Appendix 10

Urban Design Report – Jan 2018

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Urban Design Report
33 – 43 Phillip Street, St Marys Station Plaza

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Cover image: Station Street perspective - proposed built form design concept for Station Plaza Shopping Centre.

1.0 Overview

This report has been prepared to illustrate the urban design analysis undertaken in relation to the built form review of St Marys Station Plaza Precinct. The study has been prepared to inform a Planning Proposal to modify the current outdated development standards in relation to building height and floor space ratio (FSR) controls contained in Penrith Local Environmental Plan 2010 (LEP).

The report presents relevant sections of the background urban design research and analysis undertaken to inform the built form options and ultimately the preferred development option for the subject site at 33-43 Philip Street St Marys. The 11,740m^2 site is in single ownership currently operating as a Coles supermarket, representing a key major redevelopment site within the Station Plaza Precinct

It is noted that a previous Planning Proposal for the subject site was submitted to Penrith Council in August 2016 proposing built form outcomes up to 8:1. This report is a response to Councils recommendation following this submission that the height and FSR of the proposed building be reduced.

St Marys is currently a low-density town centre consisting of predominantly 1 and 2 storey buildings. The current permissible building heights and FSRs for the Centre, contained in the Penrith City Council LEP 2010, are over 7 years old and are no longer considered to reflect the State Governments strategic vision for St Marys as a Strategic Centre. St Marys Strategic Centre status making it a focus for the provision of new jobs and housing.

In recognition of St Marys Strategic Centre status, in June 2017 The AEC Group was commissioned by Council to review the feasibility of Councils current FSR and building height controls for St Marys Town Centre. The report recommended that Council consider increasing the FSR in the Station Street Entry Precinct to a minimum FSR of 5:1. In addition, the report identified the Coles site at 33-43 Phillip Street as requiring a minimum FSR threshold of 5.3:1 to 5.5:1.

The AEC report notes that 'it would be therefore be beneficial for Council to work with developers of key sites that have potential to have a transformative influence'.

The Urban Design Analysis supports a podium and tower built form for the Station Plaza Shopping Centre that provides an FSR of 5.5:1 in keeping with the recommendation of the feasibility analysis commissioned by Council. The resulting concept design provides a mixed-use building activating the public domain with ground floor retail uses and podium level commercial and residential uses. The podium is pulled back from the western site boundary to provide an opportunity for a new pedestrianised 'Station Plaza' space following the route of the existing pedestrian path connecting Philip Street to the Station.

The residential levels above the podium provide activation of the precinct and additional surveillance of the public domain supporting the place making character and amenity of the area. The two tower forms have been set back from the podium to minimise visual impacts and potential wind effects. The towers step down to the south articulating the building form and minimising shadows to the south.

2.0 Methodology

The Urban Design Report was prepared by DesignInc to provide general background, context, and to guide and inform the site development option process. The Urban Design Report provides supporting information and justification for the proposed rezoning for ongoing discussions with Council and stakeholders.

It comprises:

- An urban design analysis of the site including consideration of the site in the context of the broader St Marys Town Centre.
- Identification of opportunities and constraints for the redevelopment of the site.
- Identification of opportunities for through site linkages with the surrounding town centre including Queen Street the west and Phillip Street to the south and the St Marys Station to the north.
- Consideration of how the site would generally interface with and address potential conflicts with existing adjoining development.
- Options for the potential redevelopment of the site.
- Provision of a preliminary analysis of the potential impacts that a development of this nature may have on surrounding development, in particular in relation to potential overshadowing.
- Provision of some indicative built form envelopes and massing diagrams to provide an illustration of the proposed maximum FSR and building height controls for the site.
- Provision of indicative images and concepts illustrating the general 'vision' and desired outcomes related to activated street fronts, a community focal point, high quality public domain.



Figure 1 Station Street Perspective - Station Plaza Shopping Centre

3.0 Site Analysis

St Marys Town Centre is one of the two main retail/commercial centres within the Penrith Local Government Area. It is accessible from the M4 motorway, the main Western Railway line and the Great Western Highway. It is bounded to the north by the Main Western Railway Line, to the east by South Creek/ Werrington, to the west by low scale residential and to the south by the Great Western Highway. The Penrith Campus of the Western Sydney University is located to the west.

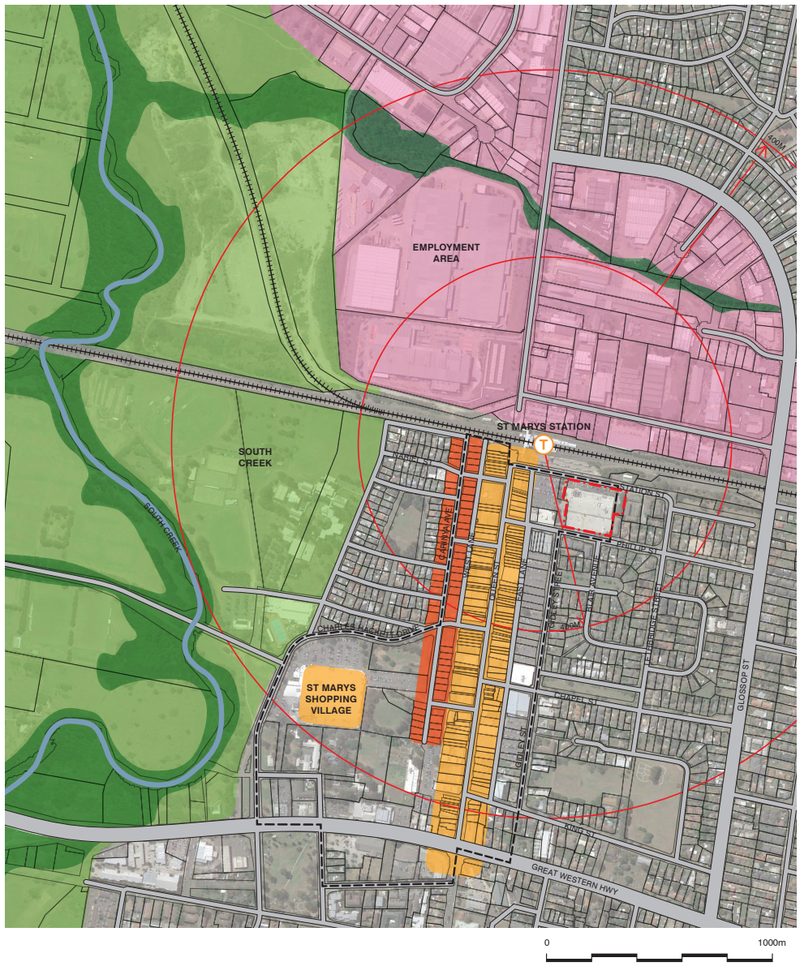


Figure 2 Town Centre Context

3.1 Town Centre Context

Refer Figure 2 Town Centre Context

The Town Centre is set out on an irregular grid defined by the following key elements:

- Great Western Rail Corridor – running east to west, the rail corridor bisects the town centre separating the retail precinct to the south from the employment precinct to the north.
- Station Plaza - the Station Plaza or Entry Precinct, represents the primary entry plaza to the town centre from St Mary's Station. The plaza is also an intermodal hub including a major bus interchange for rail passengers to transfer to local buses. The Plaza is defined by the edges of the railway corridor and landscaped zone on the northern boundary; the urban block to the south of Station Street (including the Coles site) and the low scale retail uses on Queen Street to the west.
- Queen Street - Queen Street is the primary retail 'high street' for the town centre. Running 850 metres from the Station Precinct to the Great Western Highway the street provides a wide tree lined boulevard consisting of mainly two storey buildings with retail on ground level and commercial uses or accommodation above.
- Rear Parking areas – To the rear of either side of Queen Street are extensive surface parking areas. These areas connect to the main street via laneways and covered arcades and act as a buffer to the residential areas to the east and west.
- Low Density Residential – the area to the east and west of Queen Street consist of predominantly detached single storey houses typical of western Sydney. It is noted that the residential area to the east of Queen Street and south of Philip Street has been rezoned to R4 - High Density Residential reflecting the changing character of the area.
- Employment Lands – To the north of the railway line is an area of approximately 3 square kilometres of employment land consisting of a wide range of employment uses from car repairs to office space;
- South Creek – The South Creek Open Space Corridor to the east of the Town Centre provides a green edge to the western boundary of the town centre. The green corridor runs across the Penrith LGA for 7Km's forming part of a more extensive network of open space corridors in western Sydney.

3.2 The Station Plaza Precinct (Entry Precinct)

St Mary's Plaza Precinct includes the public domain fronting St Mary's Station, including bus interchange, roadway, surface parking and landscaping. This space is defined by the land to the south of Station Street and east of Queen Street which represent 'key' sites in the transformation of the Precinct which forms the pedestrian gateway to St Marys.

The land defining the southern boundary of the Plaza Precinct consists of three key sites bounded by Station Street (north), Philip Street (south), Lethbridge Street (east) and East Lane (east).

The subject Coles site at 33-43 Station Street forms the central and largest part of this block with an area of 11,740m^2. The site currently houses a Coles supermarket with associated specialty shops with basement car parking. The site has a full frontage to Station Street to the north and Philip Street to the South with a north south pedestrian connection to the west.

Immediately to the west of the site is land owner by Penrith Council with an area of approximately 6000m^2 consisting of a surface car park. The land immediately to the east consists of a number of two and three storey apartment buildings.

3.3 Topography, Views and Vistas

Refer Figure 3 Topography, Views and Vistas

- Topography is relatively flat through the Town Centre, rising from RL30 around Queen Street to RL40 to the east.
- Significant views to the Blue Mountains escarpment are evident to the west, visible from Phillip and Chapel streets and St Marys Station bridge.
- Local views are located along Queen Street and east-west streets to parks and other local features

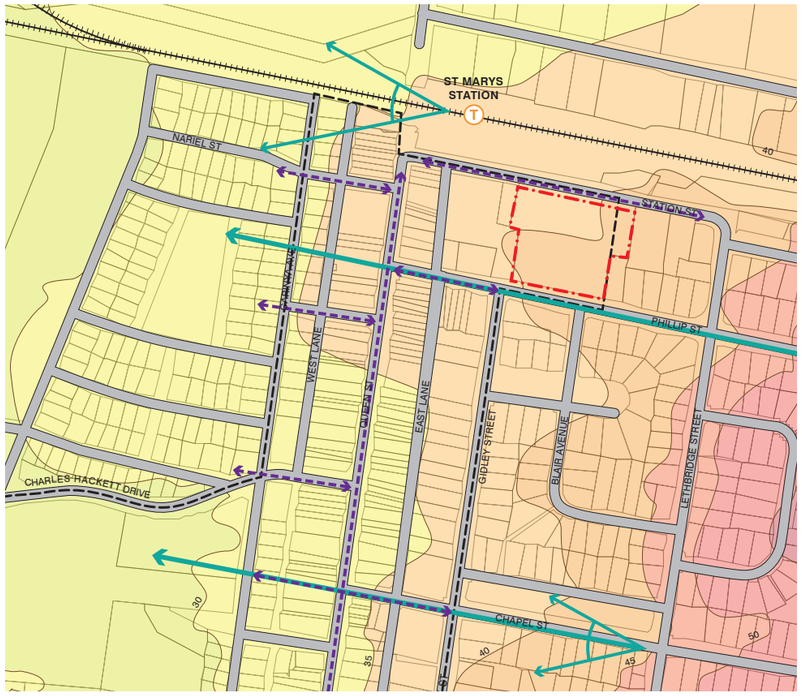


Figure 3 Topography, Views and Vistas

3.4 Existing and Future Urban and Landscape Character

Refer Figure 4 Existing and Future Urban and Landscape Character

- St Marys Town Centre is generally characterised by fine grain, low scale two storey development with retail at the ground floor and commercial above. Wide footpaths allow for a strong avenue of trees, outdoor dining and awnings. Newer developments located along King Street and Gidley Street are 6 storey residential flat buildings.
- Streets run predominantly north-south and east-west, with two service lanes immediately behind Queen Street.

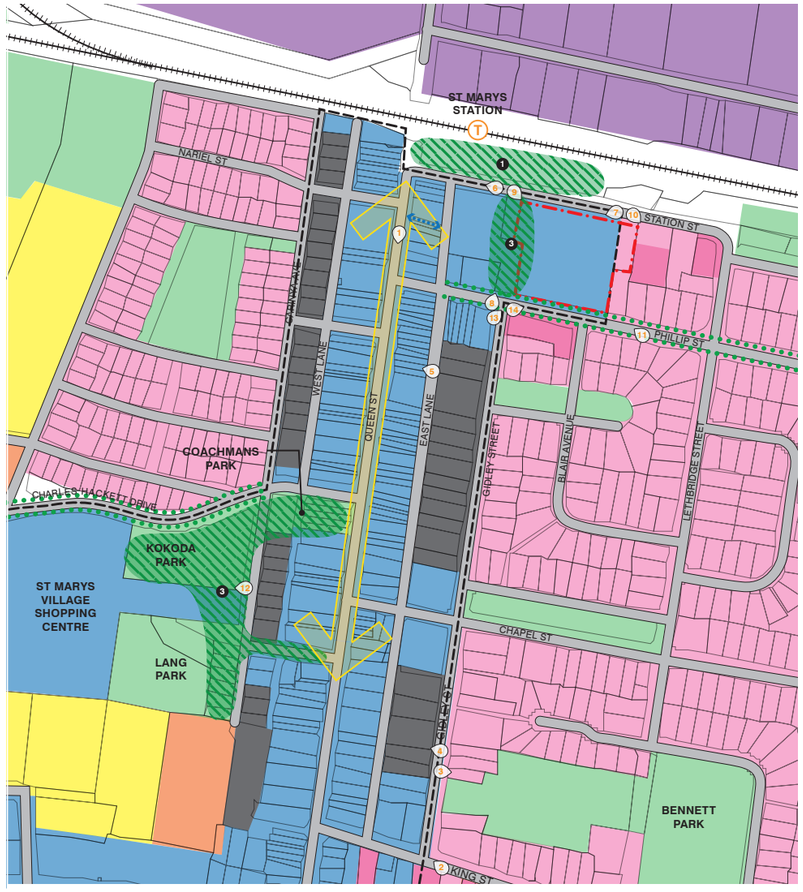


Figure 4 Existing and Future Urban and Landscape Character

- Service lanes have at-grade parking located off them to the rear of Queen Street. Accessways through the retail/commercial provide pedestrian access to the retail on Queen Street.
- Queen Street is the main urban spine for vehicular and pedestrian traffic, providing a link from the residential areas south of the Great Western Highway to St Marys Railway Station in the north. A strong avenue of street trees exists along Queen Street, and contributes to the civic quality of the street.
- Council is currently upgrading paving, lighting and overall appearance along the 1km main street of St Marys.
- Kokoda and Lang Park are large parks within the centre. There are a number of smaller pocket parks include Coachman's Park immediately adjacent to Queen Street.
- Two large shopping centres are located outside the main Town Centre spine:
  - The "Station Plaza" (Subject Site) is located south of St Marys Station, fronting Station Street. It is a 2 storey large box style building with the main entry from Phillip Street. The Station Street frontage comprises a rear/ blank façade to the building with parking and parking entries. A large at grade car park is located on the western edge called Veness Place and is owned by Council.
  - The "St Marys Village Shopping Centre" is located towards the south west of the Town Centre, on Charles Hackett Drive and has an extensive at grade car park.
- New and improved public spaces are planned by Penrith City Council at key locations:
  - Town Square
  - Station Forecourt
  - Secondary Town Plaza
- Charles Hackett Drive and Phillip Street have also been identified as new "Greenway" streets requiring evergreen avenue street tree plantings.

3.5 Heritage

Refer Figure 5 Heritage

- Most heritage items are located around Great Western Highway to the south of the Station Plaza Site and relate to tanning and wagon building industries from the mid nineteenth century.
- Directly adjacent the Station Plaza Site, St Marys Station Group is of state significance as an early station opened in the 1860s. St Marys Station Group comprises a range of buildings and structures dating from the 1880s and World War II period to the present day including the station building, goods shed, signal box, crane and footbridge substructure (excluding bus terminal and properties to the east along the railway corridor).

3.6 Access and Circulation

Refer Figure 6 Access and Circulation

- Great Western Highway and Glossop Street provide the main vehicular accessways to the Town Centre.
- Queen Street, Phillip Street, Chapel Street and Charles Hackett Drive provide secondary vehicular accessways to the Town Centre.
- The Main Western Rail Line provides an eastern connection into Sydney CBD via Parramatta, and a western connection to the Blue Mountains and Central Western NSW via Penrith. The service is relatively high frequency during peak periods and has a good spread of services throughout the day.
- Local bus routes utilise Queen Street and Station Street/ St Marys Bus Interchange.
- There are no continuous cycleway networks. Charles Hackett Drive has an on-road facility but for only part of its length.
- There are a series of pedestrian links of existing east-west pedestrian through links on streets and throughways to Queen Street and some desired future links indicated by Council.
- For the Station Plaza SHopping Centre there is an existing through site link along the western edge connecting Phillip Street to Veness Place carpark.

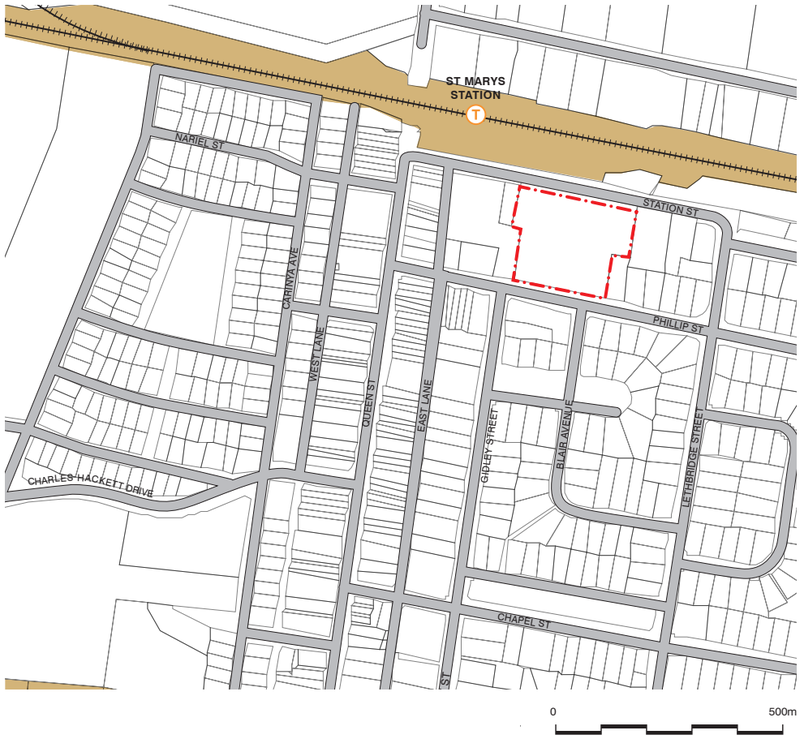


Figure 5 Heritage

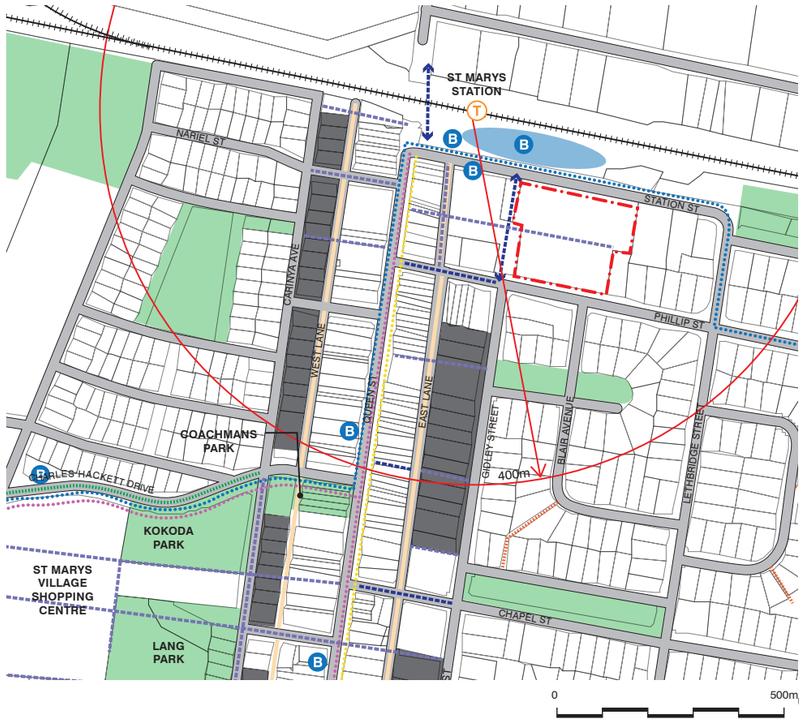


Figure 6 Access and Circulation



Viewpoint 1: Queen Street looking south from intersection with Phillip Street



Viewpoint 2: New multi-storey development to the south in St Marys Town Centre



Viewpoint 3: Gidley Street Heritage listed brick cottages



Viewpoint 4: At grade parking to the rear of Queen Street off East Lane



Viewpoint 5: Pedestrian link from at grade parking off East Lane through to Queen Street



Viewpoint 6: Station Street looking west towards St Marys Station and Queen Street intersection



Viewpoint 7: Station Plaza Shopping Centre Site Station Street Frontage



Viewpoint 8: Veness Place Carpark Access from Phillip Street



Viewpoint 9: Station Plaza Shopping Centre Station Site Street Frontage and Veness Place Carpark



Viewpoint 10: Station Street -multi-unit residential adjacent Station Plaza Shopping Centre to the east



Viewpoint 11: Station PlazaShopping Centre Site Frontage on Phillip Street with adjacent residential to the east



Viewpoint 12: St Marys Village Shopping Centre



Viewpoint 13: Station Plaza/ Shopping Centre Site Phillip Street Frontage and Veness Place Carpark Accessway



Viewpoint 14: Phillip Street looking east from Gidley Street intersection

3.7 Current LEP Controls - Zoning and FSR

Refer Figure 7 Zoning and FSR

- Currently St Marys Town Centre is zoned B4- Mixed Use including the Station Plaza Shopping Centre.
- East of Queen Street to Glossop Street and south to Chapel Street the residential area is zoned R4 High Density residential. Outside of that, the area is zoned R3- Medium Density (Townhouses & villas). The R4 zone (Apartments) adjoins the Station Plaza Shopping Centre to the east.
- A small pocket of R2- Low Density residential is located to the north-west.

3.8 Current LEP Controls - Height

Refer Figure 8 Existing and Proposed Building Heights

- In general LEP heights of buildings transition from the lowest around the edges of the Town Centre to the highest across from St Marys Station along Station Street. Height controls vary from 8.5 metres for 1-2 storey R2 and R3 zoned areas to 24-32 metres in the Town Centre/ B4 Mixed Use zone. The Station Plaza Site has a 32 metre height control which is the highest point in the Town Centre. Adjacent to the east the site has a 21 metre height control, to the west a 32m height control (Veness Place carpark) and along Queen Street a 24 metre height control.

3.9 Current DCP Controls - Setbacks, views and town centre character areas

Refer Figure 9 DCP Setbacks and PCC Town Centre Character Areas

- There are zero street setbacks on Station and Phillips Streets and 4.0 metre setbacks on the eastern side of Queen Street and Carinya Avenue. There is a 3.0 metre setback on the western side of Queen Street and part of West Lane and Carinya Avenue.
- The Station Plaza Shopping Centre has zero setbacks on Station and Phillip Street frontages.
- The Station Plaza Shopping Centre is located in the North East Mixed Use Character Area.

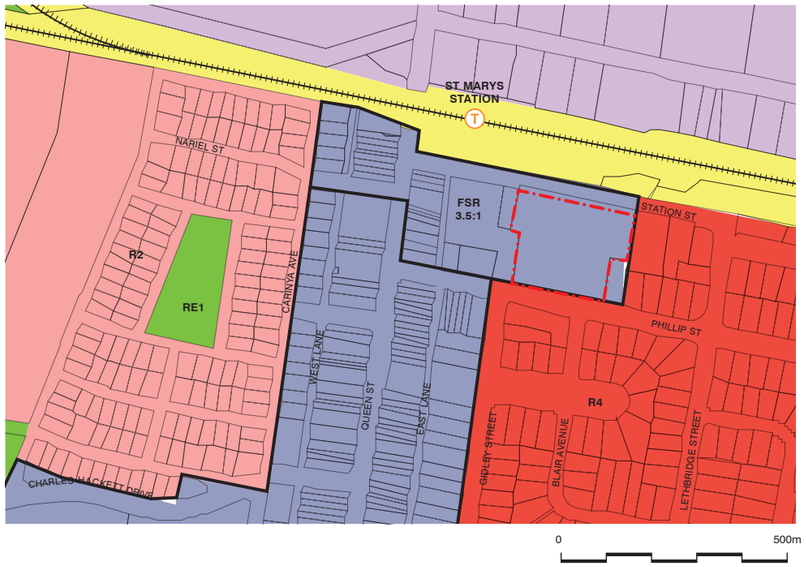


Figure 7 Zoning and FSR

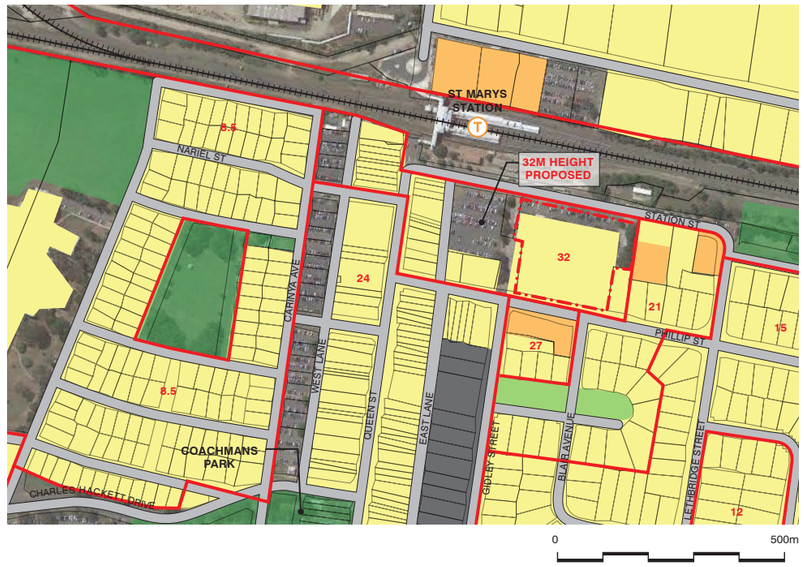


Figure 8 Existing and Proposed Building Heights

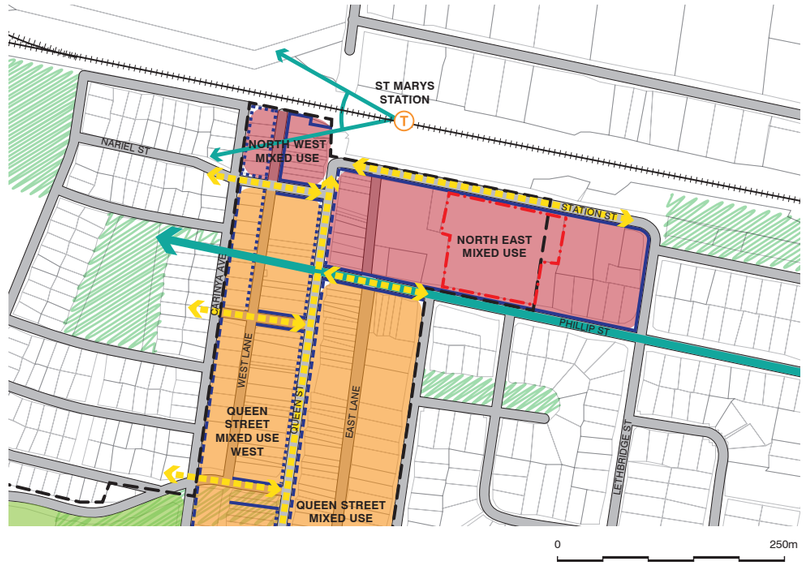


Figure 9 DCP Setbacks and PCC Town Centre Character Areas

4.0 Penrith City Council Vision & Objectives

Council's St Marys Town Centre Strategy document identified a vision for St Mary's:

"St Marys is the vibrant heart of the district, providing diverse experiences and services in a friendly atmosphere."

Strategic Objectives from the 2006 document included:

1. The provision of at least 14,000m² of high quality, multi-use urban open space, including 8,400m² of green space, directly linked with, and, inclusive of, Coachmans Park.
2. The provision of a new east-west road from Charles Hackett Drive to Queen Street.
3. The provision of generous and attractive pedestrian and retail links with Queen Street.
4. The arrangement of future uses to maximise positive economic flow over effects to, and interaction with, Queen Street.
5. The nature of uses selected to activate spaces near Queen Street should not result in negative impacts on Queen Street.
6. No nett loss of public parking.
7. Replacement parking is to be free, untimed and designed and orientated to support Queen Street.
8. New public spaces are to properly interpret and celebrate historical associations.
9. Any new development and public spaces are to implement actions from Council's Cooling the City Strategy.
10. Any new development and public spaces are to activate Station Street and East Lane.

In particular this document outlined Activity Precincts for St Marys Centre. The Station Plaza Site is located in Precinct 4 – Station Entry (Mixed Use). It is noted that more recent strategy documents have re-named this precinct to North East Mixed Use (Refer Figure 9). The document noted:

This precinct provides a key focus to the revitalisation of St Marys; and becomes a safe and exciting place to be; it is well lit and heavily used by pedestrians; traffic flows are limited and upgrades to public infrastructure is provided and there is street art installed. New development incorporates residential uses that overlook the street – the shopping centre increases its active frontages and provides better connectivity to Queen Street. New buildings do not create overshadowing on the street.

The St Marys Town Strategy was revised in 2007. The following Urban Design Principles were identified in the St Marys Town Centre Revised Master Plan (2007):

1. Increase density around the Railway Station.
2. Maintain the character and scale of Queen Street.
3. Provide for a Central Square that will be a focus for the Town Centre.
4. Integrate the Commercial Centres into the life of Queen Street.
5. Allow views through the Town Centre towards the Blue Mountains.
6. Allow for a healthy mix and spread of residential, retail and commercial development.
7. Allow landscape elements to filter through the Town Centre.
8. Allow for sensible servicing of retail and commercial areas.
9. Ensure equitable sun access to residential developments.
10. Allow for a variety of lot amalgamations to occur.

Under the heading 'St Marys Town Centre Planning Guidelines' the Plan provides Block Studies of key sites on the Town Centre. Block 1 combines the subject site (Coles site) and Council's car park site as site 'B'. The controls for site 'B' include a single storey podium with 16 storey towers above generating an FSR of 2.22:1

In 2015, Penrith City Council prepared a draft Concept Plan for St Marys Town Centre as one of several documents which supported a public exhibition of a Planning Proposal for the Reclassification of Certain Public Land in the St Marys Town Centre. It listed five strategic objectives:

1. Improve existing levels of pedestrian activity and social interaction within the St Marys Town Centre.
2. Encourage higher levels of retailing and business activities, and share those activities across the whole of the town centre.
3. Identify the most-effective configuration for public lands and streets that would promote highest-possible levels of pedestrian and business activities, and recommend general directions for the detailed design of public places.
4. Nominate directions for future development that would promote high levels of pedestrian activity in public places, as well as contributing to the improvement of local retailing and business services.
5. Recommend directions for updating and co-ordination of Penrith City Council's current strategies and policies which apply to the town centre.

Refer Section 7.5 for an assessment of the Station Plaza Proposal against these objectives and principles.

In June 2017 The AEC Group was commissioned by Council to review the feasibility of Councils current FSR and building height controls for St Marys Town Centre. The report recommended that Council consider increasing the FSR in the Station Street Entry Precinct to a minimum of FSR 5:1. In addition, the report identified the Coles site at 33-43 Phillip Street as requiring a minimum FSR threshold of 5.3:1 to 5.5:1.

The report notes that '*it would be therefore be beneficial for Council to work with developers of key sites that have potential to have a transformative influence*'.

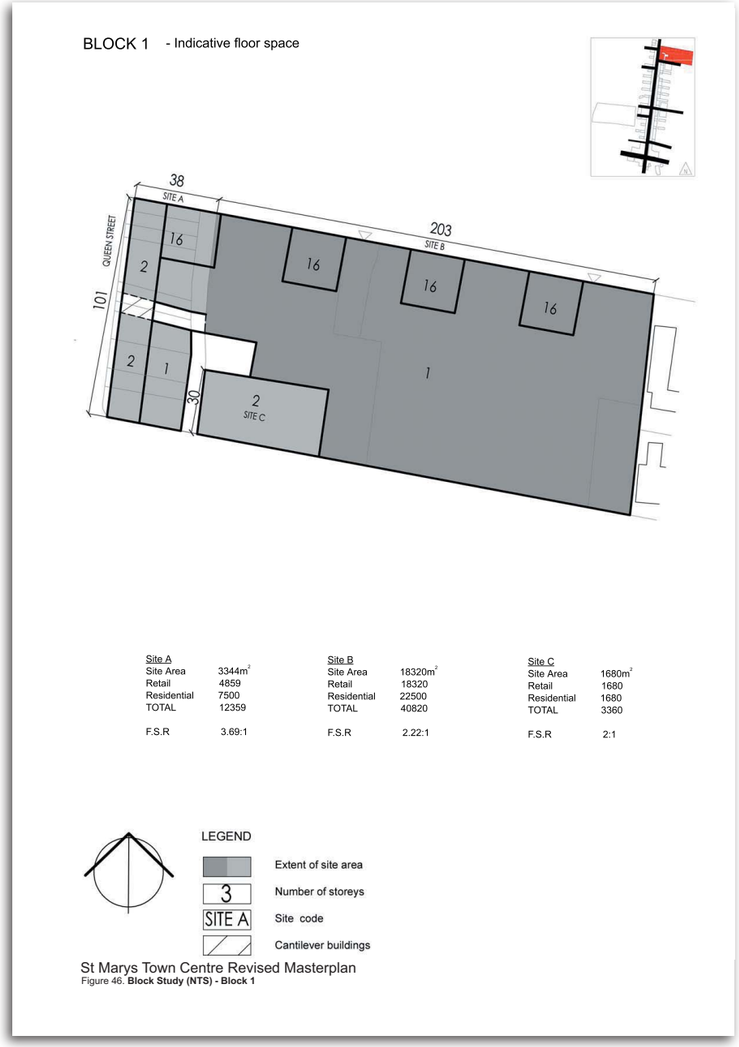


Figure 10 Block 1: Block Study
(Source: Fig 46 St Marys Town Centre Revised Master Plan)

5.0 Opportunities & Constraints for the Station Plaza Site

- Increased intensity of development and a mix of uses (retail/ commercial/ residential) will encourage street level activity on Station and Phillip Streets.
- Active edges along Station Street will provide an improved street address over the current Station Plaza development which has at grade carparking in the frontage.
- The Station Plaza Site has a requirement for zero setbacks on Station and Phillip Street frontages. This limits the ability to provide outdoor dining and streetscaping. A setback would enable better amenity on these streets.
- Current height control of 32 metres limits building to 9 storeys overall. As the lowest level of the development will require a 6 metre ceiling height (double storey), this limits the number of residential floors to 6 only.
- Providing an increased development height will enable a landmark building form for St Marys Town Centre and increase legibility for wayfinding to the station.
- Increased density at this location adjacent St Marys Station will support the State Government's Transport Oriented Design Strategy and provide a catalyst for new development in St Marys Town Centre.
- Potential for a new urban public space and accessway between Station and Phillip Streets provides increased public amenity and better safety and security through increased casual surveillance opportunities.

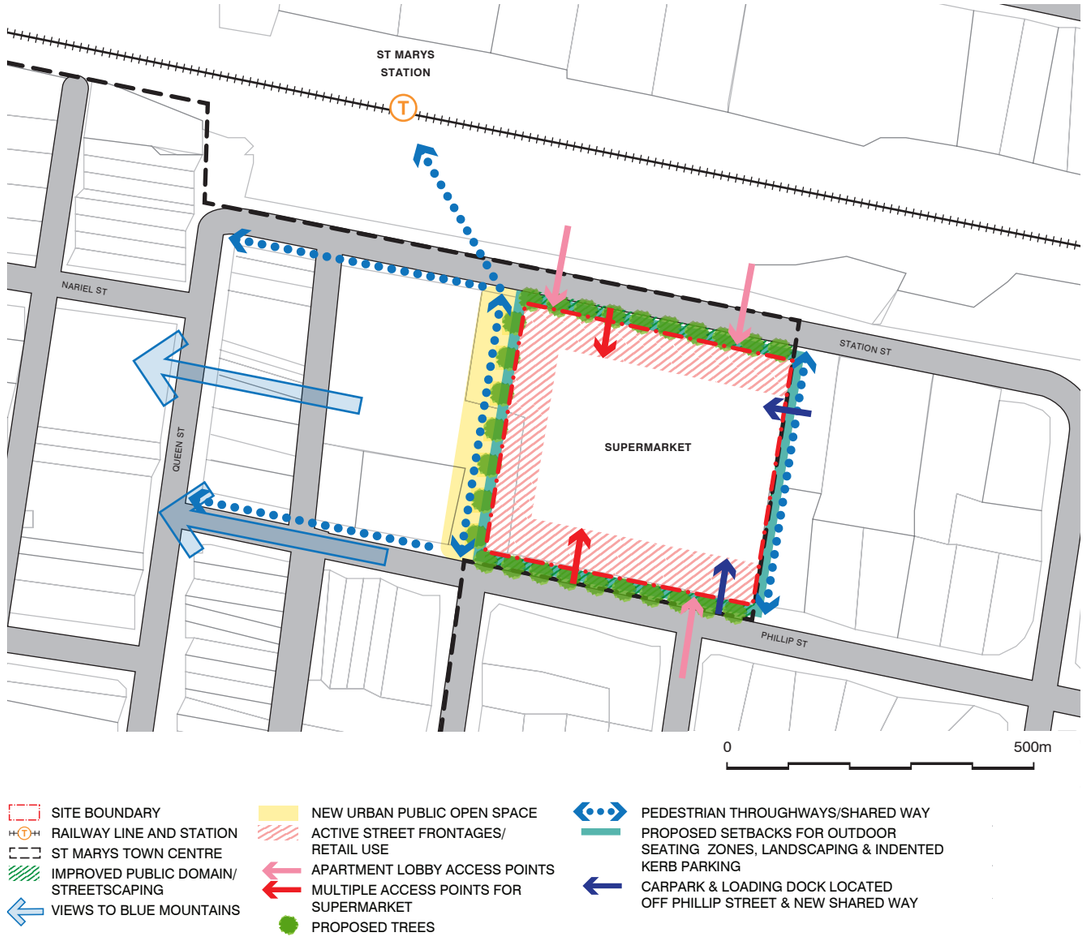


Figure 11 Opportunities and Constraints

6.0 Urban Design Planning Proposal for Station Plaza ‘Key’ Site

6.1 Urban Design Framework

6.1.1 Vision and Principles

The re-development of the ‘Coles Site’ at 33-43 Philip Street as a major component of the Station Entry Plaza will make a significant contribution to the revitalisation of St Marys Town Centre. It will provide a catalyst for increased development in the Town Centre and set a benchmark for future mixed use development.

Key urban design principles identified for the site include:

Land use Principles

- Provide retail and commercial space to activate the town centre and provide employment opportunities. Provide a mix of uses – residential, retail and commercial including a 4,500m^2 Coles supermarket.
- Provide a diverse range of residential apartments to support the growth of St Marys and take advantage of its proximity to St Marys Rail Station (ToD).
- Act as catalyst for future land use vision for precinct.
- Integrate with surrounding retail development fronting Queen Street.

Public Realm Principles

- Provide public domain improvements to enhance the northern end of the St Marys Town Centre. Create new public spaces that prioritise the pedestrian and cyclist.
- Provide active uses at ground level to activate the public realm. Provide active street frontages with outdoor spaces that encourage activities and may be used for community events etc.
- Improve amenity of existing public realm with landscaping and trees.
- Provide safe spaces with maximum surveillance.
- Provide equitable 24/7 accessible spaces.
- Improve the permeability and connectivity of the town centre. Provide pedestrian linkages through the site from St Marys Station to Phillip Street and surrounding streets.

Built Form Principles

- Create a gateway marker building for St Marys Town Centre.
- Provide a podium that creates a human scale at the street.
- Create a building form that steps down to the south to minimise overshadowing impacts.
- Locate vehicle access points to minimise disruption to pedestrian routes and limit impacts to surrounding residential amenity.
- Provide street frontages setbacks which are landscaped and which provide buffers to neighbours.



Figure 12 Station Street Streetscape looking south-west



Figure 13 Station Street Streetscape looking south

7.0 Building Options

7.1 Option Testing

Following feedback from Council's Urban Design Panel regarding the building form and potential overshadowing impacts, a number of building form envelopes were tested for the subject site. The three envelope studies maintained an FSR of 5.5:1 with a maximum height of 61 metres. The envelope options are discussed below:

Option 01 – Podium and Two Separate Tower Form

Option 1 provides a three storey podium with two 15 storey towers above. The positive of this design is that it maximises sunlight to apartments as there is not courtyard overshadowing. The negative is the that this design does not allow for stepped tower form therefore maximises shadow length.

Refer Figure 14

Option 02 – Podium and Perimeter Stepped Tower Form

Option 2 proposes a 3 storey podium with two tower forms stepping down to the south to minimize overshadowing. The two towers are connected on the north and south by 6 storey infill elements creating a courtyard form. The positive of this design is that the stepped form reduces shadow impacts to the south. The negative is the potential overshadowing of the courtyard space lower level apartments facing the courtyard.

Refer Figure 15

Option 03 – Podium and Perimeter Stepped Tower Form

Option 3 proposes a 6 storey podium with a two 12 storey towers with the same form as Option 02 stepping down to the south to minimize overshadowing. As with Options 2, the two towers are connected on the north and south by infill elements creating a courtyard form. However, the height of the infill element on the north has been reduced to four levels to support solar access to the courtyard and lower level courtyard facing apartments. The positives of this design are that the stepped form reduces shadow impacts to the south and that the lower height of the northern connecting floors supports sunlight access to the courtyard space and lower level apartments facing the courtyard.

The taller podium height in this option at 6 floors increases activation and surveillance of the street. The height of the podium at 29 metres provides a 1:1 enclosure ratio with Philip Street.

Refer Figure 16

Following this Option testing exercise, the building envelope for Option 03 was considered the preferred building form for the subject site. Option 03 takes into consideration Penrith Council's current advice regarding appropriate FSR for the site, it minimizes shadow impacts and has the potential to satisfy the requirements of SEPP 65 and the Apartment Design Guide (ADG).

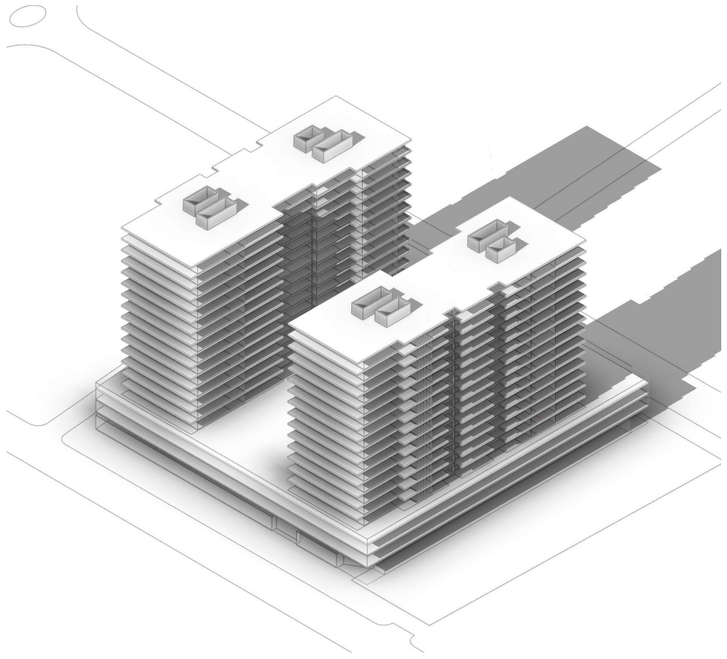


Figure 14 Option Testing: Option 1

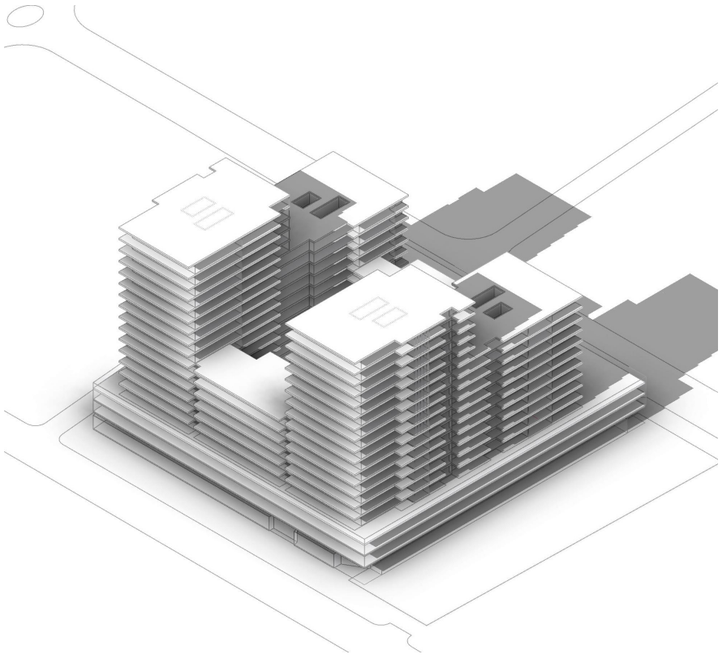


Figure 15 Option Testing: Option 2



Figure 16 Option Testing: Option 3

7.2 Development Summary

The proposal development Option 03 provides an FSR of 5.5:1, following the recommendations of the AEC Group report commissioned by Council in June 2017. The report that identified the Coles site at 33-43 Phillip Street as requiring a minimum FSR threshold of 5.3:1 to 5.5:1 to be economically viable for redevelopment.

The following uses are to be included in the proposed development;

- Basement parking;
- A new Coles supermarket to replace the existing supermarket;
- Speciality retail, café and restaurant uses with street and laneway frontage;
- ground Floor loading dock & Residential lobbies;
- First floor podium commercial uses including potential for office suites, health related services and fitness along Station Street & New Public Plaza;
- First floor parking;
- Level 2-5 podium residential apartments;
- Level 6-17 above podium residential apartments.

Area Schedule

Apartment Type	Count
1 Bed - Family Min 60m²	264
2 Bed - Family Min 80m²	244
3 Bed - Family Min 100m²	76
Grand total	**584**

Level	Area
Ground Floor - Retail	1615 m²
Ground Floor - Supermarket	4500 m²
Ground Floor - Lobbies & loading docks	1645m²
Level 1 - Commercial	2210 m²
Level 1 - Parking	5905 m²
Level 2 - Residential	5365 m²
Level 3 - Residential	5365 m²
Level 4 - Residential	5365 m²
Level 5 - Residential	5365 m²
Level 6 - Residential	2743 m²
Level 7 - Residential	2743 m²
Level 8 - Residential	2743 m²
Level 9 - Residential	2743 m²
Level 10 - Residential	2743 m²
Level 11 - Residential	2743 m²
Level 12 - Residential	2743 m²
Level 13 - Residential	2743 m²
Level 14 - Residential	1292 m²
Level 15 - Residential	1292 m²
Level 16 - Residential	1292 m²
Level 17 - Penthouse	1292 m²
Grand total	**64447m²**

7.3 Building Envelope

7.3.1 Podium

The proposal development Option 03 podium consists of a six level podium. The podium includes retail, commercial, parking and residential levels. The non-residential uses including supermarket and retail/café/restaurant uses on ground level, and commercial uses on level one and residential apartments on levels 2-5.

The podium is setback from the principal street frontages to provide opportunities for outdoor dining, increase footpath depth, landscaping and curb side parking. The podium has a significant setback to the west adjoining the Council car park site to provide a new urban pedestrian space connecting Station and Philip Streets. On the east the podium is setback to provide a new shared service roadway.

7.3.2 Above Podium

The planning of the residential apartments above podium has been designed to provide compliance with the ADG with particular emphasis on setback separation, solar access and cross flow ventilation. The courtyard is enclosed for four levels with internal dimensions of 31.9m and 57.9m in compliance with ADG.

The two north south oriented tower forms step down to the south by 4 levels to minimize shadow impacts on the properties to the south (refer to shadow analysis).

7.3.3 Minimum floor to floor heights

Ground Floor	5 metres floor to floor (accommodate the supermarket);
Above ground podium levels	3.5 metres floor to floor (non-residential uses);
Residential Uses	3.2 metres floor to floor



Figure 18 Section

7.3.4 Setbacks

To reduce the potential visual and overshadowing impact of the residential apartments above the podium, the tower forms have been setback from the podium edge. From the northern Station Street podium façade the above podium built form is setback 5 metres, from the western and eastern pedestrian public space 6 metres, and from the southern Philip Street podium façade 15.3 metres.

The podium is designed to provide a defined active edge to the public domain. The six storey form creates street enclosure (approx. 1:1) and a human scale to the streetscape. Podium setbacks to the east and west site boundary are provided to allow opportunities for mid-block connections in the form of new urban spaces. Setbacks to the primary street frontages are provided to allow outdoor seating zones, landscaping and potential for indented curb side parking.

Refer Figure 17

7.3.5 Car Parking

Car parking for the proposed building is based on minimum RMS parking rates for Sub regional Centres.



Figure 17 Setback Plan

7.3.6 Public Domain

The diagram below indicates the key public domain and streetscape elements including public domain, landscape and streetscape elements, pedestrian and vehicular access points.

Refer Figure 19



Figure 19 Public Domain Concept

7.3.7 Maximum Building Heights

The bulk scale and massing of the proposed building is based on a response to the context of the site, maintaining local amenity and providing a mix of land uses to support the gateway Town Centre location. The diagrams below indicates the proposed building form and height of the podium and stepped tower form.

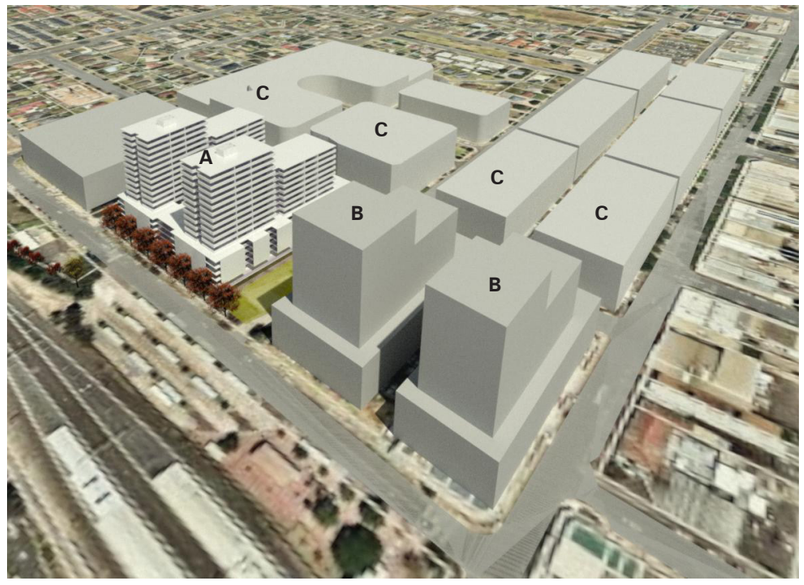


Figure 20 3D Modelling

A SUBJECT SITE
B POTENTIAL DEVELOPMENT OUTCOMES FOR STATION PLAZA
C COUNCIL LEP HEIGHT



Figure 21 East-west longitudinal section

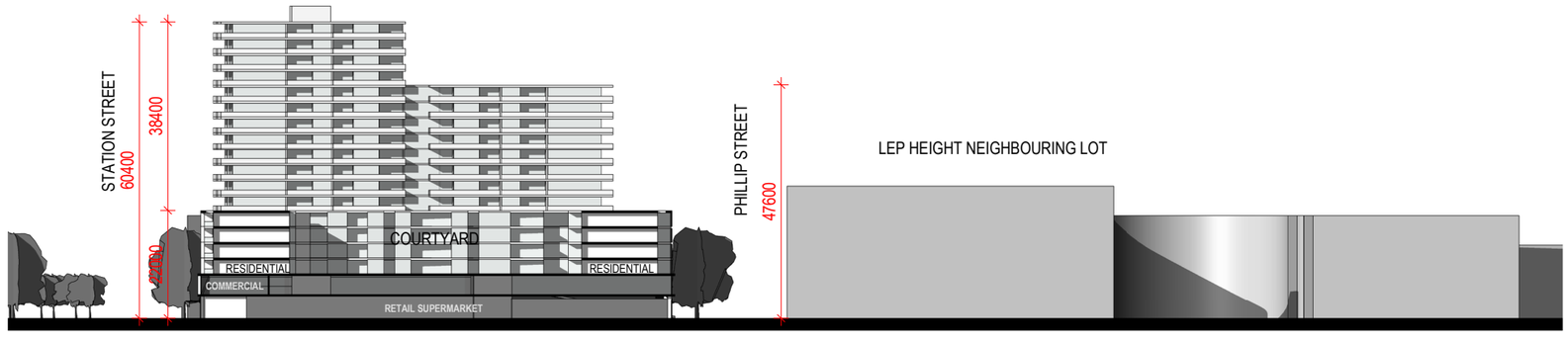


Figure 22 Proposed Maximum Building Heights

7.3.8 Indicative Layouts

Street Level

- New public urban space linking Station Street and Philip Street provided on subject Coles site land (potential for larger space shared between Station Plaza site and Council site). Potential for outdoor seating landscaping and markets.
- 4,500sqm supermarket.
- Speciality retail, café along Station Street, Philip Street and the new north south public space.
- Loading dock and residential parking accessed from the new service lane on the eastern boundary.
- Podium parking for supermarket and shops accessed from Phillip Street.
- Residential lobbies accessed on all street frontages.

Podium Level

- Retail/cafe uses on Ground Floor
- Commercial office use & Parking - Level 1
- Residential apartments - Levels 2-5

Tower Level

- Residential apartments Levels 6-17
- Setbacks from podium
- Tower step down to south (4 levels)
- Mix of unit types
- Articulation of building
- SEPP 65/ADG compliant for separation, building depth, apartment size, solar access cross flow.



Figure 29 Potential Public Plaza Indicative image

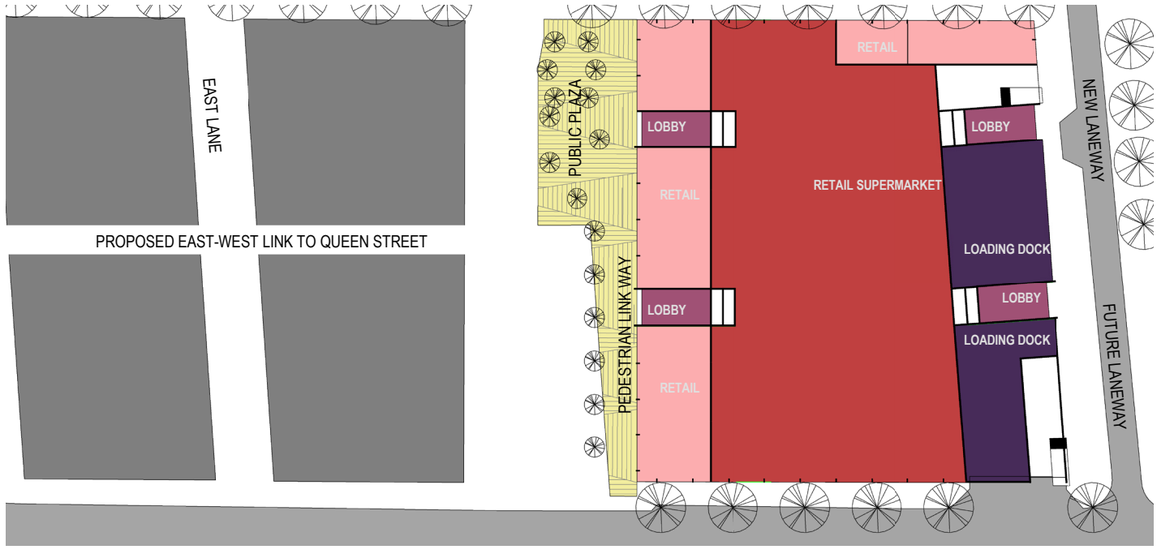


Figure 23 Indicative Street Level Floor Plan



Figure 24 Indicative Podium Plan
Ground (Retail)



Figure 25 Indicative Podium Plan
Level 01 (Commercial)

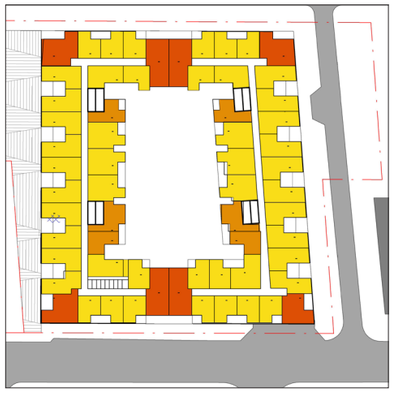


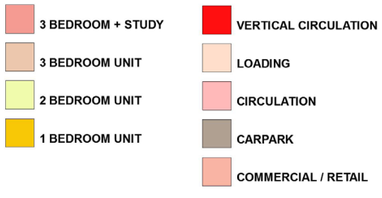
Figure 26 Indicative Podium Plan
Levels 02 - 05 (Residential)



Figure 27 Indicative Tower Plan
Levels 06 - 13 (Residential)



Figure 28 Indicative Tower Plan
Levels 14 - (Residential)



Note: These are indicative only and do not represent a proposed design outcome

7.3.9 Station Plaza Streetscape

The streetscape diagram indicates the importance of the proposed podium providing a human scale to the street with contextual references with the adjoining sites. The diagram also indicates the potential for new north south public streets and plazas generated by future development.

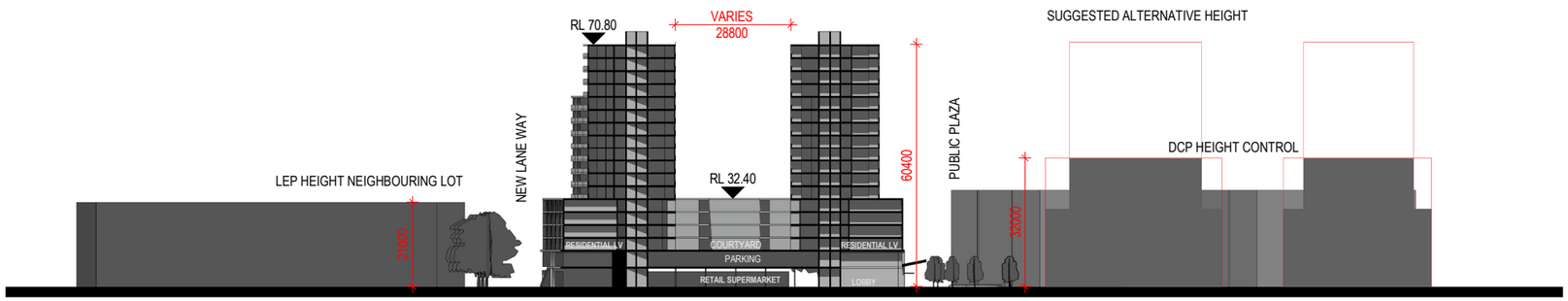


Figure 30 East-west longitudinal section 5.5:1 FSR

7.4 Council Car Park Site

The council car park site adjoins the Coles site. The two sites make up a proportion of the station entry plaza precinct and the combined site can provide a significant opportunity to provide a new north facing public space. The plan and 3D envelope study below indicates a potential redevelopment option for the council site.



Figure 31 Council site

7.5 Assessment of the Proposal against PCC Strategic Documents

Table 7.5.1 assesses the proposal against the relevant Council Strategy document objectives and principles.

Table 7.5.1

Council Strategy Document	Proposed Concept Plan
St Marys Town Centre Strategy (July 2006)	
1. The provision of at least 14,000m² of high quality, multi-use urban open space, including 8,400m² of green space, directly linked with and inclusive of Coachmans Park.	The planning proposal for the Station Plaza Site provides the potential for over 2,500m² of urban open space to the western edge of the development.
2. The provision of a new east-west road from Charles Hackett Drive to Queen Street.	Not Applicable to the Station Plaza site.
3. The provision of generous and attractive pedestrian and retail links with Queen Street.	The Station Plaza site does not directly link to Queen Street as there are two sites including a Council carpark and laneway in between. It does however allow for a future link to be provided east-west through the new proposed urban public open space on the western edge.
4. The arrangement of future uses to maximise positive economic flow over effects to, and interaction with, Queen Street.	The provision of a mix of uses including retail, commercial and residential will provide a positive economic benefit to the Town Centre as a whole increasing the town centre population and utilising existing facilities and retail.
5. The nature of uses selected to activate spaces near Queen Street should not result in negative impacts on Queen Street.	Active retail frontages along Station Street, Phillip Street and along the new urban open space to the west as well as the supermarket as an anchor tenant will complement and extend the link back to the Queen Street retail.
6. No nett loss of public parking.	Public parking will be provided for the supermarket, retail and residential with no nett loss. The existing Veness Place Council Carpark is not impacted by the development.
7. Replacement parking is to be free, untimed and designed and orientated to support Queen Street.	Not applicable as no public parking is being replaced.
8. New public spaces are to properly interpret and celebrate historical associations.	Public art and interpretive signage for the new urban space will be further investigated in the subsequent design stages.
9. Any new development and public spaces are to implement actions from Council's Cooling the City Strategy.	The *Cooling the City Strategy* identifies a range of solutions to help cool urban areas, including living and non-living solutions. The proposal provides shaded car parking in underground and decked structures. The Station Plaza development itself will also provide a place of respite from extreme conditions. During detailed design additional strategies will be incorporated including: • Non-living solutions include reflective and light coloured surfaces on roads, walkways and roofs • Living Solutions such as: » Green infrastructure, e.g. street trees, rain gardens, green roofs and walls that provides shade and soften hard surfaces in new developments and public spaces; » Artificial water features and shade structures in public spaces » Water Sensitive Urban Design that reduces water usage and retains water in the landscape by mimicking natural systems.
10. Any new development and public spaces are to activate Station Street and East Lane.	Active retail frontages are provided along Station Street and a new urban open space provides additional active throughways from Station Street.

Council Strategy Document	Proposed Concept Plan
St Marys Town Centre Revised Master Plan (2007)	
1. Increase density around the Railway Station.	The proposal provides a high density multi-storey mixed use development which provides an increased residential density.
2. Maintain the character and scale of Queen Street.	The proposal is distant from Queen Street, complements its retail uses without competing and has no impact on the character and scale of Queen Street allowing the lower scale Queen Street to remain intact.
3. Provide for a Central Square that will be a focus for the Town Centre.	The Central Square referred to here is to the south of this Site. The Station Plaza site however does also provide a new urban square.
4. Integrate the Commercial Centres into the life of Queen Street.	Retail and commercial space in the building podium will support the activation of Queen Street.
4. Allow views through the Town Centre towards the Blue Mountains.	Views to the Blue Mountains along Phillip Street are retained.
6. Allow for a healthy mix and spread of residential, retail and commercial development.	The Station Plaza site provides a mixed use development comprising supermarket, speciality retail, cafés, commercial uses including offices, health related services and fitness on the lower levels and residential on the upper levels.
7. Allow landscape elements to filter through the Town Centre.	Landscaping will be provided including improved street tree planting on Station Street and Phillip Street as well as a new urban public space.
8. Allow for sensible servicing of retail and commercial areas.	Loading docks and residential parking are accessed from the new service lane on the eastern boundary. Podium parking for the supermarket and shops is accessed from Phillip Street.
9. Ensure equitable sun access to residential developments.	Preliminary shadow analysis indicates that equitable sun access can be achieved.
10. Allow for a variety of lot amalgamations to occur.	Not within the scope of this project.
Draft Concept Plan for St Marys Town Centre (August, 2015) – part of the Planning Proposal for the Reclassification of Certain Public Land in the St Marys Town Centre.	
1. Improve existing levels of pedestrian activity and social interaction within the St Marys Town Centre.	The Station Plaza site proposal includes a new north-south link via a shared way to the east of the site. A new urban public space on the western edge provides a more activated edge to the carpark increasing safety and security and improving the amenity of the throughway through provision of landscaping. The podium has also been setback from Station and Phillip Streets to provide an increased footpath width for landscaping and kerbside parking.
2. Encourage higher levels of retailing and business activities, and share those activities across the whole of the town centre.	The Station Plaza site provides a mixed use development comprising supermarket, speciality retail, cafés, commercial uses including offices, health related services and fitness on the lower levels and residential on the upper levels.
3. Identify the most-effective configuration for public lands and streets that would promote highest-possible levels of pedestrian and business activities, and recommend general directions for the detailed design of public places.	The Station Plaza site provides a new north-south link via a shared way, active street frontages on three of its four podium frontages, a new urban public space on the western edge that provide high levels of pedestrian permeability and retail/ café frontages. The new urban public space is proposed to have seating and landscaping and be a flexible space that can accommodate activities such as markets on the weekends.
4. Nominate directions for future development that would promote high levels of pedestrian activity in public places, as well as contributing to the improvement of local retailing and business services.	The proposed new urban public space will allow for a mix of passive and active recreation with seating, street furniture and landscaping as well as being designed as a flexible space that can accommodate activities such as markets, festivals on the weekends.
5. Recommend directions for updating and co-ordination of Penrith City Council's current strategies and policies which apply to the town centre.	The Station Plaza site planning proposal updates height and FSR controls in line with the need for greater diversity and accessibility of housing choices for the St Marys area.

Figure 32 indicates the current permissible building heights for St Marys Town Centre in the vicinity of the Station Precinct.

The building heights range from 32m (10 storeys) to 8.5m (2 storey) within the proximity of the Station.

The existing permissible densities are not consistent with State Government policy for land close to a station and are not consistent with Station Precincts in the Sydney area.



Figure 32 Current Height Control LEP (Note: height in metres)

Figure 33 indicates the LEP building heights in light grey, the proposed heights and building form for the Station Plaza Shopping Centre in white and the potential building form and height of the council car park site and Queen Street site in dark grey.



Figure 33 5.5:1 FSR - Proposed Envelope for Station Plaza Shopping Centre and council car park with Current Height Controls to the south

Figure 34 indicates the proposed number of storeys of the mixed use building on the Station Plaza Shopping Centre.



Figure 34 5.5:1 FSR - Potential / Possible Future Envelope Scenario for Station Plaza Shopping Centre (Note: height in storeys)

The mid winter shadow diagrams include the permissible LEP building heights modelled as 3D blocks to the south.

The diagrams indicate the 9am shadow impact will be the greatest during the day. However, it is noted that the stepped form of the proposed towers significantly reduces the shadows by 12 noon and 3 pm.

Overall the analysis indicates that the shadow impacts will allow all buildings to the south to achieve in excess of the minimum 2 hours solar access in mid winter required under the Apartment Design Guide (ADG).



5.5:1 Mid Winter 9am



5.5:1 Mid Winter 12pm



5.5:1 Mid Winter 3pm

Figure 35 Shadow Diagrams - Mid Winter

References

- Penrith City Council, St Marys Town Centre Strategy, July 2006
- Penrith City Council, St Marys Revised Town Centre Masterplan, 2007
- Penrith City Council, A draft Concept Plan for the St Marys Town Centre, August 2015
- Penrith LEP 2010,
- Penrith DCP 2014 (part E15).

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STATION STREET

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PLOT DATE	18/01/17
PROJECT Nº.	S16028
DRAWING Nº.	SK-500
REVISION	2

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REVISION	1
DRAWING Nº.	SK-501

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