbacks evident. A recent approval to the west of the site incorporates a high rise mixed use development including private hospital, residential aged care facility, commercial and residential uses spread over 2 buildings but has not proceeded. A relatively new 8 level AHM building has been constructed on the south-east corner of Market and Regent Street, with a 65m high mixed use building approved on the southern side of Rawson Street, opposite this site.

The architectural design of the building acknowledges the opportunities of the site, its important strategic position and its mixed usage, having regards to the diverse character and built form which will reflect an individual character but which will contribute towards revitalization of this precinct.

2. Scale

The Wollongong LEP2009 allocates a height of 80m to this area, which is to undergo a transition as part of the revitalisation of the City Centre.

The proposed building is 25 levels high from the entry point of Regent Street, and 24 levels high from the residential entry point on Rawson Street. The commercial component of the development has a street wall to Regent Street of 7 levels, with the hotel/residential tower being set on a podium.

The proposed height of the building, whilst greater than the existing in the immediate vicinity, will not be out of context with the desired future character as established in the Wollongong LEP, or the heights established in approvals within the area which have not as yet been constructed. It is further believed that the scale of development proposed will activate redevelopment opportunities in the surrounding area.

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3. Built form

The building contains a well proportioned hotel/residential tower over a 7 level commercial podium. The street façade of the commercial component activates the street edge and is in line with the requirements of the LEP. The residential tower is set back from both streets and creates a strong presence on the crown of the hill.

The varying form of the commercial building and the tower will contribute to the character of the street and will enhance the visual integrity of the precinct.

The positioning and design of the commercial component will ensure a high degree of internal amenity and will enable quality outlooks from every level. The residential portion of the tower will provide quality views from every unit, with a high degree of internal amenity. Pedestrian and vehicular entry is separated from the commercial and residential uses with the visual dominance of access driveways to car parking levels being minimised.

Building Depth
The Residential Flat Design Code aims to encourage buildings with a building depth of between 10-18m, to achieve satisfactory access to natural sunlight and ventilation. Our tower has depth of between 14-20m, which complies with the intent of the code.

Street Setbacks
The DCP calls for street walls to be on the street boundary, with towers stepping back approximately 4m from the street frontage. Our buildings complies with the intent of the provisions.

4. Density

The density proposed for the development is in line with the intent of the LEP, which states an FSR of 6:1. The density proposed for the site is appropriate in terms of its strategic position within Commercial Core and the sites access to transport, services and facilities. It is also reflective of the unique qualities of the site due to its size and dual road frontages.

The building height configuration and building modulation will not result in an undesirable building mass. The Residential Flat Design Code confirms that “FSR should not be the sole determinant of the future built form; it should be linked with all other building envelope controls to support the desired urban outcome”.

The proposed floor space ratio for the site is considered appropriate as it complies within the intent of the LEP, the sites proximity and ease of access to transport, the CBD, medical, entertainment and recreational facilities. A building of this scale and density will also encourage future revitalisation of this important precinct.

5. Resource, Energy & Water Efficiency

The use of corner apartments to all levels, allows for appropriate natural ventilation and light. The building configuration achieves a balance between privacy and amenity considerations and also solar access requirements.

Many of the kitchens within the development have been located adjacent to a window to allow for natural ventilation. Where a kitchen is not provided with an external window, the rear of the kitchen complies with the maximum 8m distances specified within the Residential Flat Design Code.

All water will be stored and re-used for garden irrigation. All appliances chosen will be appropriately rated and construction materials will be chosen to enhance the energy efficiency of the development.

6. Landscape

At the street level, street tree planting, in combination with feature paving which will radiate across the corner of Crown Lane, will define the street block and create a character which can be reinforced throughout the precinct. The frontage to Rawson Street, which provides access to the residential tower, has increased levels of landscaping to add visual amenity.

Whilst a deep soil zone has not been provided on site, a recreation area has been provided at the podium level at the base of the residential tower. The size of this space offers opportunities for feature planting, with passive and active recreational activities.

The recreation area includes an indoor/outdoor swimming pool, gymnasium, common room, day spa, barbeque facilities and a landscaped deck area to enjoy as an amenity from the recreation level and a view from above.

7. Amenity

The internal design of the units provides for suitable room dimensions having regard to amenity considerations. The size of the 3 and 4 bedroom units more than satisfies the minimum requirements recommended within the Residential Flat Design Code.

The unit interiors are generally spacious and through their open plan layout offer good light penetration. The balconies are generous and variable, with many having screening or operable glazed walls to protect from prevailing winds and to increase the level of amenity. All balconies ensure an excellent flow of space from inside to outside through appropriate wall glazing.

Within the basement area, storage areas are provided for units, which ensure that the car parking spaces remain available for their intended purpose. The residential parking areas are separated securely from the commercial car parking, which enhances the security of the residents car parking area.

8. Safety and Security

Access Control

The residential portion of the tower has a single secure access point off Rawson Street.

The residential lobby will provide secure lift connection to the residential basement parking, function/restaurant level, recreation level and all residential levels. The lifts provide access to a maximum of 4 units per floor, which is well below the maximum 8 units specified within the Residential Flat Design Code.

Territorial Reinforcement

All residential and visitor parking is located within the basement parking level.

Access from the security parking level will be via 2 centrally located lifts.

9. Social Dimensions

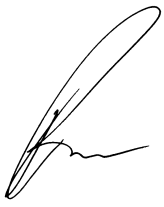
Within the building, there are a range of bedroom units, with 3 bedroom with study, 2 sub-penthouses, and a 5 bedroom penthouse. The range of unit types provides increased housing choice for those seeking the advantage of inner city living. The mix of units will cater for a variety of family types.

2 adaptable units will be provided for the 23 units, which complies with the intent of the Code, and will offer choice for those who require such a unit due to changing needs. Such units will enable those requiring adaptable units to be close to the range of services, facilities and public transport of the City Centre.

10. Aesthetics

The range of use and unit types within the complex creates diversity, which allows a dynamic expression of the mass form. The street wall comprising the commercial use, the recreation and restaurant levels provide a visual break from the commercial form to the sinuous form residential tower. The tower form is sculptural through its use of articulation and varied screening elements which are both fuctional and cosmetic. The overall form enriches the urban fabric with its varied building form and high quality sculptural facade articulation. It enhances the surrounding urban fabric through the composition of its mass form. It responds to its environment with its optimum orientation and effective planning

Yours Faithfully



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