

# SECTION 4 – SPECIALIST REPORTS



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60 Dutton Street, Coolangatta

**Engineering Services Report  
Statement of Landscape Intent  
Stormwater Management Plan  
Traffic and Transport Assessment  
Waste Management Plan**

# ENGINEERING SERVICES REPORT



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60 Dutton Street, Coolangatta



## RESIDENTIAL DEVELOPMENT

60 DUTTON STREET, COOLANGATTA, QLD

## ENGINEERING SERVICES REPORT

**FOR:** SOUTHERN CROSS PROPERTY HOLDINGS

**REPORT NUMBER:** R002-G24095



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#### Document Control

|                          |                                            |                      |
|--------------------------|--------------------------------------------|----------------------|
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| <b>Reviewer</b>          | Byron Massie                               |                      |
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| <b>Report Title</b>      | R002 – G24095– Engineering Services Report |                      |
| <b>Revision</b>          | 03                                         | <b>Date</b> 01/06/26 |

#### Revision History

| Revision | Date     | Author | Approver | Description                 |
|----------|----------|--------|----------|-----------------------------|
| 01       | 09/05/25 | MTB    | MB       | Original Issue - Draft      |
| 02       | 20/05/25 | MTB    | MB       | Original Issue              |
| 03       | 01/06/26 | SC     | JT       | Revised Architectural Plans |

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## 1. Introduction

This report has been prepared to support the lodgement of a development application involving the construction of a new residential development, comprising of five (5) townhouse type units with four (4) stories. The development is proposed to take place over the following parcel of land:

**Property Address:** 60 Dutton St, Coolangatta QLD 4225

**Property Description:** Lot 2 on RP86756

**Council:** City of Gold Coast

**Site Area:** 703m<sup>2</sup>

The report describes the civil engineering issues associated with the development of the proposed land and includes discussion on the following engineering items;

- Earthworks;
- Erosion and Sediment Control;
- Flooding;
- Stormwater Drainage;
- Water Connection; and
- Sewer Connection.

This report demonstrates that the proposed development can be suitably serviced with all engineering services described and supports the type and scale of development that is proposed.

### 1.1 Related Reports

This report is intended to be read in conjunction with the associated development submission documents, current as of the date of this report.

A Stormwater Management Plan (Ref: R001-G24095, REV 4) has been prepared for the proposed development and should be read in conjunction with this report.



## 2. Property Description

The proposed development is situated on the existing lot located at 60 Dutton Street, Coolangatta described as Lot 2 on RP86756. The property is located within the City of Gold Coast Local Government Area.

The site is located in the suburb of Coolangatta and is in close proximity to local commercial and retail centres.

The proposed development site is bounded by Dutton Street to the west, existing residential allotments to the north and south and Goodwin Park to the east. The registered area of the existing allotment for this proposal is 703m<sup>2</sup>.

A general locality plan is presented in Figure 2.1 below:



Figure 2.1 - Site Locality (retrieved from QLD Globe)

## **2.1 Land Usage**

The development site is currently occupied by a residential dwelling. The existing development contains impervious land uses, including roof, driveway, and other hardstand areas. The existing impervious areas have been estimated from the survey to cover approximately 57% of the site area, as displayed on the pre-developed catchment plan attached within Appendix A of this report.

The existing development is currently assessable via an existing VXO from Dutton Street.

## **2.2 Topography and Drainage**

The detailed survey obtained for the project site indicates that majority of the surface grades towards the eastern boundary of the site towards Goodwin Park. A stormwater culvert traverses the proposed development site, running in parallel alignment with the northern boundary of the development site. Approximate levels on the site vary from 4.19m (AHD) in the northwest corner of the site to 2.99m (AHD) located in the southeast corner of the site. The average grade of the site has been calculated to be approximately 1.5%.

The development site contains existing internal stormwater infrastructure capturing runoff generated from the roof area, and discharges flows towards Goodwin Park to the east.

A copy of the detailed survey by Usher and Company has been attached within Appendix A of this report.

## **2.3 Upstream Catchment**

The site survey indicates that the development site contains existing stormwater infrastructure that conveys an upstream catchment through the site, it is proposed that this stormwater infrastructure will remain to convey the upstream catchment through the development site, and the proposed development will comply with MP1.4. As a result, this development is expected not to be impacted by an upstream catchment and no allowance for upstream catchment flows have been considered in this report.

## 3. Proposed Development

### 3.1 Development Description

The proposed development consists of:

- The demolition of existing structures; and
- The construction of 5 (five) units, four (4) storey residential townhouses; and
- The construction of access driveways and other hardstand surfaces associated with the proposed development.

A copy of the proposed architectural layout plans has been included in Appendix A of this report.

Additional works on site shall include the construction of water reticulation, sewer reticulation, electrical and telecommunications services and stormwater management works.

External works for the development will consist of verge works with Dutton Street to facilitate the construction of the vehicle crossover and service connections. No further external civil works are proposed as part of this development.



## 4. Earthworks

The earthworks associated with the proposed development will predominantly involve minor earthworks and general lot shaping

The development is shown as being within a potential Acid Sulfate Soils problem area in City of Gold Coast's Interactive Mapping, shown in Figure 4.1 below.

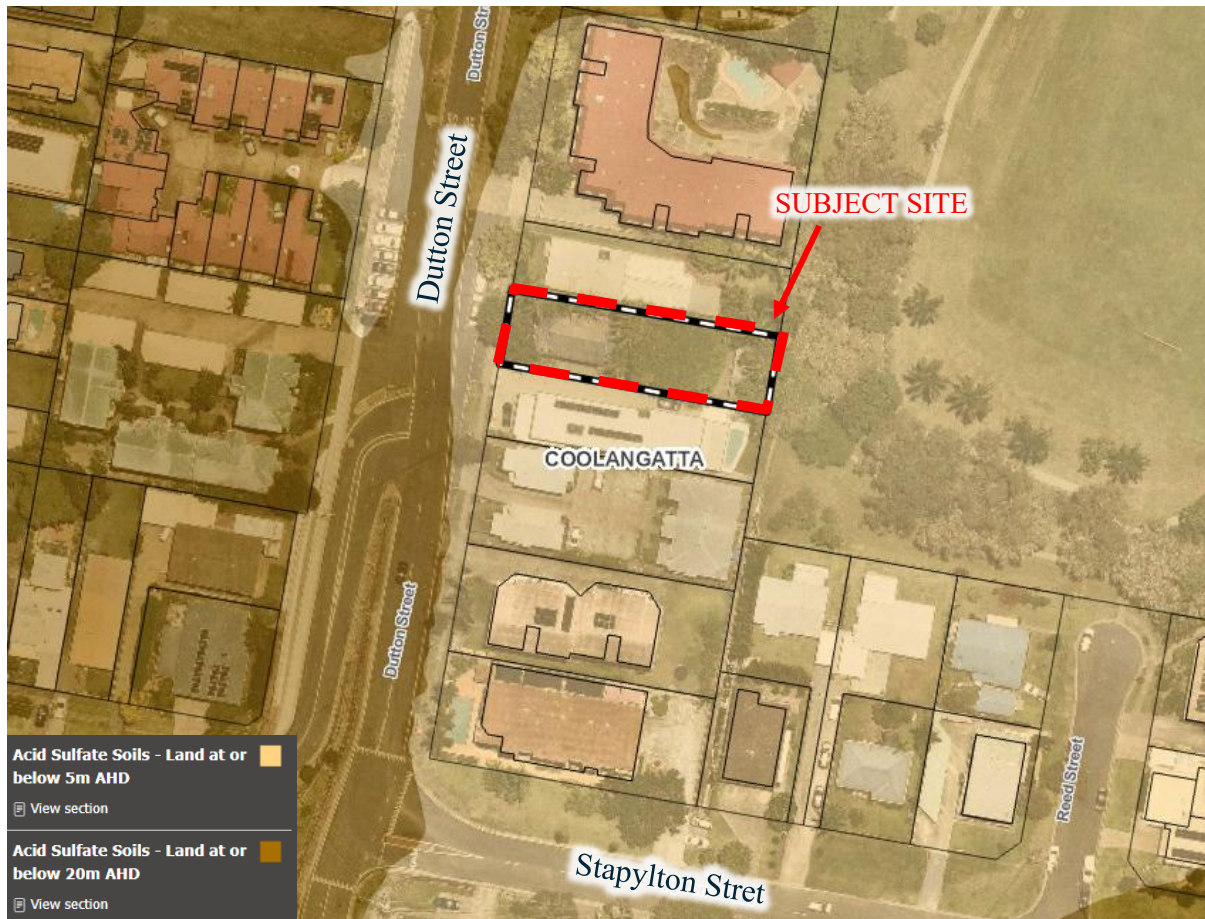


Figure 4.1: Acid Sulfate Soils Overlay Map (retrieved from Gold Coast City Plan interactive mapping)

A site-specific Acid Sulfate Soils assessment may therefore be required for the site. This is to be prepared by a suitably qualified geotechnical engineer. It is expected that the preparation of this report is to be included in the development application conditions, to be completed prior to construction of the development site.



## 5. Erosion and Sediment Control

The development has the potential to cause erosion and sedimentation runoff. The information presented in this section is relevant to the City of Gold Coast's Erosion Hazard Assessment table.

The average slope across the development site is estimated to be approximately 5%. Geoscience Australia Portal (GAP) data surrounding the subject site suggests that the soil type is a clay. The estimated duration of soil disturbance will likely be more than six months, considering the development type and average construction times.

The average rainfall for the Gold Coast area was taken from the bureau of meteorology for a three-month period from January to the end of March. This resulted in an expected mean rainfall of 186mm per month. There are currently no off-site sediment control measures serving the development site and analysis of the site survey and surrounding properties shows it is unlikely that stormwater from upstream catchments will discharge into the development area.

The results of the Erosion Hazard Assessment presented in City Plan / Part 9 Development codes / 9.4 Other development codes / 9.4.5 Healthy waters code / Table 9.4.5-3 of the City of Gold Coast City Plan are shown in table 5.1 below. If the development scores more than 11 points or greater, or five in any factor, a detailed erosion and sedimentation control plan will be required.

*Table 5.1: Erosion Hazard Assessment*

| Controlling Factor         | Result             | Points    |
|----------------------------|--------------------|-----------|
| Average Slope              | Slope less than 2% | 0         |
| Soil Type                  | Clay               | 3         |
| Duration of Disturbance    | More than 6 months | 5         |
| Rainfall Risk              | High (101-225mm)   | 2         |
| Off-Site Sediment Control  | No                 | 1         |
| Run-off Entering the Site  | No                 | 0         |
| Extent of Site Disturbance | Yes                | 2         |
|                            | <b>Total</b>       | <b>12</b> |

As the total score for the proposed development is above 11 points and has scored 5 in a controlling factor, erosion and sediment control measures shall be undertaken in accordance with the Best Practice Erosion and Sediment Control: International Erosion Control Association. Detailed erosion and sediment control plans are to be prepared and lodged to Council during Operational Works phase of the development.

## 6. Flooding

The site has been identified on City of Gold Coast's mapping system as being unaffected by flooding levels, as shown in Figure 6.1 below.



Figure 6.1: Potential Flooding Inundation Overlay Map (retrieved from Gold Coast Flood Planning interactive mapping)

The development site is shown to not be flood affected by the flood overlay of the City of Gold Coast Flood Planning Map. Therefore, no further assessment of flood management is required for the proposed development site.

## 7. Water and Sewer Connection and Capacity

### 7.1 Sewer Connection

An existing Ø225 mm sewer main is located within the development site, located near the southern boundary. The precise location of the existing sewer property connection is currently unknown and will need to be identified and inspected as part of the development.

Subject to the findings of the inspection, it may be necessary to upgrade the existing sewer property connection. If required, the property connection will be upgraded to a new Ø150 mm sewer connection, which will directly tie into the existing Ø225 mm sewer main located within the development site.

Location of the proposed sewer property connection is detailed in the Engineering Drawings attached as Appendix B.

### 7.2 Water Connection

The development site is currently serviced via an existing Ø100 water main located within the Dutton Street western verge. It is proposed the existing Ø20 water property connection is to be decommissioned and removed and the existing water meter is to be returned to council.

It is proposed that the development site is to be serviced via a Ø40mm below ground water meter and property connection connecting directly into the existing Ø100 water main located within the western verge of Dutton Street. The final size of the connection is to be confirmed by the hydraulic engineer at the detailed design stage. Location of the proposed water property connection is detailed in the Engineering Drawings attached as Appendix B.

### 7.3 Capacity Assessment

The proposed development has been assessed under the requirements of the Gold Coast City Plan and the South-East Queensland Code (SEQ Code), providing a comparison between the planned intent for the subject site and the proposed development with regards to sewer and water demand rates.

An estimation of the Equivalent Persons (EP) to be used for the water demand and effluent discharge calculations for the proposed development site are presented in Table 7.1.

The impact of the proposed development has been compared to the planned demand in the City of Gold Coast City Plan.

The resulting impact on the existing water and sewer infrastructure has been calculated using the CoGC Water and Sewerage Demand Table and is presented in Table 7.2.

*Table 7.1: Proposed Developments Equivalent Persons (EP)*

| Development Schedule                        | Dwellings | EP/Dwelling | Equivalent Persons (EP) |
|---------------------------------------------|-----------|-------------|-------------------------|
| Apartments/Attached Dwellings - 3+ Bedrooms | 5         | 2.51        | 12.55                   |
| <b>Total EP</b>                             |           |             | <b>12.55</b>            |

Table 7.2: Water and Sewer Capacity Summary

|                                                 | Current City Plan<br>(RD5) | Proposed Development      |
|-------------------------------------------------|----------------------------|---------------------------|
| <i>Demand Conversion</i>                        | 206.00 EP/Ha               | See above EP calc         |
| <i>Demand EP</i>                                | 14.48 EP                   | 12.55 EP                  |
| <b>Water Demand</b>                             |                            |                           |
| <i>Average Day Demand<br/>(240L/EP/d)</i>       | 3475.63 L/d                | 3,012.00 L/d              |
| <i>Peak Conversion</i>                          | PH = 2.97AD M.Residential  | PH = 2.97AD M.Residential |
| <i>Peak Hour Demand</i>                         | 10,322.63 L/d - or         | 8,945.64 L/d - or         |
|                                                 | <b>0.120 L/s</b>           | <b>0.104 L/s</b>          |
| <b>Sewer Demand</b>                             |                            |                           |
| <i>Average Dry Weather Flow<br/>(210L/EP/d)</i> | 3,186.00 L/d               | 2,635.50 L/d              |
| <i>Peak Wet Weather Flow<br/>(5xADWF)</i>       | 15929.98 L/d - or          | 13,177.50 L/d - or        |
|                                                 | <b>0.180 L/s</b>           | <b>0.153 L/s</b>          |

#### 7.4 Summary

Results from Table 7.2 indicate that the proposed development does increase the water and sewer demand flows beyond what has been allowed for within the City of Gold Coast City Plan.

Therefore, a detailed W&S capacity assessment may be required for the proposed development site. It is requested that Council confirm the requirement of this assessment.



## 8. Stormwater Drainage

In the existing case, the majority of the stormwater runoff generated from the development site discharges towards the eastern boundary via overland sheet flow, towards Goodwin Park. Flows will enter council stormwater network via a stormwater headwall located within Goodwin Park. The captured stormwater runoff, discharges from the site without any on-site detention or water quality treatment. There is an existing 1200mm wide and 900mm high stormwater culvert traversing the northern side of the subject property as shown in Figure 8.1 below.

In the developed case, it is proposed that the development site is to connect into the existing stormwater infrastructure located within Goodwin Park. The flows generated from the site are to be detained and treated within a combined belowground stormwater treatment and detention tank, and discharge to an existing council headwall located within Goodwin Park via a proposed Ø300 stormwater pipe. This arrangement is outlined in the Engineering Drawings attached within Appendix B.

A separate report has been prepared for submission with this application to address stormwater drainage in specific detail.

The report prepared by Michael Bale & Associates (Ref: R001-G24095) describes the process of managing stormwater quality and quantity.

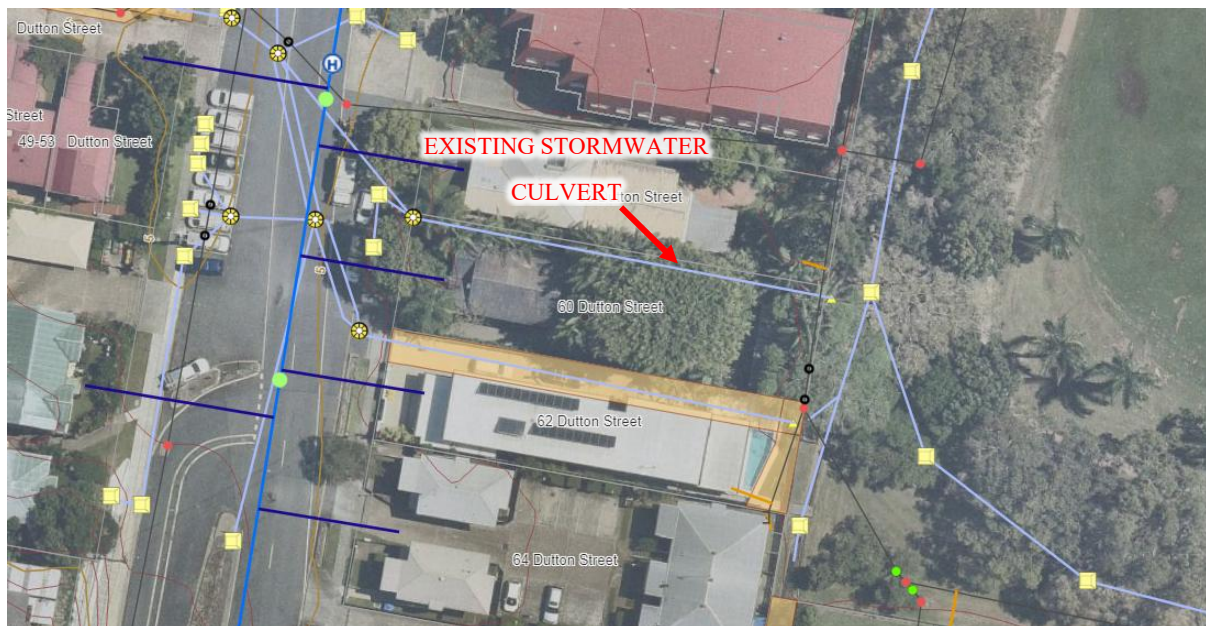


Figure 8.1: Existing Stormwater Infrastructure (retrieved from Gold Coast Infrastructure Asset ArcGIS online mapping)



## 9. Conclusion

This report has been prepared to support the lodgement of a development application involving the construction of a new residential development, comprising of five (5) townhouse type units with four (4) stories. The development is proposed to take place over the following parcel of land:

**Property Address:** 60 Dutton St, Coolangatta QLD 4225

**Property Description:** Lot 2 on RP86756

**Council:** City of Gold Coast

**Site Area:** 703m<sup>2</sup>

There are no apparent significant constraints on the execution of earthworks, sediment and erosion control, provision of vehicular access, or the drainage of stormwater from the site.

A summary of the proposed water and sewer connection strategy has been presented for Council's consideration. It has been assumed that surrounding infrastructure has sufficient capacity to service the proposed development.

This report demonstrates that the proposed development can be suitably serviced with all engineering services described and supports the type and scale and development that is proposed.



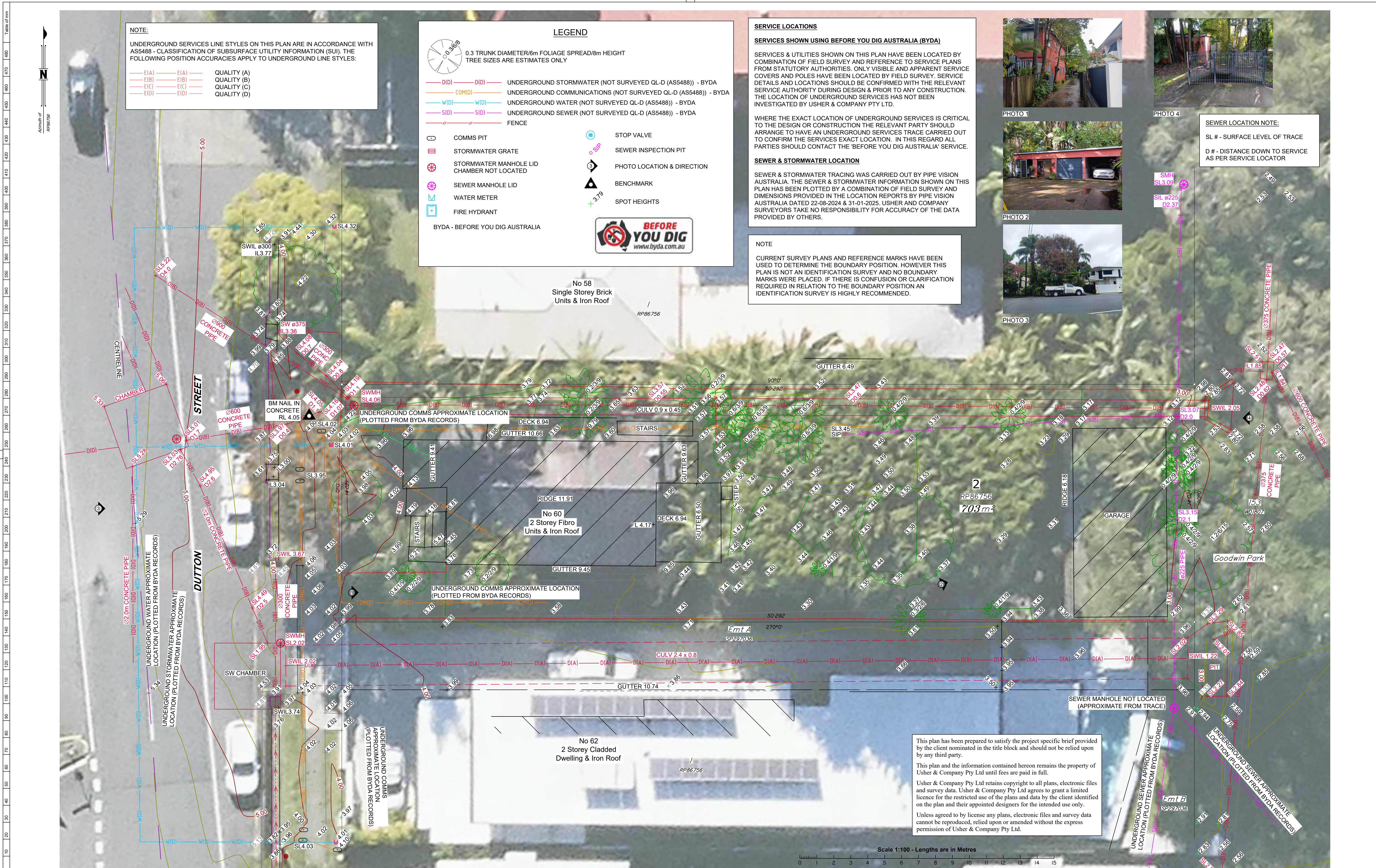
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# **Appendix A**

## **Site Survey & Architectural Plans**

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| Amendments |            |                               |
|------------|------------|-------------------------------|
| ISSUE      | DATE       | DETAILS                       |
| A          | 20-01-2025 | Original Issue                |
| B          | 05-02-2025 | Additional Survey of Services |
|            |            |                               |
|            |            |                               |
|            |            |                               |
|            |            |                               |
|            |            |                               |





LIGHTWAVE  
ARCHITECTURAL

PROPOSED  
DEVELOPMENT

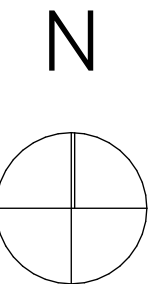
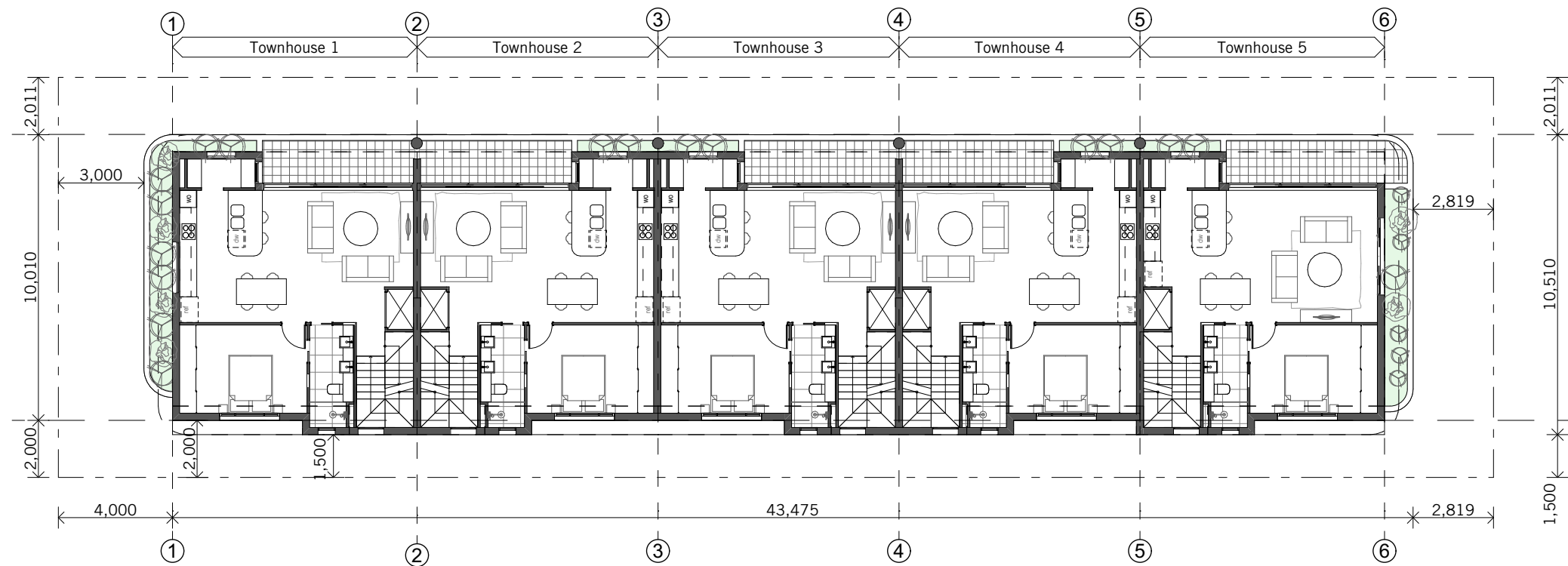
# 60 Dutton Street

60 Dutton Street Coolangatta QLD  
4285  
Lot 2 on RP86756



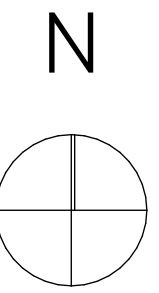
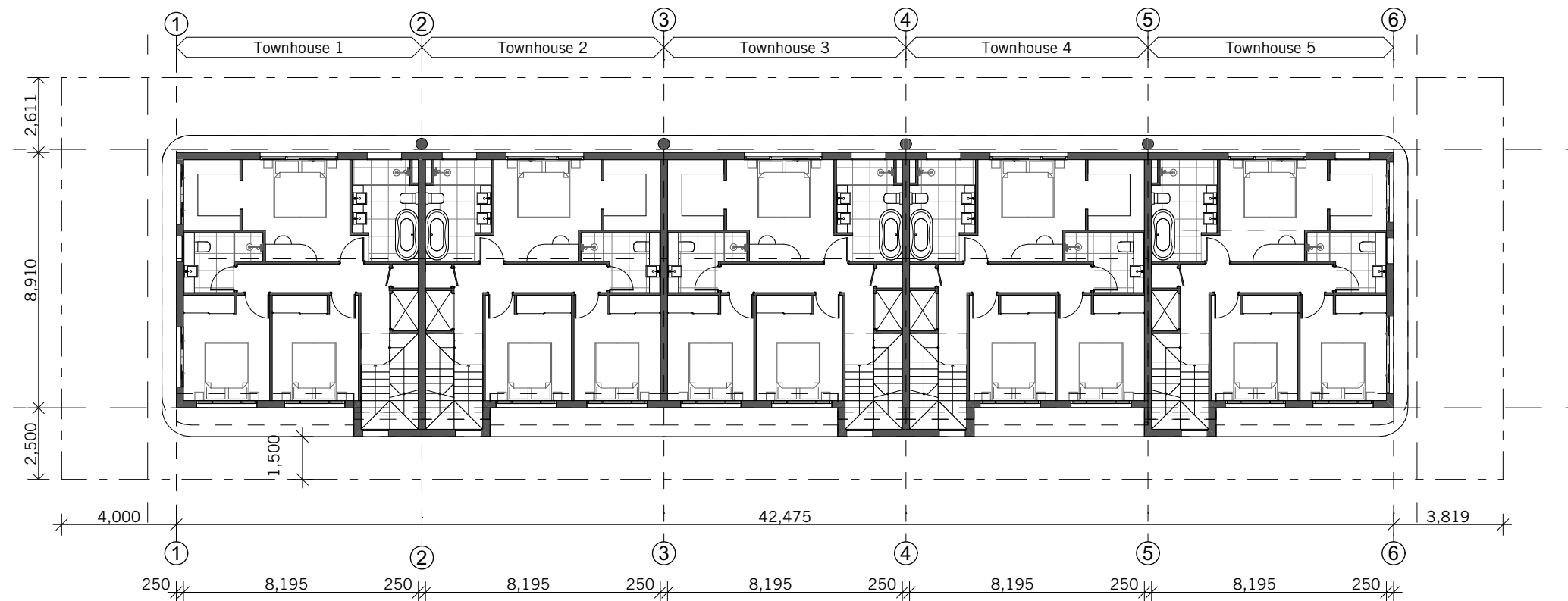






Level 2 Site Plan  
1:200 @ A3

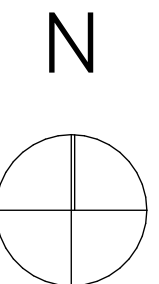
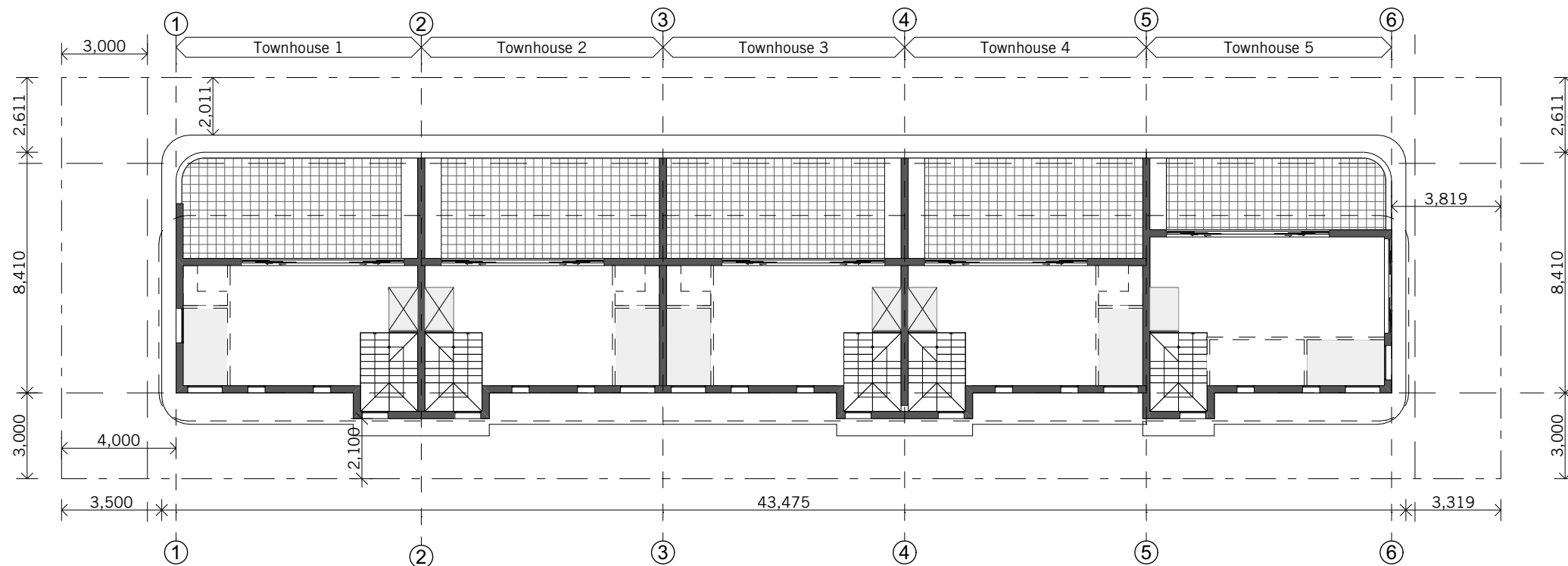




Levels 3 Site Plan  
1:200 @ A3







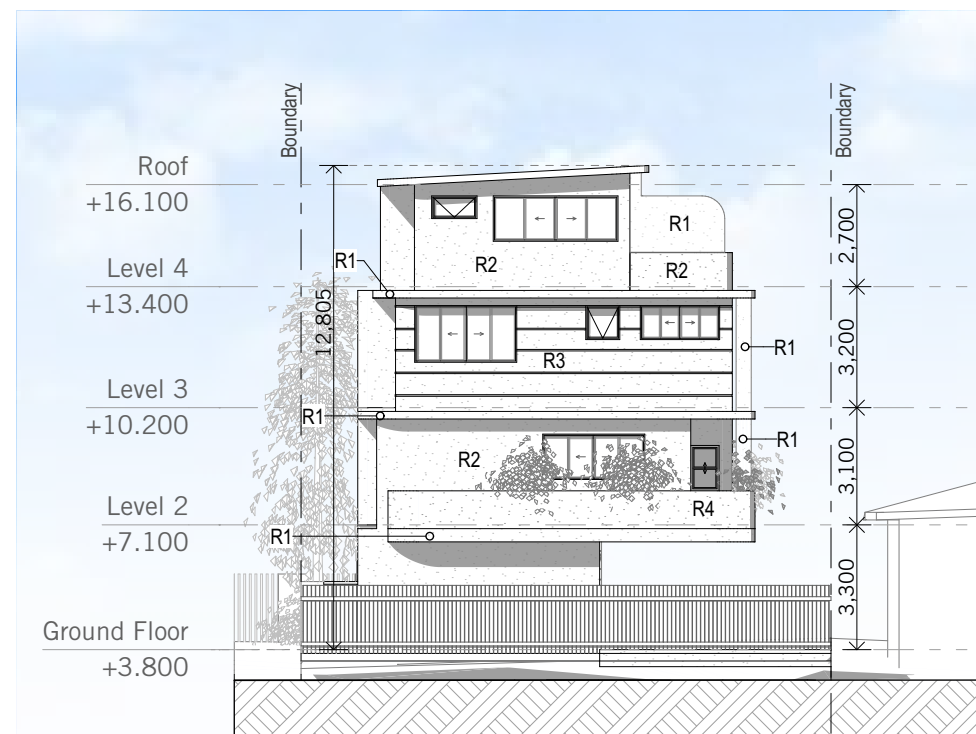
Level 4 Site Plan  
1:200 @ A3





#### Legend

- R-1 Rendered Finish (Vivid White)
- R-2 Rendered Finish (Natural White)
- R-3 Textured Rendered Finish  
with Ashlar Cut @600mm ctr (Vivid White)
- CT-2 Crazy Paver (Sandblasted Finish)
- Refer DA 20.05 Colour Pallet



East Elevation

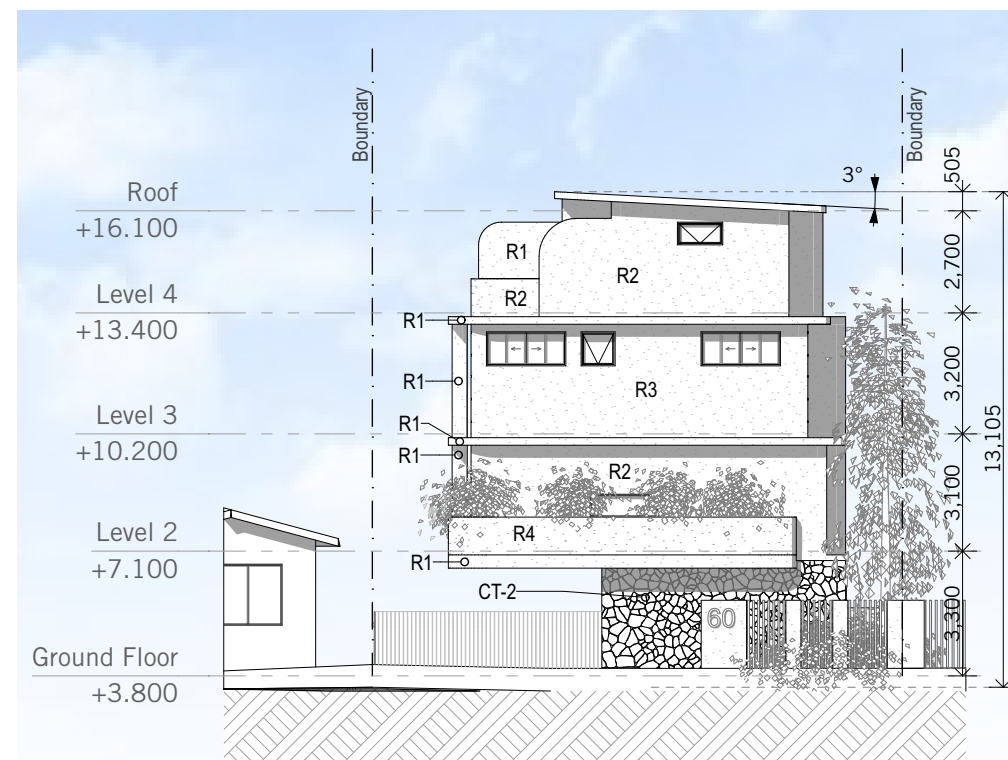
East Elevation  
1:200, 1:100 @ A3





#### Legend

- R-1 Rendered Finish (Vivid White)
- R-2 Rendered Finish (Natural White)
- R-3 Textured Rendered Finish  
with Ashlar Cut @600mm ctr (Vivid White)
- CT-2 Crazy Paver (Sandblasted Finish)
- Refer DA 20.05 Colour Pallet



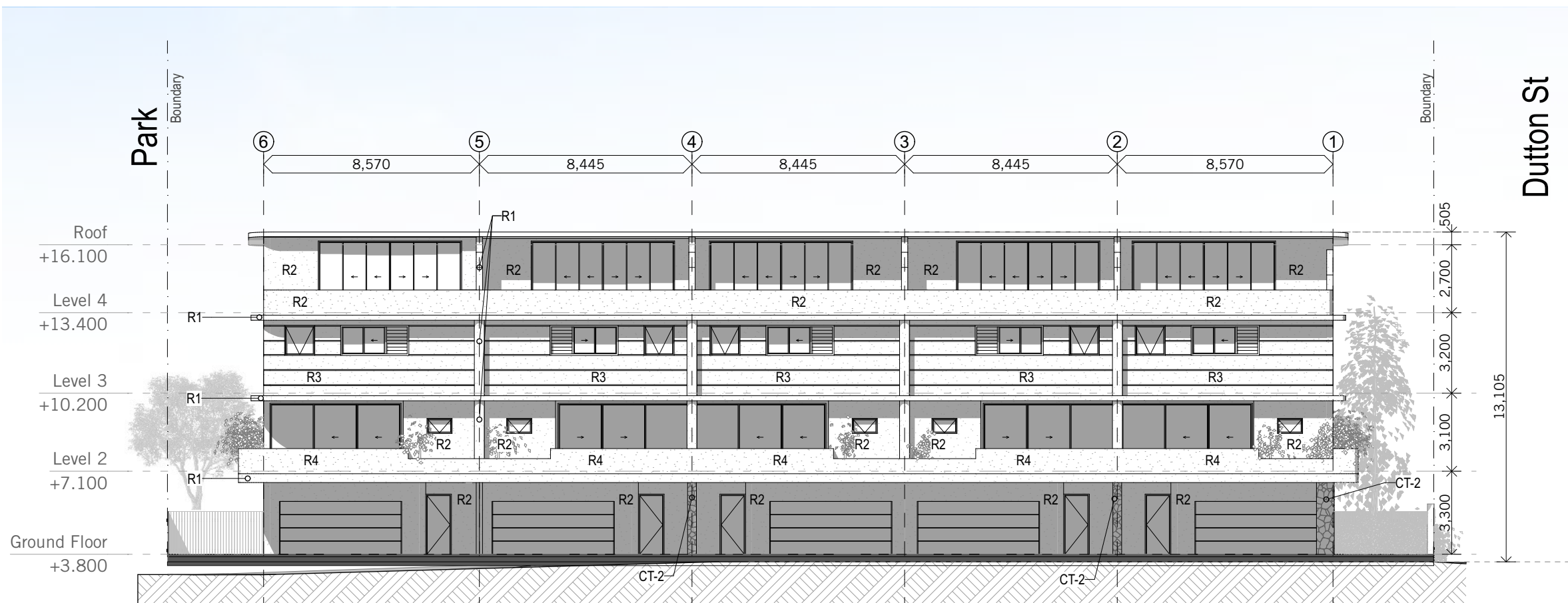
West Elevation

West Elevation

1:200, 1:100 @ A3

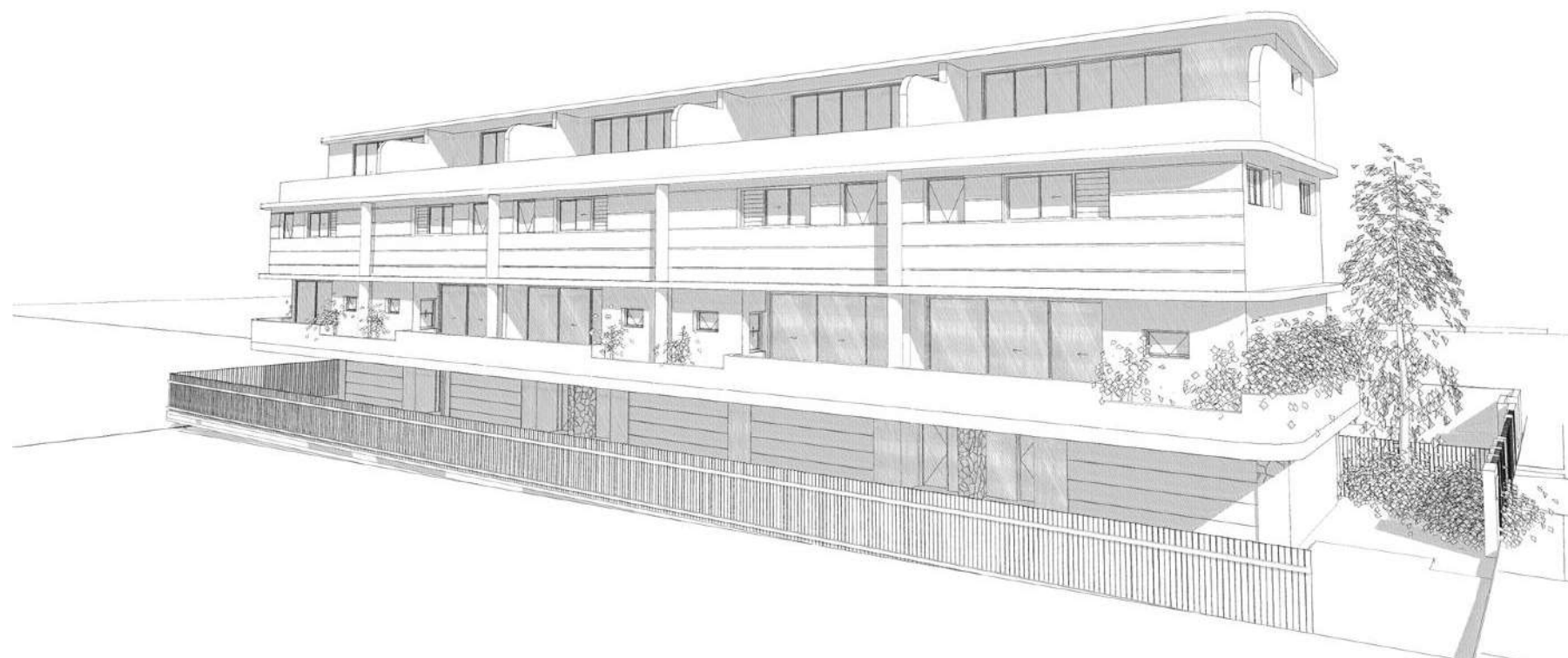






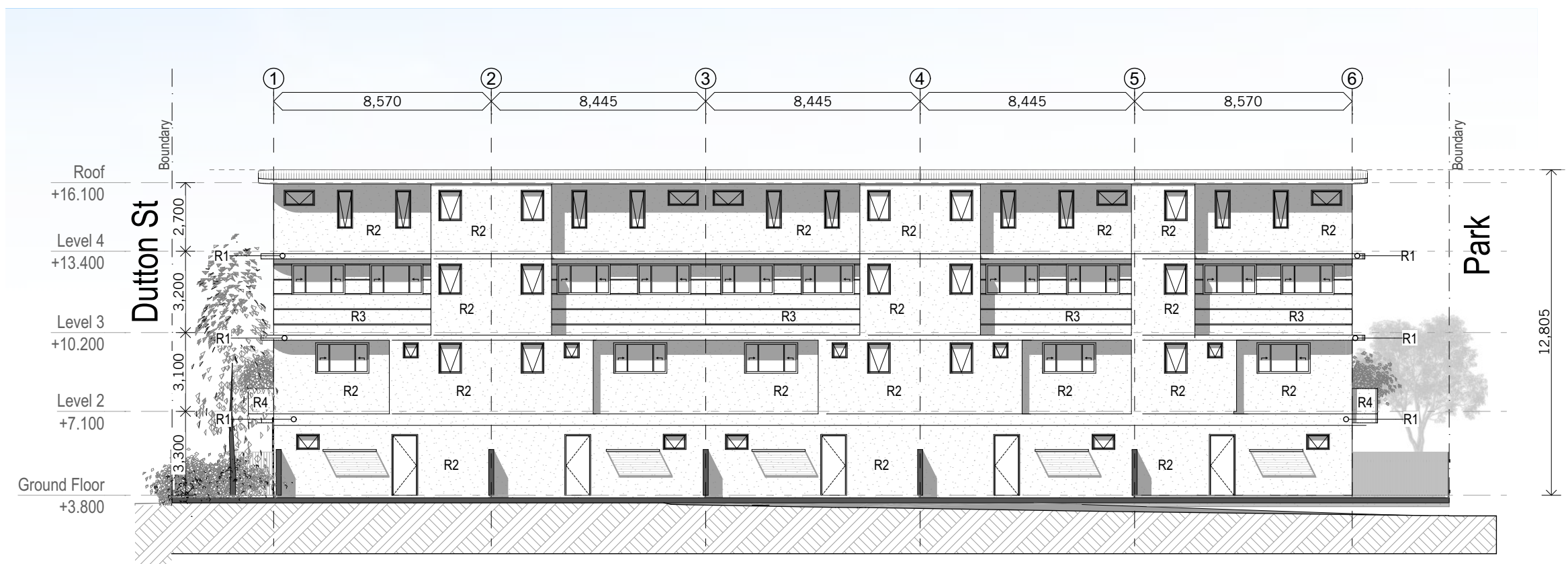
North Elevation

| Legend                       |                                                                      |
|------------------------------|----------------------------------------------------------------------|
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| R-2                          | Rendered Finish (Natural White)                                      |
| R-3                          | Textured Rendered Finish<br>with Ashlar Cut @600mm ctr (Vivid White) |
| CT-2                         | Crazy Paver (Sandblasted Finish)                                     |
| Refer DA 20.05 Colour Pallet |                                                                      |



North Elevation  
1:200, 1:100 @ A3





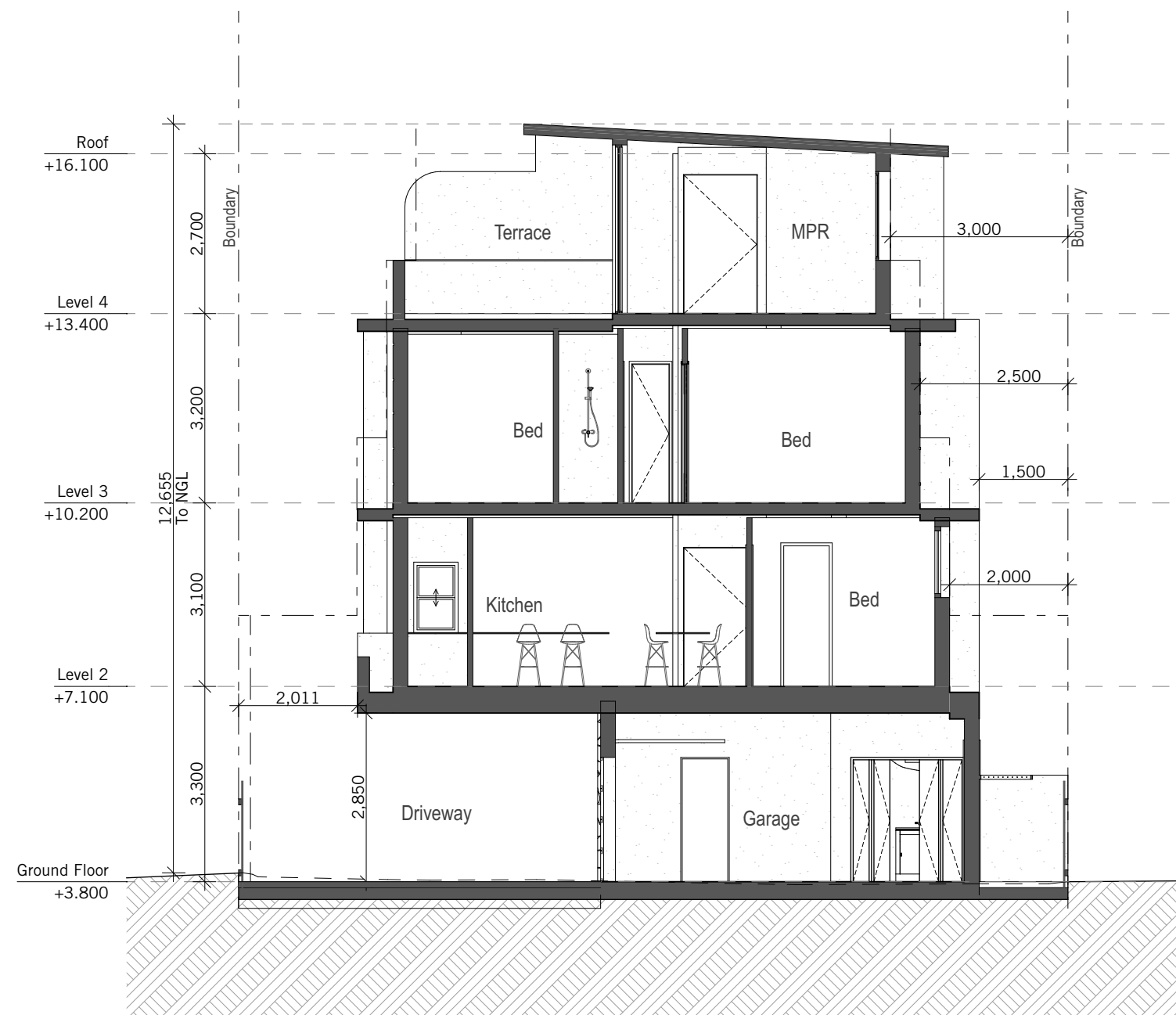
South Elevation



| Legend                       |                                                                      |
|------------------------------|----------------------------------------------------------------------|
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| R-2                          | Rendered Finish (Natural White)                                      |
| R-3                          | Textured Rendered Finish<br>with Ashlar Cut @600mm ctr (Vivid White) |
| CT-2                         | Crazy Paver (Sandblasted Finish)                                     |
| Refer DA 20.05 Colour Pallet |                                                                      |

South Elevation  
1:200, 1:100 @ A3





Section A  
1:100 @ A3



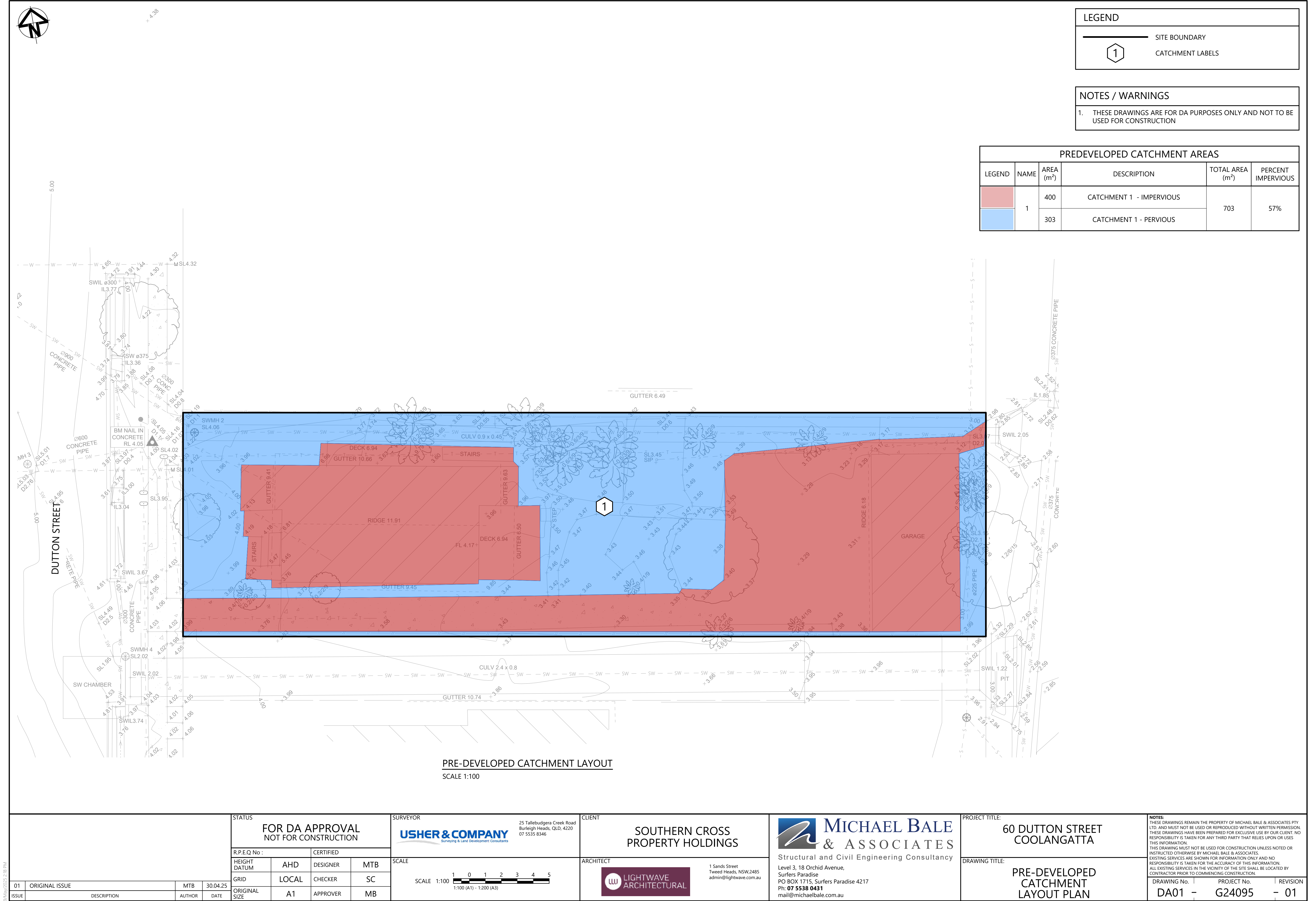


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# Appendix B

## Engineering Drawings

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LEGEND

SITE BOUNDARY

1

CATCHMENT LABELS

NOTES / WARNINGS

1. THESE DRAWINGS ARE FOR DA PURPOSES ONLY AND NOT TO BE USED FOR CONSTRUCTION

| PREDEVELOPED CATCHMENT AREAS |      |           |                          |                 |                    |
|------------------------------|------|-----------|--------------------------|-----------------|--------------------|
| LEGEND                       | NAME | AREA (m²) | DESCRIPTION              | TOTAL AREA (m²) | PERCENT IMPERVIOUS |
|                              | 1    | 400       | CATCHMENT 1 - IMPERVIOUS | 703             | 57%                |
|                              |      | 303       | CATCHMENT 1 - PERVIOUS   |                 |                    |

PRE-DEVELOPED CATCHMENT LAYOUT  
SCALE 1:100

| STATUS                                  |           |          |     |
|-----------------------------------------|-----------|----------|-----|
| FOR DA APPROVAL<br>NOT FOR CONSTRUCTION |           |          |     |
| R.P.E.Q No:                             | CERTIFIED |          |     |
| HEIGHT DATUM                            | AHD       | DESIGNER | MTB |
| GRID                                    | LOCAL     | CHECKER  | SC  |
| ORIGINAL SIZE                           | A1        | APPROVER | MB  |

|       |                |        |          |
|-------|----------------|--------|----------|
| 01    | ORIGINAL ISSUE | MTB    | 30.04.25 |
| ISSUE | DESCRIPTION    | AUTHOR | DATE     |

SURVEYOR

USHER & COMPANY

Surveying & Land Development Consultants

25 Tallebudgera Creek Road  
Burleigh Heads, QLD, 4220  
07 5535 8346

SCALE

SCALE 1:100

1000

0

1

2

3

4

5

1:100 (A1) - 1:200 (A3)

CLIENT

SOUTHERN CROSS  
PROPERTY HOLDINGS

ARCHITECT

LIGHTWAVE  
ARCHITECTURAL

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& ASSOCIATES

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Surfers Paradise  
PO BOX 1715, Surfers Paradise 4217  
Ph: 07 5538 0431  
mail@michaelbale.com.au

PROJECT TITLE:

60 DUTTON STREET  
COOLANGATTA

DRAWING TITLE:

PRE-DEVELOPED  
CATCHMENT  
LAYOUT PLAN

NOTES:

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DRAWING No.

PROJECT No.

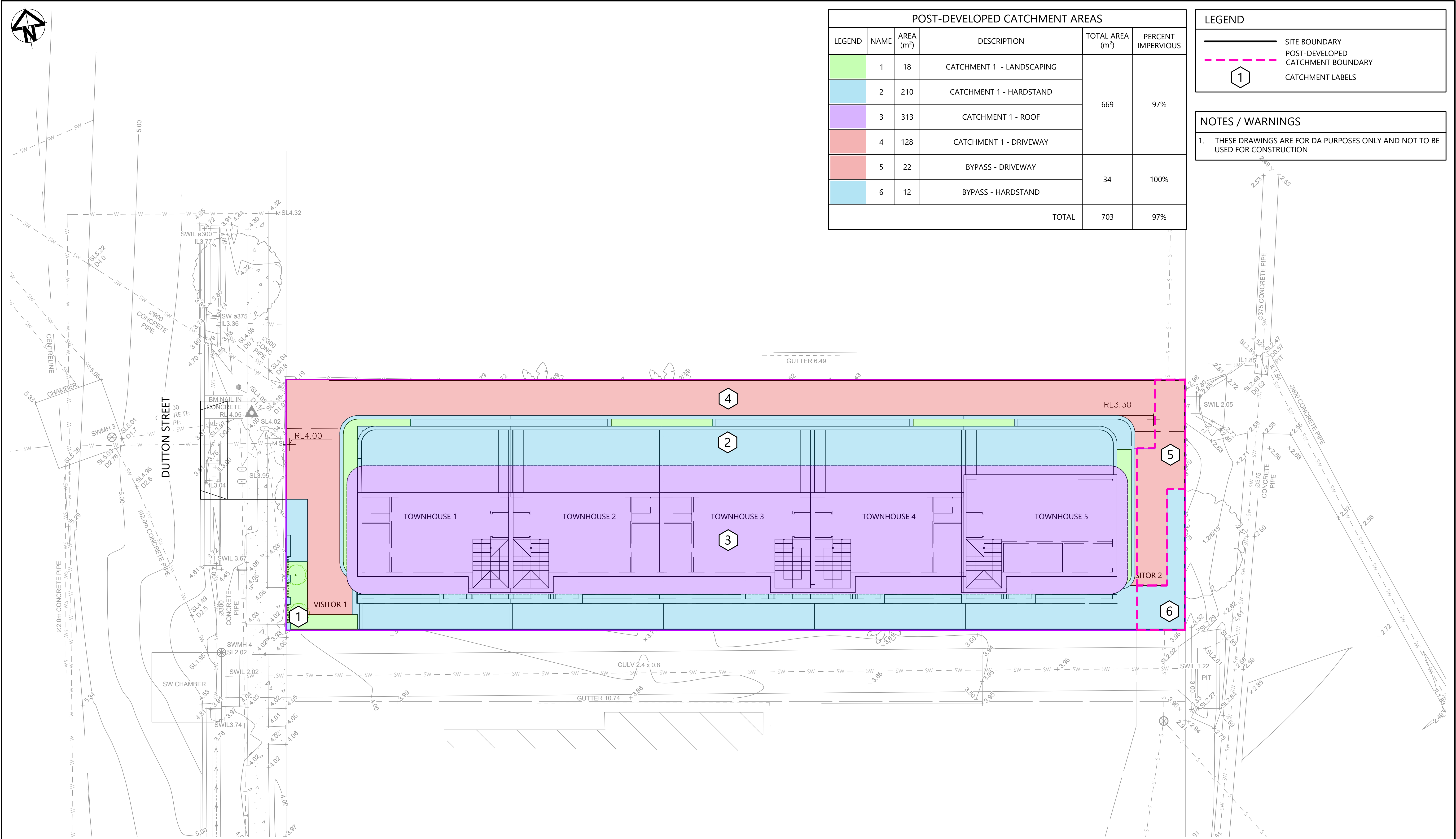
REVISION

DA01

G24095

01





| POST-DEVELOPED CATCHMENT AREAS |      |           |                           |                 |                    |
|--------------------------------|------|-----------|---------------------------|-----------------|--------------------|
| LEGEND                         | NAME | AREA (m²) | DESCRIPTION               | TOTAL AREA (m²) | PERCENT IMPERVIOUS |
|                                | 1    | 18        | CATCHMENT 1 - LANDSCAPING | 669             | 97%                |
|                                | 2    | 210       | CATCHMENT 1 - HARDSTAND   |                 |                    |
|                                | 3    | 313       | CATCHMENT 1 - ROOF        |                 |                    |
|                                | 4    | 128       | CATCHMENT 1 - DRIVEWAY    | 34              | 100%               |
|                                | 5    | 22        | BYPASS - DRIVEWAY         |                 |                    |
|                                | 6    | 12        | BYPASS - HARDSTAND        |                 |                    |
| TOTAL                          |      |           |                           | 703             | 97%                |

| LEGEND |                                   |
|--------|-----------------------------------|
|        | SITE BOUNDARY                     |
|        | POST-DEVELOPED CATCHMENT BOUNDARY |
|        | CATCHMENT LABELS                  |

| NOTES / WARNINGS |                                                                             |
|------------------|-----------------------------------------------------------------------------|
| 1.               | THESE DRAWINGS ARE FOR DA PURPOSES ONLY AND NOT TO BE USED FOR CONSTRUCTION |

POST-DEVELOPED CATCHMENT LAYOUT  
SCALE 1:100

02  
01  
ISSUE

REVISED ARCHITECTURAL SCHEME  
ORIGINAL ISSUE

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MTB

01.06.26  
09.05.25

DESCRIPTION

AUTHOR

DATE

STATUS

FOR DA APPROVAL  
NOT FOR CONSTRUCTION

R.P.E.Q No:

CERTIFIED

HEIGHT DATUM

AHD

DESIGNER

MTB

GRID

LOCAL

CHECKER

SC

ORIGINAL SIZE

A1

APPROVER

MB

SURVEYOR

USHER & COMPANY  
Surveying & Land Development Consultants

25 Tallebudgera Creek Road  
Burleigh Heads, QLD, 4220  
07 5535 8346

CLIENT

SOUTHERN CROSS  
PROPERTY HOLDINGS

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PROJECT TITLE:

60 DUTTON STREET  
COOLANGATTA

DRAWING TITLE:

POSTDEVELOPED  
CATCHMENT  
LAYOUT PLAN

NOTES:

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DRAWING No.

PROJECT No.

REVISION

DA02

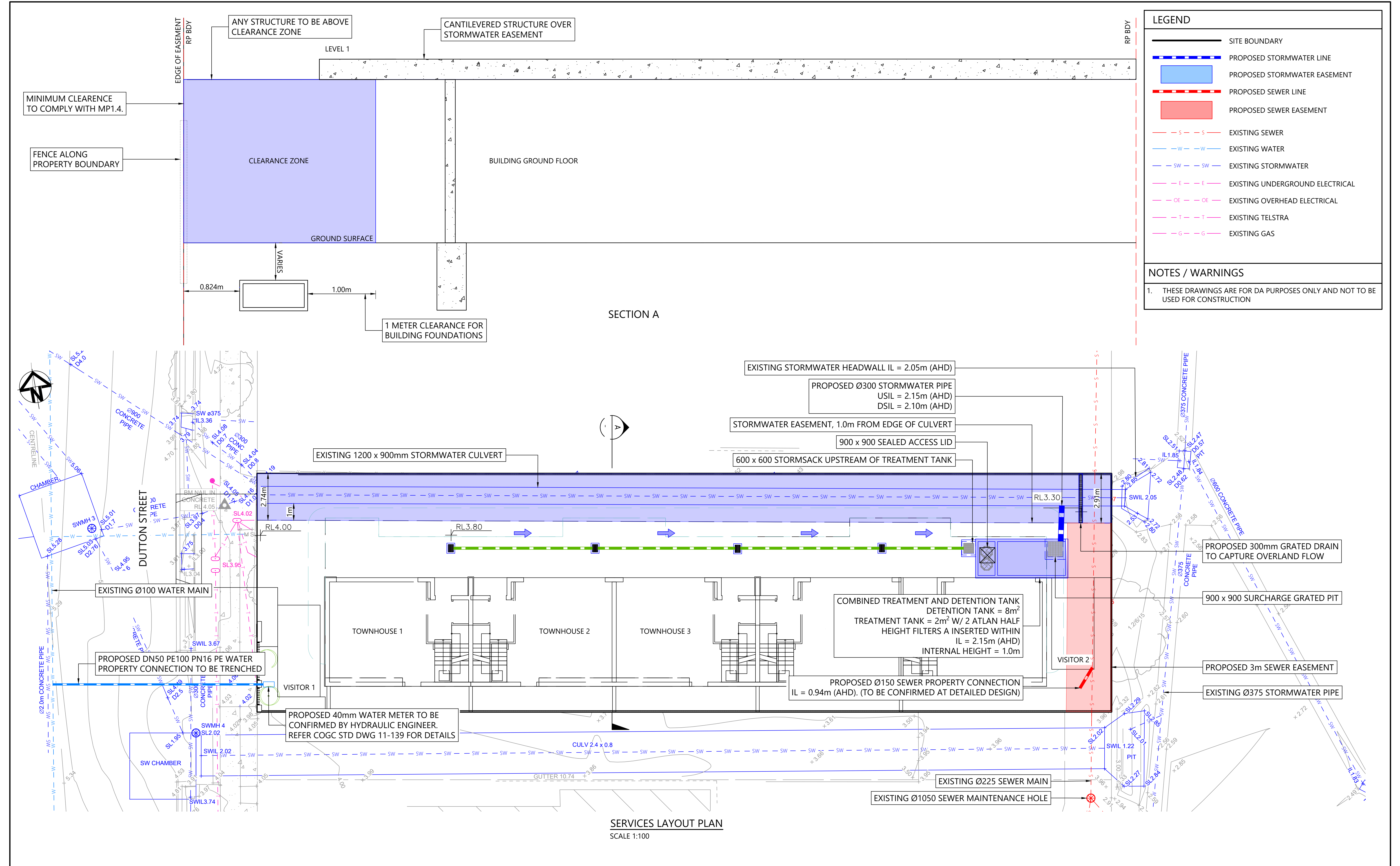
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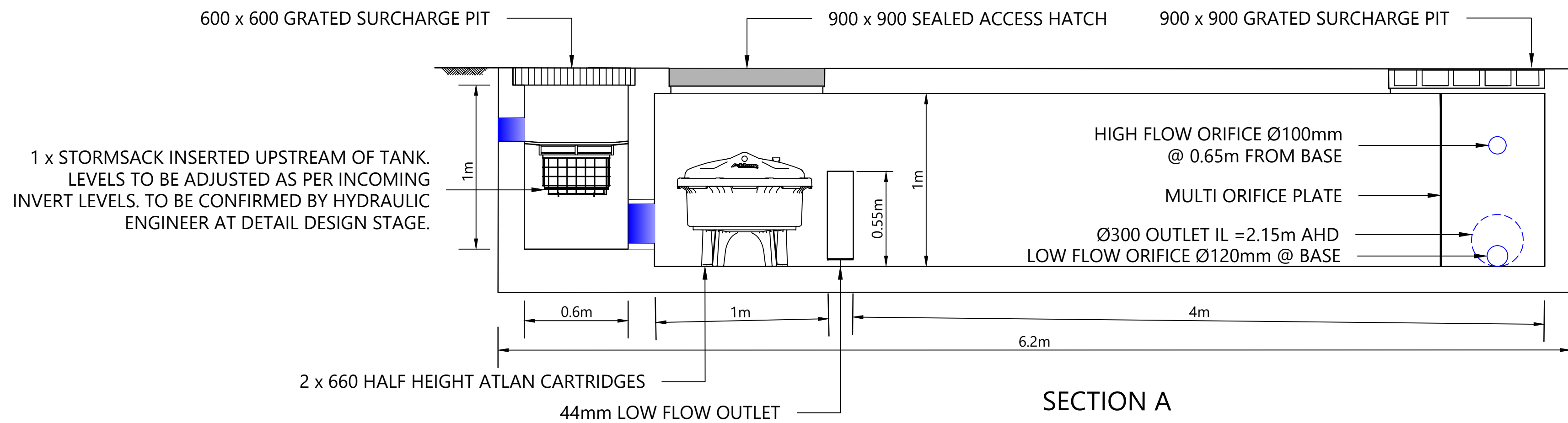
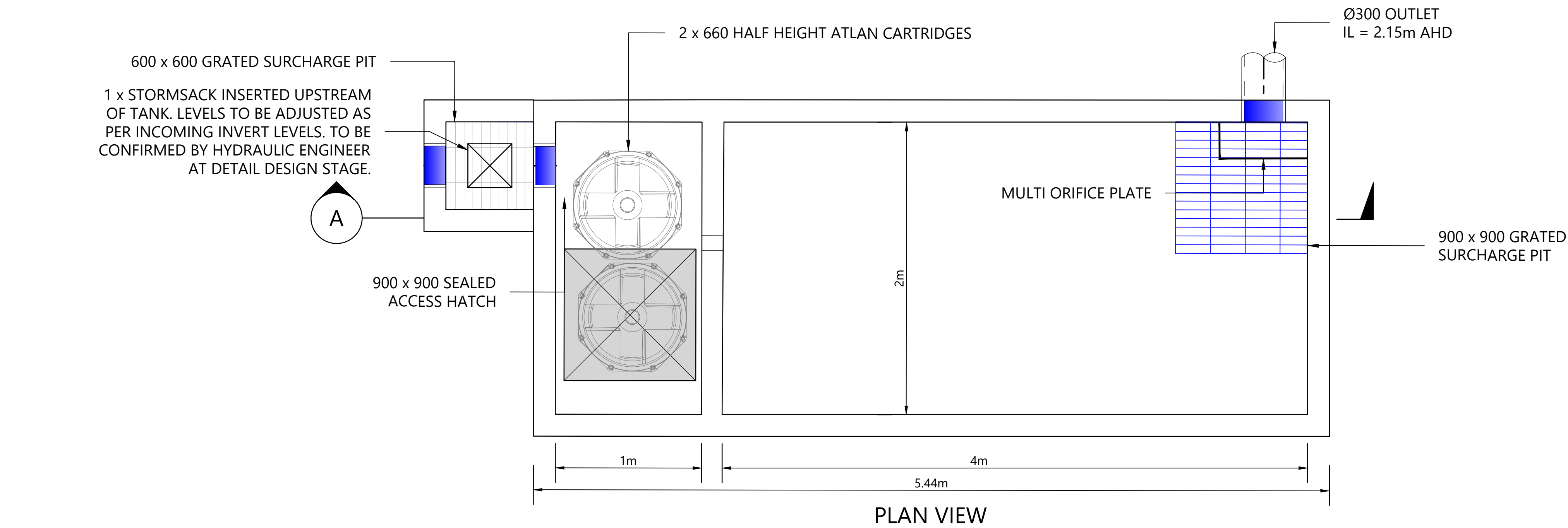


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STORMWATER TANK PLAN  
SCALE 1:20

|                                                                                                                                                                                             |  |  |  |                                         |  |  |  |                                                                                                                                                           |  |  |  |                                                                                                                                                                                                                                  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |
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| <div>02<br/>01<br/>ISSUE</div> <div>REVISED ARCHITECTURAL SCHEME<br/>ORIGINAL ISSUE</div> <div>BM<br/>MTB</div> <div>01.06.26<br/>09.05.25</div> <div>DESCRIPTION<br/>AUTHOR<br/>DATE</div> |  |  |  | STATUS                                  |  |  |  | SURVEYOR                                                                                                                                                  |  |  |  | CLIENT                                                                                                                                                                                                                           |  |  |  | <div><div></div><div>MICHAEL BALE &amp; ASSOCIATES</div><div>Structural and Civil Engineering Consultancy</div></div> <div>Level 13, 18 Orchard Avenue,<br/>Surfers Paradise<br/>PO BOX 1715, Surfers Paradise 4217<br/>Ph: 07 5538 0431<br/>mail@michaelbale.com.au</div> |  |  |  | PROJECT TITLE:<br><br>60 DUTTON STREET<br>COOLANGATTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
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| ORIGINAL SIZE<br>A1                                                                                                                                                                         |  |  |  | APPROVER<br>MB                          |  |  |  | SCALE 1:20<br><div><div>0.20.20.20.40.60.81.0</div><div>1:20 (A1) - 1:40 (A3)</div></div>                                                                 |  |  |  | <div><div></div><div>LIGHTWAVE<br/>ARCHITECTURAL</div></div> <div>1 Sands Street<br/>Tweed Heads, NSW 2485<br/>admin@lightwave.com.au</div> |  |  |  | DRAWING TITLE:<br><br>STORMWATER<br>TANK PLAN                                                                                                                                                                                                                                                                                                                   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |
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# STATEMENT OF LANDSCAPE INTENT



---

60 Dutton Street, Coolangatta



# 60 Dutton Street

Coolangatta

**Statement of Landscape Intent - Revised MCU**

May 2026

# Project Details & Contents

## Project Details

**Project Name:**  
Dutton Street

**Client Name:**  
Lattimore

**Architect Name:**  
Lightwave Architectural

**Planner Name:**  
Enhance Urban Planning

**Project Address:**  
60 Dutton Street Coolangatta QLD 4225

**Project No.**  
2450

**Revision:**  
A- 2025-04-29- Draft for Review  
B- 2025-05-06- For Approval  
C- 2025-05-07- For Approval  
D- 2025-07-30- IR Response  
E- 2026-05-19- Revised MCU  
F- 2026-05-26- Revised MCU

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- Design Summary
- 2
- Location & Context Plan
- 3
- Key Design Principles
- 4
- Landscape Concept Plan- Ground Level
- 5
- Landscape Concept Plan- Level 2
- 6
- Planting Palette

# Design Summary

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The subject site located at 60 Dutton Street (Lot 2 on RP86756) in Coolangatta on the Gold Coast, comprising 703m2 approximate of medium density land within Division 14 of the City of Gold Coast.

The Landscape concept for the proposed residential development is based on the surrounding context, response to the proposed architectural layout and expression including the desired outcomes of the City of Gold Coast Council City Plan.

The design intent is to contribute positively to the image and overall quality of the proposed residential development by providing a contemporary, sensitive and appropriate landscape environment.

The key landscape design principles applied to the landscape concept comprise:

- Enhancing (Maximising planting opportunities and responding to local context)
- Connected (multiple access points and lines of movement)
- Diverse (a planting palette that provides variation of habit, form, colour, texture, mix of natives and exotics)
- Enduring (sustainable and resilient material selection)
- Comfortable (humanised scale. A space where you can be yourself)
- Vibrant (providing spaces for interaction and socialisation)
- Safe (open sight lines)



# Location & Context Plan





# Key Design Principles



## Make it Local

- + Reflect local context, story and people
- + Reflect local planting communities
- + Provide a sense of place and locality
- + Promote local connectivity



## Make it Human

- + Provide a human scale of design
- + Experience to be comfortable



## Make it Social

- + Provide social amenities for the community
- + Provide options to gather and meet
- + Provide flexible spaces for socialisation



## Make it Green

- + Create active zones for residents and visitors
- + Create interest for kids such as sensory planting and safe water interaction
- + Promote active connections to surrounding open space

## Overview

The Landscape Principles are based on best practice design, understanding the human needs, making it safe and enjoyable while designing spaces that encourage social outcomes, community spirit and a strong sense of place.



# Landscape Concept Plan - Ground Floor

## Legend

- 1 Deep soil planting zone with screen shrub planting and accent palm / shrub / groundcover planting  
Frontage: deep soil = 11m2  
Rear deep soil = 6m2
- 2 Feature paving to private open space (to Architects details)
- 3 Visitor parking
- 4 Easement
- 5 Existing underground sewer line
- 6 Site Boundary / Fencing (to Architects details)
- 7 Columnar tree planting within deep soil planting zone
- 8 Visitor bike parking

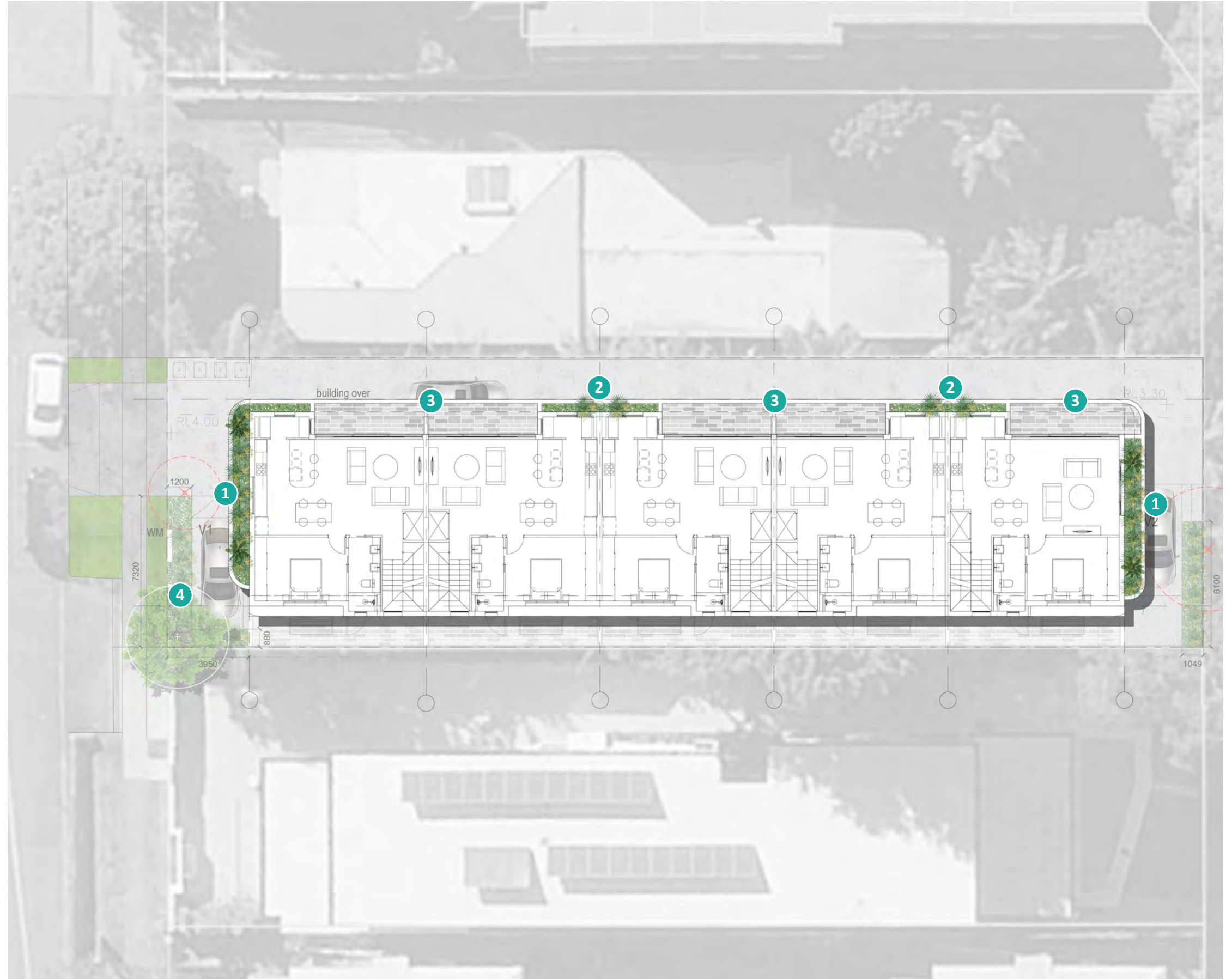




## Landscape Concept Plan - Level 2

### Legend

- 1 Raised planter 1m high with accent shrub, groundcover and cascade planting
- 2 Raised planter 700mm high with shrub, groundcover and cascade planting
- 3 BBQ / dining / gathering terrace  
To Architects details
- 4 Ground level landscape



Project Name:  
**Dutton Street**

Client Name:  
**Lattimore**

Project No.  
**2450**

Revision:

**F**

Date:  
**2026-05-26**

DWG No.  
**L005**

shepherd  
Urban Landscape Architecture



# Planting Palette - Trees & Palms



**Tuckeroo**  
Cupaniopsis anacardiodes



**Eumundi Quandong**  
Elaeocarpus eumundi



**Water Gum**  
Tristaniopsis 'Luscious'



**Weeping Lilly Pilly**  
Waterhousea floribunda



**Kentia Palm**  
Howea forsteriana



**Foxtail Palm**  
Wodyetia bifurcata



**Cabbage Tree Palm**  
Livistona australis



**Screw Pine**  
Pandanus utilis



# Planting Palette - Shrubs



**Miss Muffet**  
Pittosporum tobira  
**Shrub**  
1 x 1m



**Giant Bird of Paradise**  
Strelitzia nicolai  
**Shrub**  
5 x 3m



**Agave attenuata**  
Century Plant  
**AGA att**



**Big Red**  
Syzygium australe  
**Shrub**  
3 x 3m



**Resilience**  
Syzygium australe  
**Shrub**  
3 x 2m



**Dense Fence**  
Viburnum odoratissimum  
**Shrub**  
3 x 3m



**Pink Diamond**  
Cordyline fruticosa  
**Shrub**  
2 x 1m



**Cardboard Plant**  
Zamia furfuracea  
**Shrub**  
2 x 1m



**Desert Star**  
Carissa grandiflora  
**Shrub**  
2 x 2m



**Gynea Lily**  
Doryanthes excelsa  
**Shrub**  
2 x 2m



**Silver Lady**  
Blechnum sp  
**Shrub**  
1 x 1m



**Rojo Congo**  
Philodendron sp  
**Shrub**  
1 x 1m



# Planting Palette - Groundcovers



**Yareena**  
Myoporoum parvifolium  
**Groundcover**  
0.3 x 3m



**Silver Leaf Gazania**  
Gazania tomentosa  
**Groundcover**  
0.3 x 2m



**Blue Chalksticks**  
Senecio serpens  
**Groundcover**  
0.3 x 2m



**Xanadu**  
Philodendron selloum  
**Groundcover**  
1 x 1m



**Just Right**  
Liriope muscari  
**Groundcover**  
0.3 x 0.3m



**Evergreen Giant**  
Liriope muscari  
**Groundcover**  
0.5 x 0.5m



**Lime Tuff**  
Lomandra  
**Groundcover**  
0.5 x 0.5m



**Matt Rush**  
Lomandra Hystrix  
**Groundcover**  
1.5 x 1.5m



# Planting Palette - Cascading & Climbers



**Cousin It**  
Casuarina glauca



**Silver Falls**  
Dichondra repens



**Golden Pothos**  
Epipermnum aureum



**Waterfall Plant**  
Phyllanthus multiflorus



**Climbing Fig**  
Ficus pumila



**Pink Mandevilla**  
Dipladenias



**Trachelospermum jasminoides**  
Star Jasmine



**Funky Bells**  
Pandorea jasminoides







# STORMWATER MANAGEMENT PLAN



---

60 Dutton Street, Coolangatta

## RESIDENTIAL DEVELOPMENT

60 DUTTON STREET, COOLANGATTA, QLD

## STORMWATER MANAGEMENT PLAN

**FOR:** SOUTHERN CROSS PROPERTY HOLDINGS

**REPORT NUMBER:** R001-G24095





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The information contained in this report has been prepared based on the information made available to Michael Bale and Associates at the time of preparation. This document, design parameters, and conclusions rely on external data sources, and the accuracy of this document is correct to the extent of the information provided to us.

This report has been prepared solely for the benefit of our client. We do not accept any liability for damage or loss resulting from reliance on this report, or any part of it, by any party other than the client (named on the front page of this report).

#### Document Control

|                          |                                            |                      |
|--------------------------|--------------------------------------------|----------------------|
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| <b>Reviewer</b>          | Salvatore Cautela                          |                      |
| <b>Approver<br/>RPEQ</b> | Jasmin Trgo<br>19378                       |                      |
| <b>Report Title</b>      | R001 – G24063 - Stormwater Management Plan |                      |
| <b>Revision</b>          | 04                                         | <b>Date</b> 01/06/26 |

#### Revision History

| Revision | Date     | Author | Approver | Description                 |
|----------|----------|--------|----------|-----------------------------|
| 01       | 02/05/25 | MTB    | MB       | Original Issue - Draft      |
| 02       | 20/05/25 | MTB    | MB       | Original Issue              |
| 03       | 04/08/25 | MTB    | MB       | Updated as per council RFI  |
| 04       | 01/06/26 | BM     | JT       | Revised Architectural Plans |

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#### Client Contact Details

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## 1. Introduction

This report has been prepared to support the lodgement of a development application involving the construction of a new residential development, comprising of five (5) townhouse type units with four (4) stories. The development is proposed to take place over the following parcel of land:

**Property Address:** 60 Dutton St, Coolangatta QLD 4225

**Property Description:** Lot 2 on RP86756

**Council:** City of Gold Coast

**Site Area:** 703m<sup>2</sup>

The purpose of this report is to address the management of stormwater quantity and quality to ensure that the proposed development complies with all necessary state and local government policies.

This report intends to assess the likely impact of the proposed development in relation to stormwater quantity, and the adequacy of the existing stormwater infrastructure to accommodate the proposed development.

### 1.1 Related Reporting

This report is intended to be read in conjunction with the associated development submission documents, current as of the date of this report.

An Engineering Service Report (Ref: R002-G24095, REV 3) has been prepared for the proposed development and should be read in conjunction with this report.



## 2. Property Description

The proposed development is situated on the existing lot located at 60 Dutton Street, Coolangatta described as Lot 2 on RP86756. The property is located within the City of Gold Coast Local Government Area.

The site is located in the suburb of Coolangatta and is in close proximity to local commercial and retail centres.

The proposed development site is bounded by Dutton Street to the west, existing residential allotments to the north and south and Goodwin Park to the east. The registered area of the existing allotment for this proposal is 703m<sup>2</sup>.

A general locality plan is presented in Figure 2.1 below:



Figure 2.1 - Site Locality (retrieved from QLD Globe)

## **2.1 Land Usage**

The development site is currently occupied by a residential dwelling. The existing development contains impervious land uses, including roof, driveway, and other hardstand areas. The existing impervious areas have been estimated from the survey to cover approximately 57% of the site area, as displayed on the pre-developed catchment plan attached within Appendix A of this report.

The existing development is currently assessable via an existing VXO from Dutton Street.

## **2.2 Topography and Drainage**

The detailed survey obtained for the project site indicates that majority of the surface grades towards the eastern boundary of the site towards Goodwin Park. A stormwater culvert traverses the proposed development site, running in parallel alignment with the northern boundary of the development site. Approximate levels on the site vary from 4.19m (AHD) in the northwest corner of the site to 2.99m (AHD) located in the southeast corner of the site. The average grade of the site has been calculated to be approximately 1.5%.

The development site contains existing internal stormwater infrastructure capturing runoff generated from the roof area, and discharges flows towards Goodwin Park to the east.

A copy of the detailed survey by Usher and Company has been attached within Appendix A of this report.

## **2.3 Upstream Catchment**

The site survey indicates that the development site contains existing stormwater infrastructure that conveys an upstream catchment through the site. An assessment of this external catchment is detailed in Section 7.



### 3. Proposed Development

The proposed development consists of:

- The demolition of existing structures; and
- The construction of 5 (five) units, four (4) storey residential townhouses; and
- The construction of access driveways and other hardstand surfaces associated with the proposed development.

A copy of the proposed architectural layout plans has been included in Appendix A of this report.

Additional works on site shall include the construction of water reticulation, sewer reticulation, electrical and telecommunications services and stormwater management works.

External works for the development will consist of verge works with Dutton Street to facilitate the construction of the vehicle crossover and service connections. No further external civil works are proposed as part of this development.

## 4. Lawful Point of Discharge

In the existing case, the majority of the stormwater runoff generated from the development site discharges towards the eastern boundary via overland sheet flow, towards Goodwin Park. Flows will enter council stormwater network via a stormwater headwall located within Goodwin Park. The captured stormwater runoff, discharges from the site without any on-site detention or water quality treatment.

In the developed case, it is proposed that the development site is to connect into the existing stormwater infrastructure located within Goodwin Park. The flows generated from the site are to be detained and treated within a combined belowground stormwater treatment and detention tank, and discharge to an existing council 1200x900 reinforced concrete box culvert via a proposed Ø300 stormwater pipe. Ultimately, flows discharge towards Goodwin Park via a council headwall. This arrangement is outlined in the Engineering Drawings attached within Appendix B.

The proposed discharge arrangement is considered to comply with the requirements of a lawful point of discharge and will be maintained following the development of the site. It is not anticipated that any stormwater will be directed towards any adjacent properties.

QUDM (2017) provides a three-part framework for the identification of a lawful point of discharge for a development site. The first assessment item is to consider if the proposed development will alter the site's stormwater discharge characteristics in a manner that may substantially damage a third-party property. As the proposed development is not considered likely to worsen the flows received by the stormwater infrastructure within Goodwin Park, the proposed point of discharge is considered to satisfy the requirements set out in Section 3.9.1 – Lawful Point of Discharge Test.

This compliance is further demonstrated in the following pages where it is shown that the proposed development will result in no worsening of peak flows from the development site.

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## 5. Site Specific Hydrology

### 5.1 Introduction

The proposed development will involve the construction of a new residential apartment building, access driveway and other associated hardstand surfaces. These changes in site layout have the potential to change the coefficient of discharge for the site and thereby may affect the peak stormwater discharge rates of the development site.

This section of the report presents an assessment of the peak stormwater discharge resulting from the site and identifies whether attenuation measures are necessary to ensure “no-worsening” of the peak flows from the site.

### 5.2 Methodology

The methodology of the hydrologic analysis involves the use of both the Rational Method and DRAINS runoff-routing software. The Rational Method, as described by the Queensland Urban Drainage Manual (QUDM 2017), provides a simple means for the assessment of the peak discharge rate for design storms. The rational method does not provide a reliable basis for the determination of runoff volume or hydrograph shape.

DRAINS software (by Watercom) is a computer-based model that incorporates time-area routing processes to more accurately determine the volume and shape of the hydrograph during a storm event. DRAINS also includes storage-routing processes that can simulate the effect of stormwater detention systems.

The Rational Method is used in the hydrologic analysis to calibrate and verify the results of the DRAINS software modelling, in lieu of the availability of gauged information.

Once calibrated and verified, the DRAINS software modelling is used to calculate all the pre and post development hydrographs that are used in the assessment, and for the design of the proposed stormwater detention system.

### 5.3 Catchment Definition

In the existing case, the site has been modelled as singular catchment, with the Fraction Imperviousness measured from the site survey. In the developed case, the development site is represented by two (2) catchments, a highly developed catchment and a small bypass catchment with the fraction imperviousness measured from the current architectural plans. Table 5.1 below summarises the catchment properties used for the stormwater modelling.

*Table 5.1: Catchment Definition*

| Catchment                      | Catchment Size    | Fraction Impervious (f <sub>i</sub> ) |
|--------------------------------|-------------------|---------------------------------------|
| <b>Pre-Developed Site</b>      | 703m <sup>2</sup> | 0.57                                  |
| <b>Post-Developed Site</b>     | 669m <sup>2</sup> | 0.97                                  |
| <b>Post-Developed (Bypass)</b> | 34m <sup>2</sup>  | 1.00                                  |

### Hydrologic Parameters

#### Time of Concentration

The time of concentration for the pre- and post-development catchments have been calculated in accordance with QUDM. The Friends sheet flow equation has been used to determine the time of concentration ( $t_c$ ) for the ground catchments. The time of concentration for the catchment have been estimated using standard inlet times in combination with expected length of piped flows. Refer to Table 5.2 for the calculated time of concentration for each catchment.

Table 5.2: Time of Concentration Summary

| Catchment                      | Catchment Size    | Time of Concentration |
|--------------------------------|-------------------|-----------------------|
| <b>Pre-Developed Site</b>      | 703m <sup>2</sup> | 9.0 minutes           |
| <b>Post-Developed Site</b>     | 669m <sup>2</sup> | 5.0 minutes           |
| <b>Post-Developed (Bypass)</b> | 34m <sup>2</sup>  | 5.0 minutes           |

### C10 Value

The C<sub>10</sub> values for the existing and proposed site conditions have been calculated in accordance with the Queensland Urban Drainage Manual (QUDM), Table 4.5.3: Table of C<sub>10</sub> values. A summary of the C<sub>10</sub> values adopted for the site are presented in Table 5.3 below.

Table 5.3: C<sub>10</sub> Values

|                         | Area              | Rainfall Intensity, <sup>1</sup> I <sub>10</sub> / Fraction Impervious | C <sub>10</sub> |
|-------------------------|-------------------|------------------------------------------------------------------------|-----------------|
| Pre-development         | 703m <sup>2</sup> | 70.50mm/hr /57%                                                        | 0.814           |
| Post-development        | 669m <sup>2</sup> | 70.50mm/hr /97%                                                        | 0.894           |
| Post-Developed (Bypass) | 34m <sup>2</sup>  | 70.50mm/hr /100%                                                       | 0.900           |

### Summary of Flow – Rational Method

The Rational Method was used to calculate runoff from the site in the pre-developed and post developed scenario. The anticipated peak discharge is detailed in Table 5.4 below.

Table 5.4: Rational Method Calculation Summary

| AEP            | 39%<br>(m <sup>3</sup> /s) | 18%<br>(m <sup>3</sup> /s) | 10%<br>(m <sup>3</sup> /s) | 5%<br>(m <sup>3</sup> /s) | 2%<br>(m <sup>3</sup> /s) | 1%<br>(m <sup>3</sup> /s) |
|----------------|----------------------------|----------------------------|----------------------------|---------------------------|---------------------------|---------------------------|
| Pre-Developed  | 0.016                      | 0.024                      | 0.029                      | 0.035                     | 0.045                     | 0.052                     |
| Post-Developed | 0.019                      | 0.029                      | 0.036                      | 0.044                     | 0.055                     | 0.062                     |
| Bypass         | 0.001                      | 0.001                      | 0.002                      | 0.002                     | 0.003                     | 0.003                     |
| Flow Increase  | <b>+0.005</b>              | <b>+0.007</b>              | <b>+0.009</b>              | <b>+0.011</b>             | <b>+0.013</b>             | <b>+0.013</b>             |

Table 5.4 above shows that the development will result in an increase in peak estimated flow rates for all AEPs. As it has been demonstrated that the proposed development will result in increased flows from the development site, the development **will** need to provide on-site detention to mitigate peak flows.

## 5.4 Detention Design Process

DRAINS hydrologic software has been utilised to undertake the assessment of pre-development and post-development stormwater discharge for the purposes of the on-site detention specification process.

DRAINS version 2025.01 has been utilised in this assessment.

### DRAINS Parameters

#### Calibration

The total pre-development flow has been calculated using DRAINS software and compared to the Rational Method Calculations. The times of concentration and fractions impervious used in DRAINS are identical to the ones used in the Rational Method calculations. The pre-development flow calculated in the DRAINS Model is presented in Table 5.5 below.



Table 5.5: Pre-Development Runoff Calculations Comparison

|                                        | 39%<br>(m <sup>3</sup> /s) | 18%<br>(m <sup>3</sup> /s) | 10%<br>(m <sup>3</sup> /s) | 5%<br>(m <sup>3</sup> /s) | 2%<br>(m <sup>3</sup> /s) | 1%<br>(m <sup>3</sup> /s) |
|----------------------------------------|----------------------------|----------------------------|----------------------------|---------------------------|---------------------------|---------------------------|
| <b>Pre-development Rational Method</b> | 0.016                      | 0.024                      | 0.029                      | 0.035                     | 0.045                     | 0.052                     |
| <b>Pre-development DRAINS</b>          | 0.019                      | 0.024                      | 0.030                      | 0.035                     | 0.042                     | 0.047                     |

As shown in Table 5.5 above, the peak flows determined by DRAINS generally compare well against the peak flows calculated by the Rational Method, with conservative values. Therefore, the DRAINS model is considered appropriate for this site.

#### Rainfall (Temporal Patterns)

Rainfall data used in the DRAINS model has been sourced from the Bureau of Meteorology for the Coolangatta region. The model has assessed all temporal patterns between 5 minutes and 120 minutes (2 hours) for all standard design storms.

#### Modifiable Inputs

The DRAINS software package has several inputs that can be used to manipulate the hydraulic behaviour of the model. The values adopted in this model are all default values, and are presented in Table 5.6 below:

Table 5.6: DRAINS Modifiable Inputs

| Input                                      | Modelled Value |
|--------------------------------------------|----------------|
| Antecedent Moisture Condition              | 3              |
| Paved Depression Storage (mm)              | 1              |
| Supplementary Depression Storage (mm)      | 1              |
| Grassed (Pervious) Depression Storage (mm) | 5              |
| Soil Type                                  | 3              |

Depression Storage values of 1mm for paved/supplementary and 5mm for grassed (pervious) areas were adopted in this model as is recommended in the DRAINS user manual.

An Antecedent Moisture Condition (AMC) of 3.0 has been adopted for this site. This is a default value for DRAINS. A soil type classification type of 3 is representative of soil with slow infiltration rates (may have layers that impede downward movement of water). This value is the default (conservative) value adopted by DRAINS and is considered to represent the existing site conditions well.

#### Detention Design Parameters

It is proposed to provide detention for the development site within a singular detention tank that is underneath the ground floor slab. The detention system is proposed to mitigate peak flows from the proposed development. Details of the proposed detention systems are presented in Table 5.7 below.

Table 5.7– Detention System Design Parameters

| Detention Tank Parameters     |                               |
|-------------------------------|-------------------------------|
| Detention Base                | 8.0m <sup>2</sup>             |
| Detention Height              | 1.0m                          |
| <b>Total Detention Volume</b> | <b>8.0m<sup>3</sup></b>       |
| Low-Flow Orifice Size/Level   | Ø120mm @ Base                 |
| High-Flow Orifice Size/Level  | Ø100mm @ 0.65m above Base     |
| Emergency Overflow Weir       | 900 x 900 Grate @ Top of Tank |
| Outlet Size/Level             | Ø300mm @ Base                 |

Figure 5.1 below shows a screenshot of the DRAINS model used to represent the subject site.

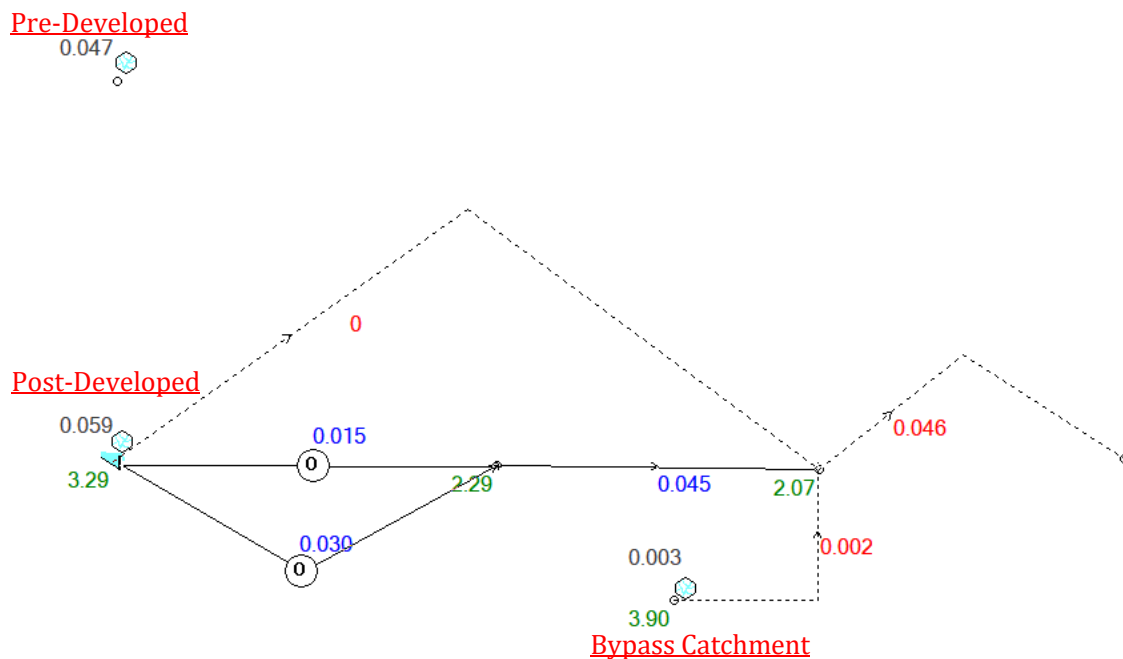


Figure 5.1 – DRAINS Model Screenshot 1% AEP

#### DRAINS Hydrologic Modelling Results

The on-site stormwater detention arrangement described in Table 5.7 has been designed to demonstrate that the proposed on-site detention strategy is effective in reducing developed peak stormwater discharge to a rate that is less than the existing, pre-development scenario.

The results of the assessment and confirmation of the achievement of the on-site detention objectives at all lawful points of discharge are provided in Table 5.8 below:

Table 5.8 – Development Runoff Calculations with Detention – DRAINS Model

|                                              | 39%<br>(m <sup>3</sup> /s) | 18%<br>(m <sup>3</sup> /s) | 10%<br>(m <sup>3</sup> /s) | 5%<br>(m <sup>3</sup> /s) | 2%<br>(m <sup>3</sup> /s) | 1%<br>(m <sup>3</sup> /s) |
|----------------------------------------------|----------------------------|----------------------------|----------------------------|---------------------------|---------------------------|---------------------------|
| <b>Q Pre-Developed (m<sup>3</sup>/s)</b>     | 0.019                      | 0.024                      | 0.030                      | 0.035                     | 0.042                     | 0.047                     |
| <b>Q Detention (m<sup>3</sup>/s)</b>         | 0.019                      | 0.023                      | 0.030                      | 0.035                     | 0.040                     | 0.046                     |
| <b>Peak Flow Reduction (m<sup>3</sup>/s)</b> | 0.000                      | -0.001                     | 0.000                      | 0.000                     | -0.002                    | -0.001                    |

The comparison of pre-developed and attenuated post-developed with detention conditions shows that non-worsening of peak discharges in the 39%, 18%, 10%, 20%, 50% and 1% AEP storm events is achievable with the detention system described in previous sections.



## 6. Stormwater Quality

### 6.1 Introduction

This section of the report aims to identify the requirements for stormwater quality management resulting from the proposed development and identify suitable stormwater treatment devices to comply with relevant requirements of the State Planning Policy and the City of Gold Coast City Plan Policy – Land Development Guidelines.

### 6.2 State Planning Policy Assessment

An assessment has been undertaken to determine whether the development proposal necessitates compliance with the State Planning Policy (SPP) objectives. The following trigger questions are used to determine whether SPP compliance is required.

Table 6.1: State Planning Policy Trigger Questions

| Trigger Question                                                                                                                         | Development Response |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Material Change of Use for Urban Purposes with a land area greater than 2,500m <sup>2</sup> and:                                         | No                   |
| a) Will result in an impervious area greater than 25% of the net developable area; or                                                    | N/A                  |
| b) Will result in 6 or more dwellings.                                                                                                   | N/A                  |
| Reconfiguration of Lot for Urban Purposes that involves a land area greater than 2,500m <sup>2</sup> , and will result in 6 or more lots | No                   |

The above table indicates that the development does not trigger compliance with the SPP, and the proposed development will adopt local authority stormwater quality assessment.

### 6.3 Local Authority Assessment

As compliance with the SPP objectives has been shown not to be required, an assessment has been undertaken to determine whether the development proposal necessitates compliance with City of Gold Coast (CoGC) objectives. The following trigger questions are used to determine whether CoGC compliance is required.

Table 6.2: City of Gold Coast Trigger Questions

| Trigger Question                                                                                                              | Development Response |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Greater than 850m <sup>2</sup> of land and results in an increased number of allotments                                       | No                   |
| 3 or more dwellings (attached or detached)                                                                                    | Yes                  |
| Includes newly constructed road (previously unformed road) exceeding 30m in total length                                      | No                   |
| Includes 200m <sup>2</sup> or more uncovered new or refurbished car park area including parking bays and circulation driveway | No                   |

As the above trigger questions are applicable to this development, the site **is** required to achieve the design objectives of the City of Gold Coast City Plan Policy.

#### 6.4 Water Quality Objectives and Methodology

Table 6.2 indicates that the proposed development triggers the requirement for the development to achieve the Water Quality Objectives outlined in the State Planning Policy. As such, the development must demonstrate the following minimum reductions in mean annual pollutant loads from the unmitigated development:

*Table 6.3-Water Quality Objectives*

| Pollutant                      | Minimum Reduction in Mean Load (%) |
|--------------------------------|------------------------------------|
| Total Suspended Solids (kg/yr) | 80                                 |
| Total Phosphorus (kg/yr)       | 60                                 |
| Total Nitrogen (kg/yr)         | 45                                 |
| Gross Pollutants (kg/yr)       | 90                                 |

To design and assess the achievement of these stormwater quality objectives the Model for Urban Stormwater Improvement Conceptualisation (MUSIC) Version 6.4.0 has been utilised to size suitable stormwater quality improvement devices as described in the following sections.

#### 6.5 Catchment Areas & Source Nodes

The catchment areas used in the MUSIC model for the site are limited to the net developable area of the development site and are outlined in Table 6.4 below:

*Table 6.4-Pollutant Export Parameters*

| Catchment                               | Area              |
|-----------------------------------------|-------------------|
| Roof Area (100% Impervious)             | 313m <sup>2</sup> |
| Landscape Area (100% Pervious)          | 18m <sup>2</sup>  |
| Hardstand Area (100% Impervious)        | 210m <sup>2</sup> |
| Driveway Area (100% Impervious)         | 128m <sup>2</sup> |
| Bypass Driveway Area (100% Impervious)  | 22m <sup>2</sup>  |
| Bypass Hardstand Area (100% Impervious) | 12m <sup>2</sup>  |

The hardstand bypass area has been excluded from the modelling due to the size of the catchment area which would have minimal affected on the development.

#### 6.6 Recorded Rainfall Data – Gold Coast South

Rainfall data for the site was taken from the City of Gold Coast (South) Elanora Treatment Plant (ID 40609) using the dates 1/1/1989 – 31/12/1998 in accordance with the Water By Design – MUSIC Modelling Guidelines (2010) using a 6-minute time step.

The mean average rainfall over the period is 1,436mm.

Rainfall over this time period was modelled using MUSIC to calculate the pollutant generation and treatment effectiveness of the proposed systems.



## 6.7 Rainfall-Runoff Parameters

Rainfall-runoff parameters were taken in accordance with the Water By Design – MUSIC Modelling Guidelines (2010) using *Urban Residential* land use, as tabulated in Table 6.5 below:

Table 6.5-MUSIC Modelling Parameters

| Parameter                           | Value |
|-------------------------------------|-------|
| Rainfall threshold (mm)             | 1.00  |
| Soil storage capacity (mm)          | 500   |
| Initial storage (%)                 | 10    |
| Field capacity (mm)                 | 200   |
| Infiltration capacity coefficient a | 211   |
| Infiltration capacity exponent b    | 5.0   |
| Initial depth (mm)                  | 50    |
| Daily recharge rate (%)             | 28    |
| Daily baseflow rate (%)             | 27    |
| Daily deep seepage rate             | 0     |

## 6.8 Pollutant Export Parameters

Pollutant export parameters were taken in accordance with Water By Design – MUSIC Modelling Guidelines (2010) using *Urban Residential* land use.

The split catchment approach was utilised for each surface type, with the input parameters shown in Table 6.6 below:

Table 6.6-Pollutant Export Parameters

| Flow Type | Surface Type | TSS log <sup>10</sup> values |      | TP log <sup>10</sup> values |      | TN log <sup>10</sup> values |      |
|-----------|--------------|------------------------------|------|-----------------------------|------|-----------------------------|------|
| Baseflow  | Roof         | N/A                          | N/A  | N/A                         | N/A  | N/A                         | N/A  |
|           | Roads        | 1.00                         | 0.34 | -0.97                       | 0.31 | 0.20                        | 0.20 |
|           | Ground       | 1.00                         | 0.34 | -0.97                       | 0.31 | 0.20                        | 0.20 |
| Stormflow | Roof         | 1.30                         | 0.39 | -0.89                       | 0.31 | 0.26                        | 0.23 |
|           | Roads        | 2.43                         | 0.39 | -0.30                       | 0.31 | 0.26                        | 0.23 |
|           | Ground       | 2.18                         | 0.39 | -0.47                       | 0.31 | 0.26                        | 0.23 |

## 6.9 Proposed Treatment Device Details

The proposed stormwater quality treatment train includes an Atlan Environmental cartridge system to treat stormwater flows from the development site. This system is to provide primary treatment of stormwater flows. Flows from majority of the development site are to be directed towards the treatment tank. The proposed development will contain a singular treatment chamber located towards the north boundary of the site, as shown on the engineering drawing attached within Appendix B.

### Proprietary Treatment Device (Atlan Environmental Products)

The Atlan treatment train is a compact implementation of multiple stormwater treatment elements. It is comprised of Atlan Stormsack gully pit inserts which act as a pre-treatment device and AtlanFilter cartridge filters which provide primary treatment for the site. The Atlan treatment train is typically designed to provide stormwater treatment in ultra-urban environment by meeting water quality standard whilst increasing yield and hence cost effectiveness for developers.

ATLAN StormSack filtration solutions are water quality devices that are installed within stormwater inlet pits to capture contaminants close to the surface for ease of maintenance. ATLAN StormSack filtration offers a decentralised approach to stormwater treatment which assists in achieving site water quality goals.

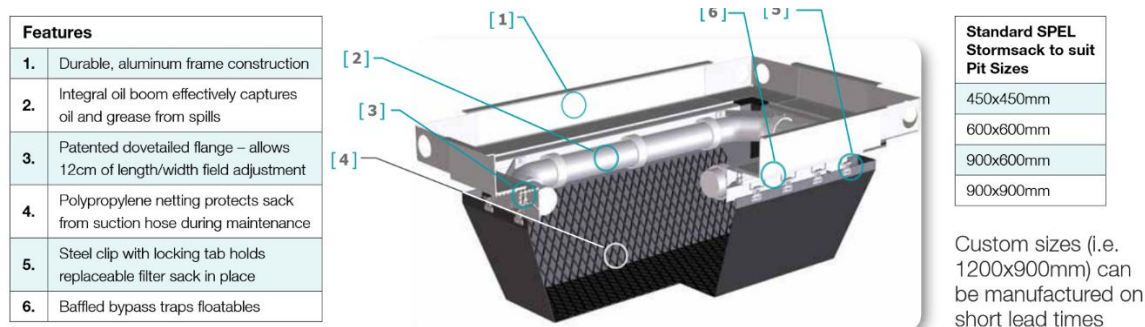


Figure 6.1: ATLAN Stormsack Gully Insert Pre-Treatment Filters

The AtlanFilter cartridge system provides a significantly greater surface contact area to footprint ratio than other filters. With a flow rate of 3.00L/s per cartridge and underground installation, the AtlanFilter provides excellent removal efficiency whilst maintaining site surface yield.

The high flow capacity and modular cartridge design means the AtlanFilter system can be effectively deployed in a variety of structures including manholes, precast vaults, or cast-in-place structures.



Figure 6.2: AtlanFilter Cartridge Filter

The Atlan Treatment Train system has proven compliance with the South-East Queensland Water by Design Music Modelling Guidelines requirements (2010) and has been accepted for use by the City of Gold Coast Council. The total requirement for treatment devices for the subject site is presented in Table 6.7 below:

Table 6.7 - Site Specific Atlan Treatment Train Requirements

| Device Type                        | Treatment Tank |
|------------------------------------|----------------|
| AtlanFilter Half Height Cartridges | 2              |
| Stormsack Inserts                  | 1              |

The AtlanFilter cartridge is to be located within an underground tank that is to be constructed at the near the eastern boundary of the site alongside the Atlan Stormsack Insert which is to be constructed upstream of the treatment chamber.



## 6.1 MUSIC Model Diagrams

A diagrammatic layout of the MUSIC model interface used to model the proposed development with the proposed treatment devices incorporated for the development is presented in Figure 6.3 below:

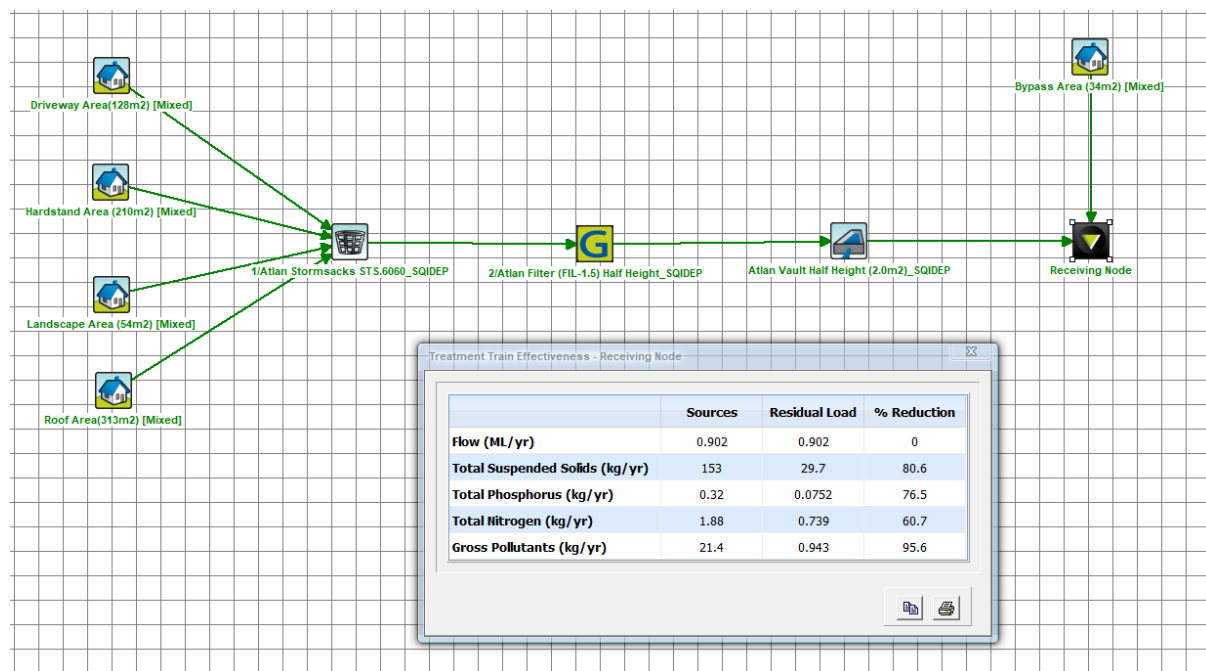


Figure 6-3: MUSIC Modelling Results

## 6.2 MUSIC Modelling Results

MUSIC was used to model the treatment train effectiveness in terms of the percentage of pollutants being removed from the system using the proposed treatment devices.

The results of the MUSIC modelling compared to the stated Water Quality Objectives (WQO's) are presented below:

Table 6.8: MUSIC Modelling Results

| Potential Pollutant            | Target WQO's | MUSIC Results |
|--------------------------------|--------------|---------------|
| Total Suspended Solids (kg/yr) | 80%          | 80.6%         |
| Total Phosphorus (kg/yr)       | 60%          | 76.5%         |
| Total Nitrogen (kg/yr)         | 45%          | 60.7%         |
| Gross Pollutants (kg/yr)       | 90%          | 95.6%         |

The results indicate that the proposed treatment devices are efficient in achieving the water quality objectives and exceeds the minimum required pollutant reduction targets.

## 7. Overland Flow Assessment

### 7.1 Hydrologic

Hydrologic modelling of the external catchments was undertaken using WBNM with Storm injector (1.4.2). Sub-catchments were delineated from Council's stormwater network database and ALS (conducted 2018), as illustrated on Appendix C1. Current best practices were adopted to estimate design storm runoff, including the following:

- 65% impervious value (IPWEAQ, 2017), with the exception of C13, C29 & C30;
- 1.3 catchment lag factor;
- BoM 2016 design rainfall depths; and
- ARR (Ball, et al., 2019) temporal patterns and burst losses (initial loss – median pre-burst).

All 1% AEP, 5-180 minute durations and temporal ensembles were simulated, with box plots included in Appendix C.

### 7.2 Hydraulic

Hydraulic modelling was undertaken using Tuflow (2025.1.1), as summarised below.

- Model extent illustrated in Appendix C2, with boundaries set a suitable distance away from the site to eliminate undue boundary effects;
- Topography is based on ALS data (conducted 2018), and site ground survey (August 2024), with a 1 m model grid. Break lines and grid modifications were applied to critical areas for accuracy, consistency and stability;
- Manning's 'n' roughness, as illustrated in Figure C3:
  - Road reserve 0.025;
  - Open space 0.035;
  - Dense vegetation 0.18 (0.2 m) to 0.08 (3.5 m) (variable depth); and
  - Lots 0.1.
- Structure information was extracted from Council's digital stormwater database and site survey, with engineering judgement applied to missing or conflicting information.
- Constant tailwater boundary and initial water level set to 3.1m AHD (5% AEP storm tide +0.8 m predicted seal level rise);
- Local inflows applied to applicable pits; and
- Map cut-off depth of 0.1 m.

### 7.3 Results

Figure C5 presents the predicted 1% AEP overland flow map, illustrating extensive flooding of Goodwin Park as a result of the adopted tailwater boundary condition. This backwater inundation extends into the lower elevation western boundary site areas. However, fill of the lower site areas inundated by storm tide will not affect local catchment storage.

The upstream Dutton Street inundation is generally contained to the street kerb, with the underlying stormwater network providing sufficient conveyance. No changes are proposed to the relevant trunk drainage. Hence the site development is not predicted to adversely impact overland flows external to the site. Furthermore, in the case of upstream stormwater network blockages, the proposed layout facilitates conveyance of severe storm overland flows via the proposed driveway to Goodwin Park.



## **8. Conceptual Erosion and Sediment Control Plan**

### **8.1 Introduction**

During construction, it shall be the responsibility of the Principal Contractor to ensure that the development complies with the relevant erosion and sediment control objectives, as outlined in the State Planning Policy and the City of Gold Coast Planning Scheme.

This section of the report provides suggested inclusions in an erosion and sediment control plan for the proposed development site. This plan includes recommendations for monitoring & reporting responsibilities and the construction of site-specific sedimentation and erosion control measures. Detailed drawings specifying the proposed erosion and sediment control measures are to be provided at the Operational Works stage of the development.

### **8.2 General Erosion and Sediment Control Measures**

It shall be the responsibility of the Principal Contractor to ensure the following erosion and sediment control measures are implemented on site:

- Clean stormwater runoff from upstream allotments is to be directed away from the development site using earth bunds or cut-off drains, as deemed appropriate by a suitable supervisor;
- The prevention of sediment runoff towards other allotments via the effective implementation of silt fences, sediment basins or other mitigation devices as deemed appropriate by a suitable supervisor;
- Sediment runoff shall also be prevented from entering the Council stormwater drainage system via the implementation of control measures such as gully pit sediment barriers;
- Erosion shakedown points shall be established at all vehicular access points, with shakedown areas regularly swept clean and sediment removed; and
- Erosion and sediment control measures are not to be removed from the development site until the site is completely rehabilitated and the surface is capable of resisting erosion.

### **8.3 Spoil and Stockpile Management Measures**

It shall be the responsibility of the Principal Contractor to ensure the following spoil and stockpile management measures are implemented on site:

- Where the stockpiling of spoil and excess earthworks is necessary on the development site, stockpiles shall be established as far away as possible from stormwater inlets and pipelines to reduce the likelihood of sediment runoff; and
- Stockpiles are to be established within a designated zone of fill material and should be surrounded with appropriate erosion and sediment control measures.

### **8.4 Training Requirements**

It shall be the responsibility of the Principal Contractor to ensure the following training protocols are implemented on the development site:

- Site induction courses shall include details of an environmental management reporting system, through which personnel will be able to report perceived erosion and sediment control issues on site.

## 9. Conclusion

This report has been prepared to support the lodgement of a development application involving the construction of a new residential development, comprising of five (5) townhouse type units with four (4) stories. The development is proposed to take place over the following parcel of land:

**Property Address:** 60 Dutton St, Coolangatta QLD 4225

**Property Description:** Lot 2 on RP86756

**Council:** City of Gold Coast

**Site Area:** 703m<sup>2</sup>

This report has addressed the management of stormwater quantity and quality to ensure that the proposed development complies with all necessary state and local government policies.

This report describes the design process for specifications of the following key infrastructure elements that will ensure the management of stormwater to achieve necessary standards.

- Stormwater detention for the proposed development,
  - The construction of an 8.0m<sup>2</sup> stormwater detention tank (refer to Section 5 of this report for outlet arrangements).
- Stormwater quality treatment for the proposed development,
  - The installation of a two (2) half height Atlan filters to be located within a 2.0m<sup>2</sup> treatment chamber to treat flows generated from the proposed development site.
  - The installation of one (1) Atlan Stormsack pit insert to be located within a pit upstream of the treatment tank to treat flows generated from the proposed development site.

This report has addressed the management of stormwater quantity and demonstrated that no additional works are required to ensure that the proposed development complies with all necessary state and local government policies.

It is the opinion of this report that the proposed stormwater quantity management systems are suitable for a development of this scale and potential impacts.





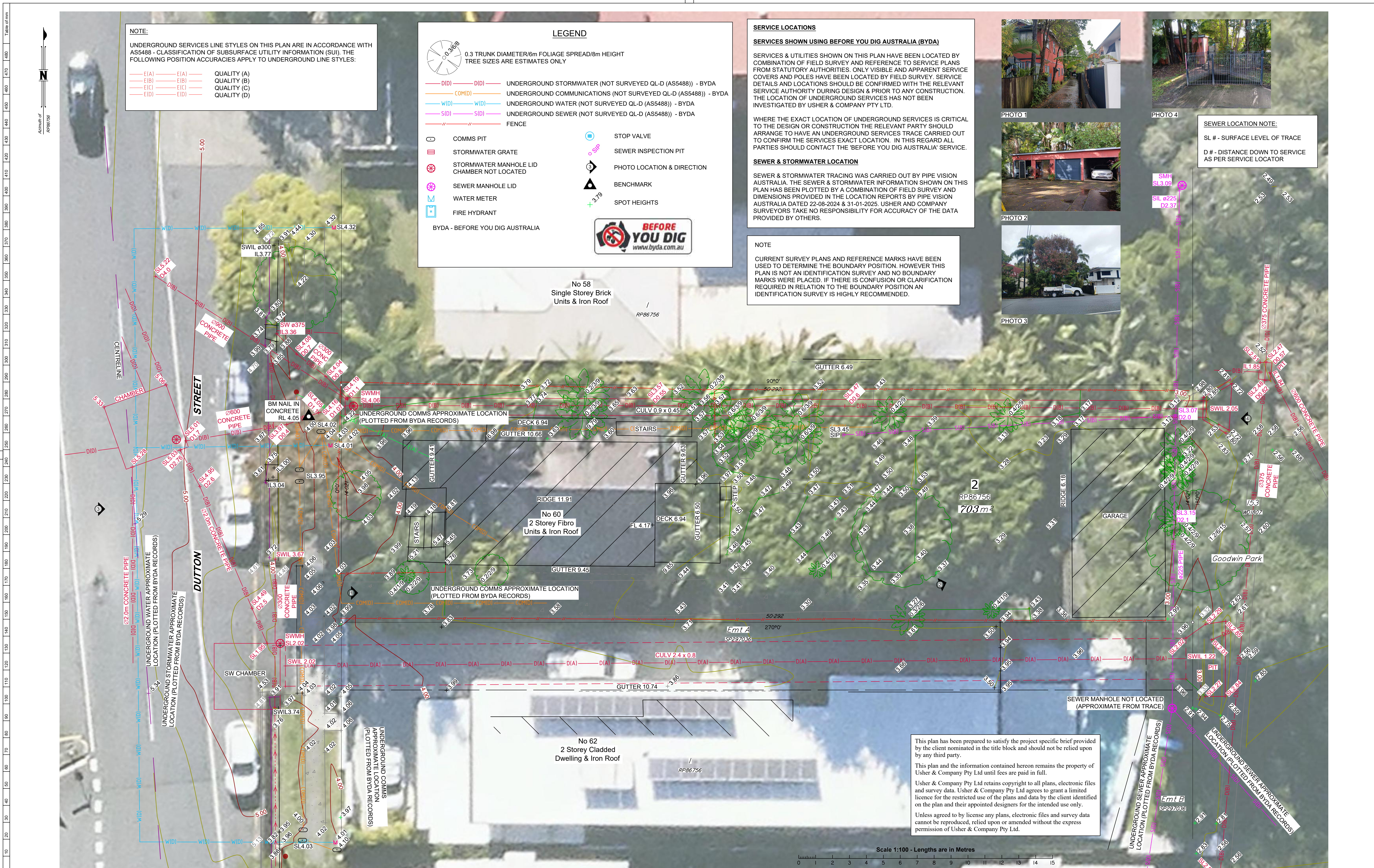
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# Appendix A

## Site Survey & Architectural Layout

---





| Amendments |            |                               |
|------------|------------|-------------------------------|
| ISSUE      | DATE       | DETAILS                       |
| A          | 20-01-2025 | Original Issue                |
| B          | 05-02-2025 | Additional Survey of Services |
|            |            |                               |
|            |            |                               |
|            |            |                               |
|            |            |                               |

|        |
|--------|
| TITLE: |
|--------|

PLAN OF SITE DETAIL AND LEVELS  
AT 60 DUTTON STREET  
BEING LOT 2 ON RP86756  
SHEET 1 OF 1

|      |  |
|------|--|
| LGA: |  |
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|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
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PSM95883  
RL 15.229 AHD  
CLASS D, ORDER 5th

REDUCTION RATIO:

1:100 (A1)

DATUM:

AUB

DATE OF SURVEY \_\_\_\_\_

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SUPERVISED BY:

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[illegible]

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THIS PLAN IS FOR THE EXCLUSIVE USE OF  
SOUTHERN CROSS  
PROPERTY HOLDINGS

PLAN REFERENCE

12202

# A1

ISSUE

B





LIGHTWAVE  
ARCHITECTURAL

PROPOSED  
DEVELOPMENT

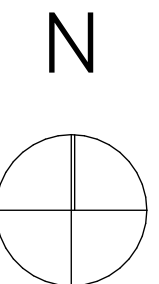
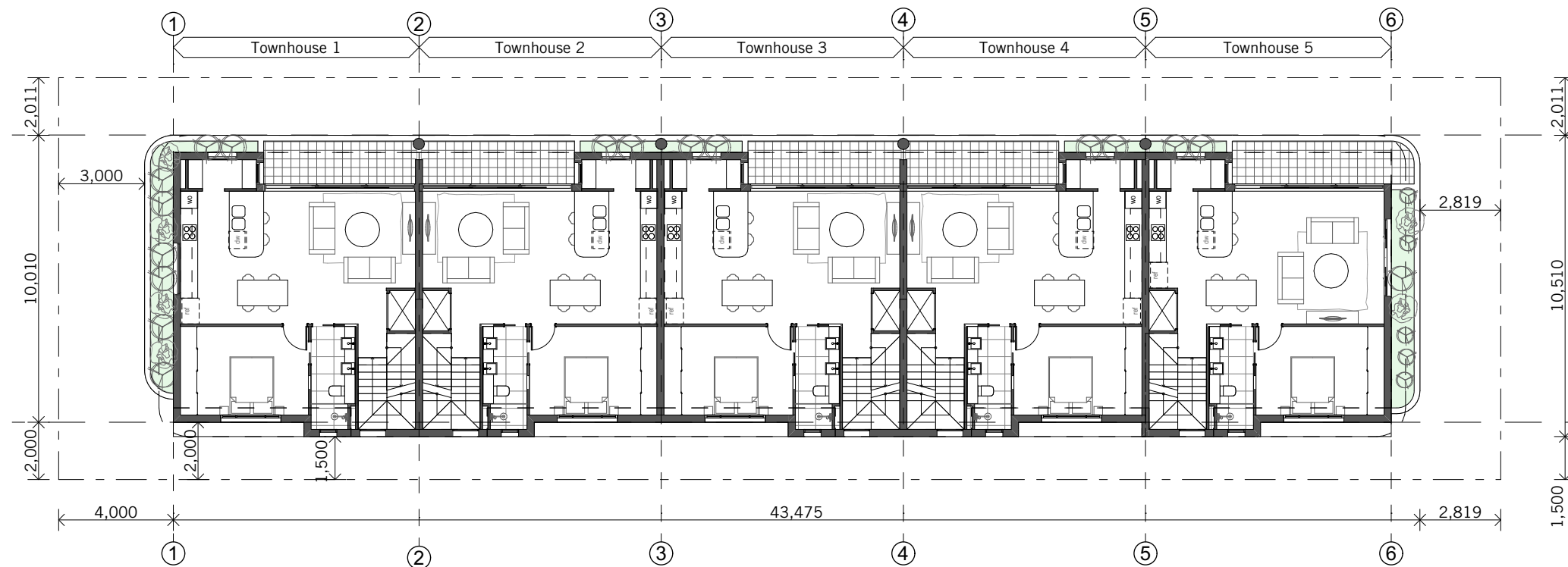
# 60 Dutton Street

60 Dutton Street Coolangatta QLD  
4285  
Lot 2 on RP86756



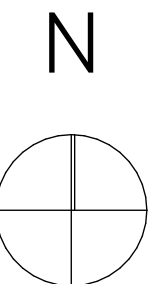
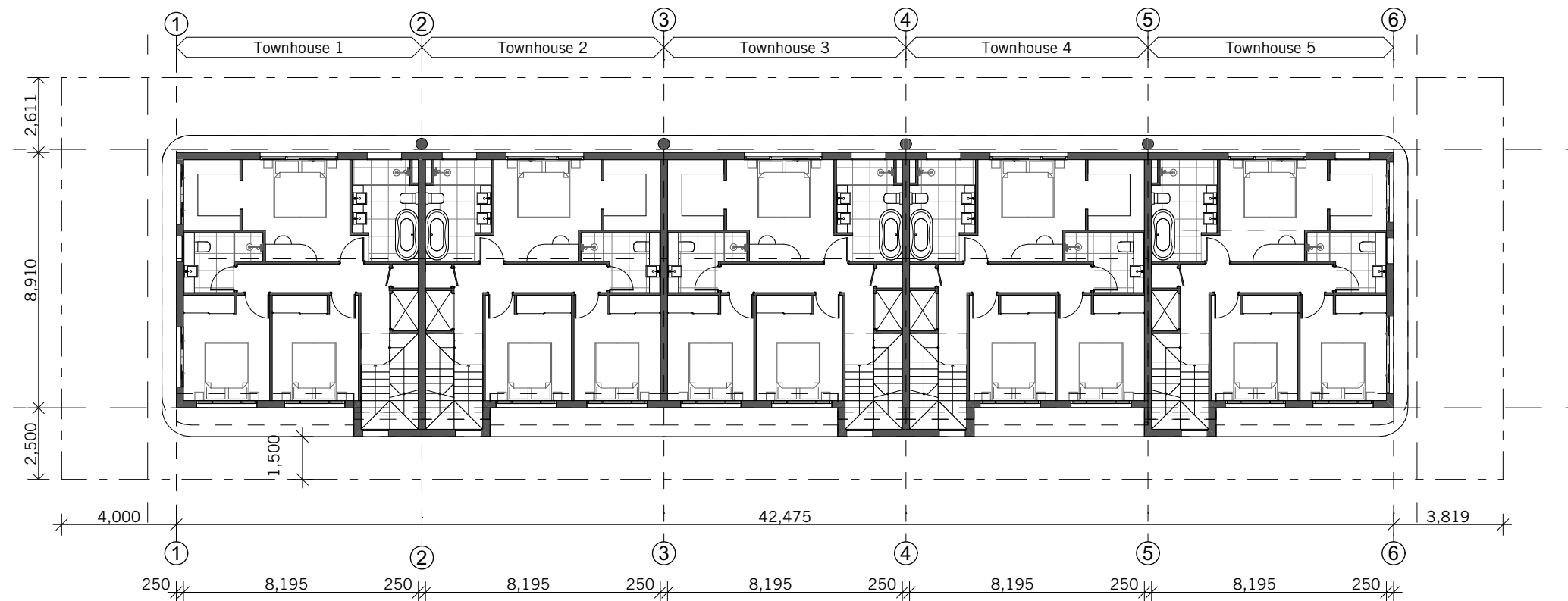






Level 2 Site Plan  
1:200 @ A3

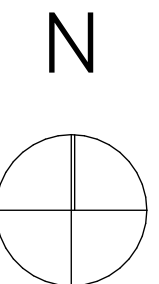
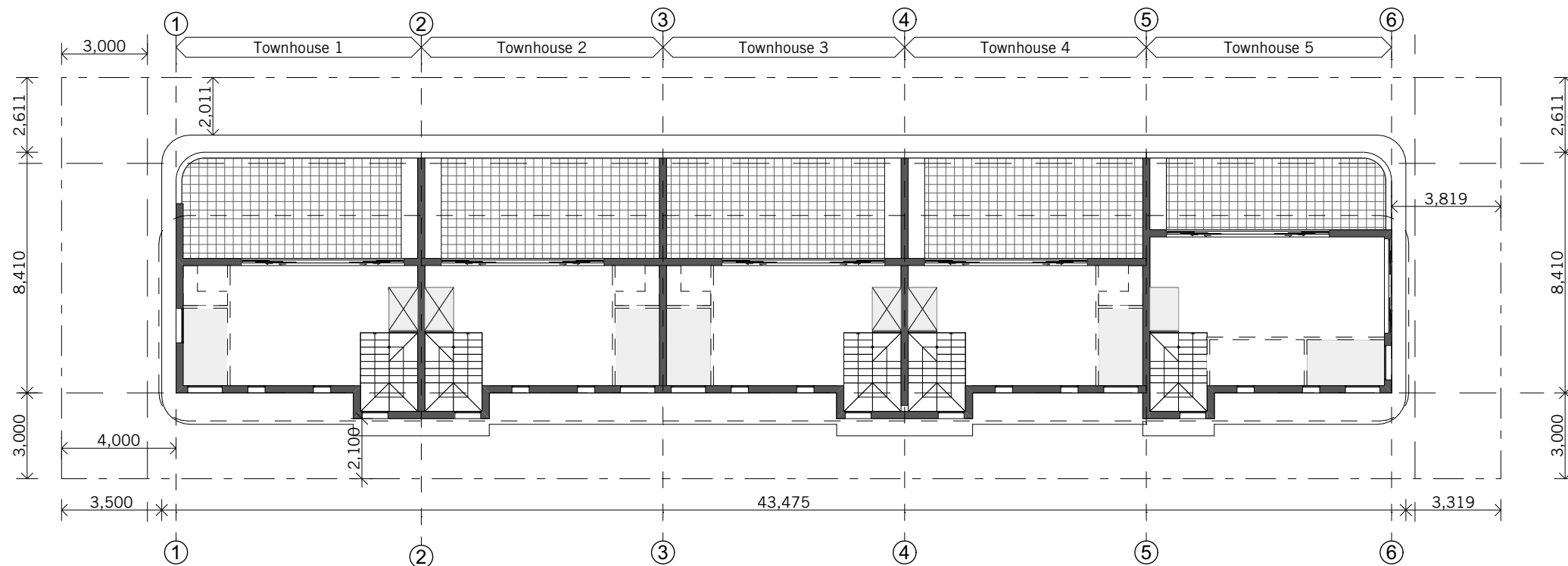




Levels 3 Site Plan  
1:200 @ A3







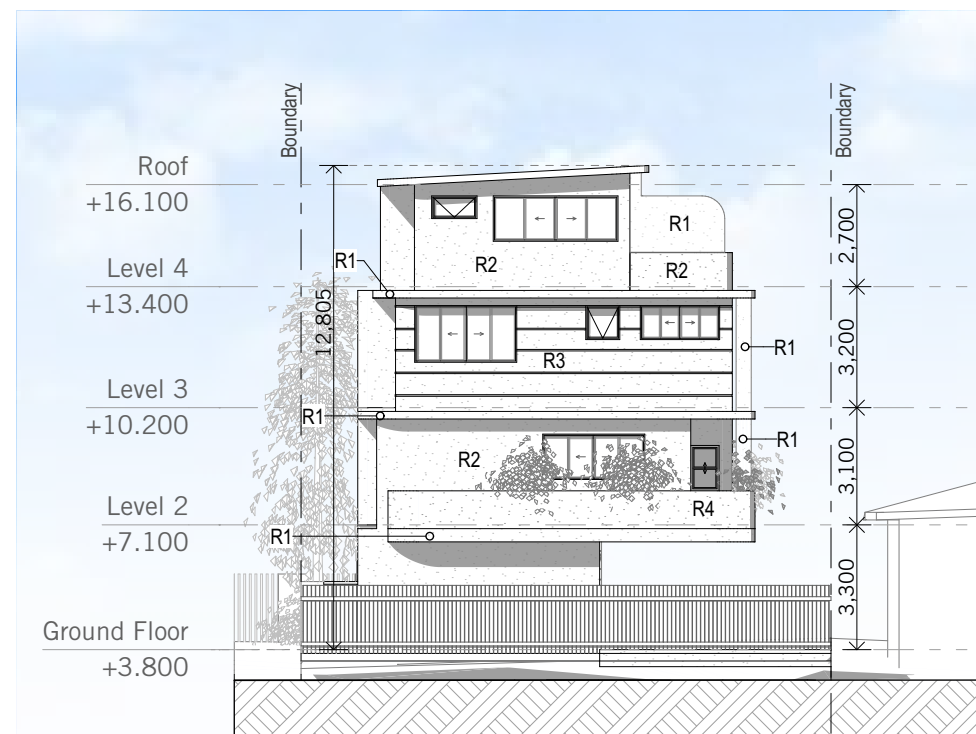
Level 4 Site Plan  
1:200 @ A3





#### Legend

- R-1 Rendered Finish (Vivid White)
- R-2 Rendered Finish (Natural White)
- R-3 Textured Rendered Finish  
with Ashlar Cut @600mm ctr (Vivid White)
- CT-2 Crazy Paver (Sandblasted Finish)
- Refer DA 20.05 Colour Pallet



East Elevation

East Elevation  
1:200, 1:100 @ A3

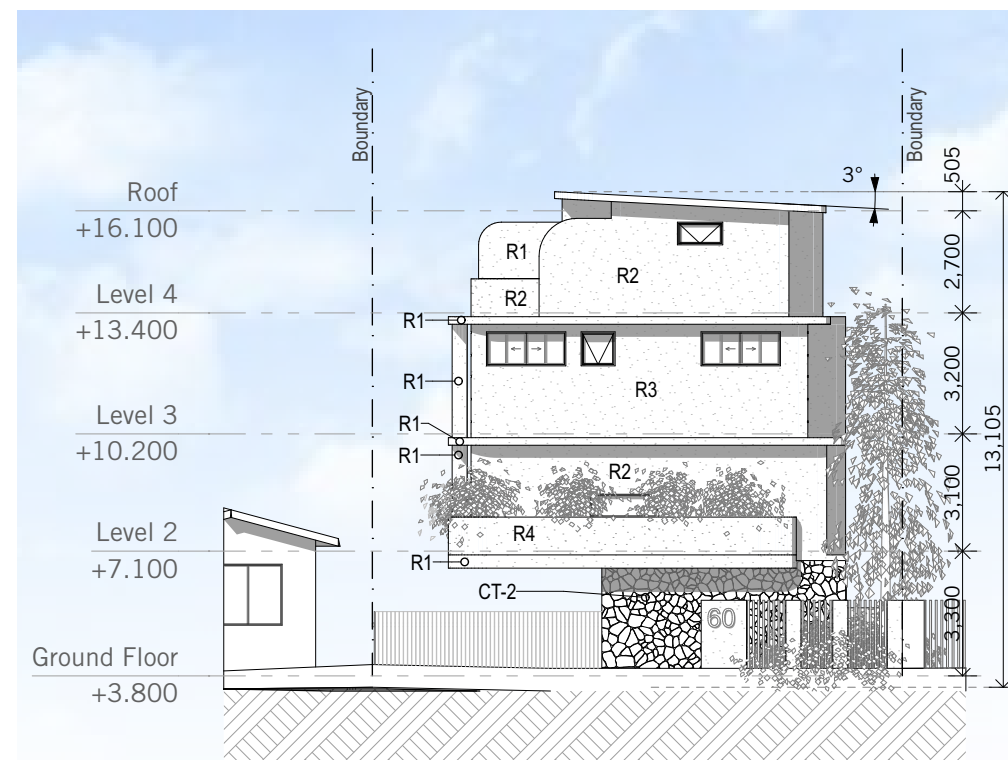






#### Legend

- R-1 Rendered Finish (Vivid White)
- R-2 Rendered Finish (Natural White)
- R-3 Textured Rendered Finish  
with Ashlar Cut @600mm ctr (Vivid White)
- CT-2 Crazy Paver (Sandblasted Finish)
- Refer DA 20.05 Colour Pallet

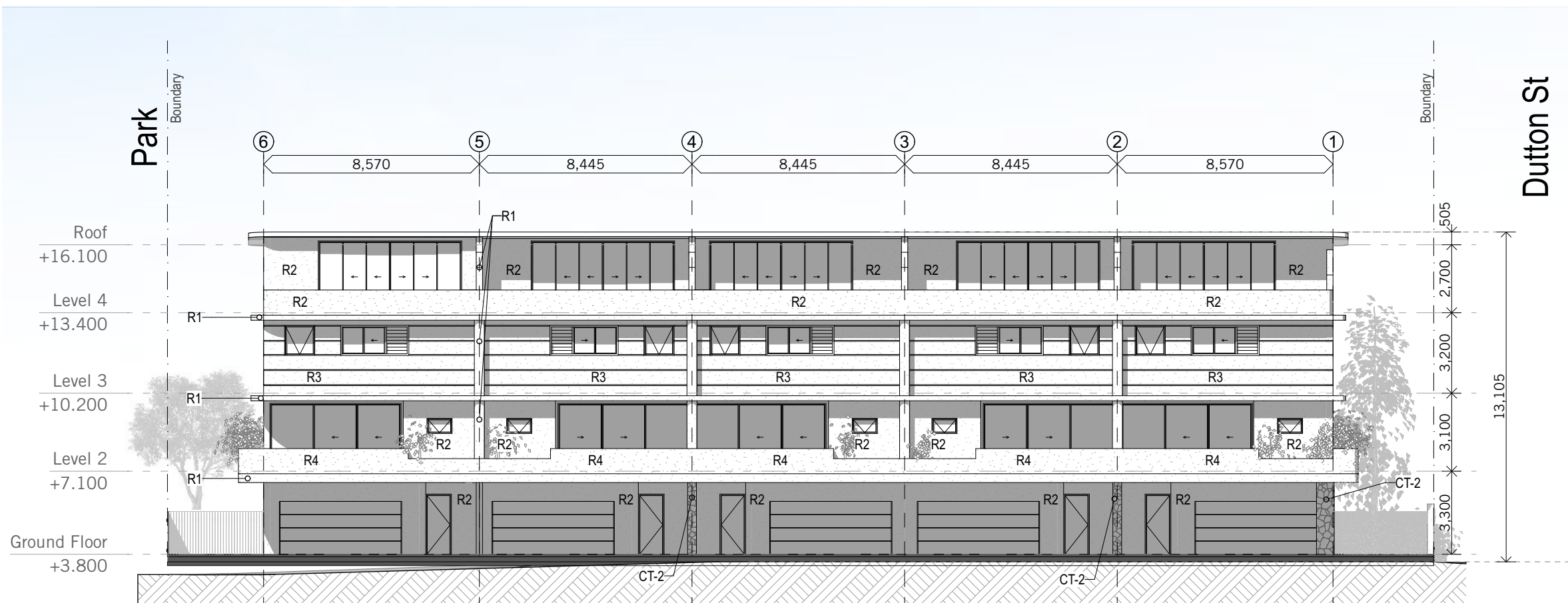


West Elevation

West Elevation

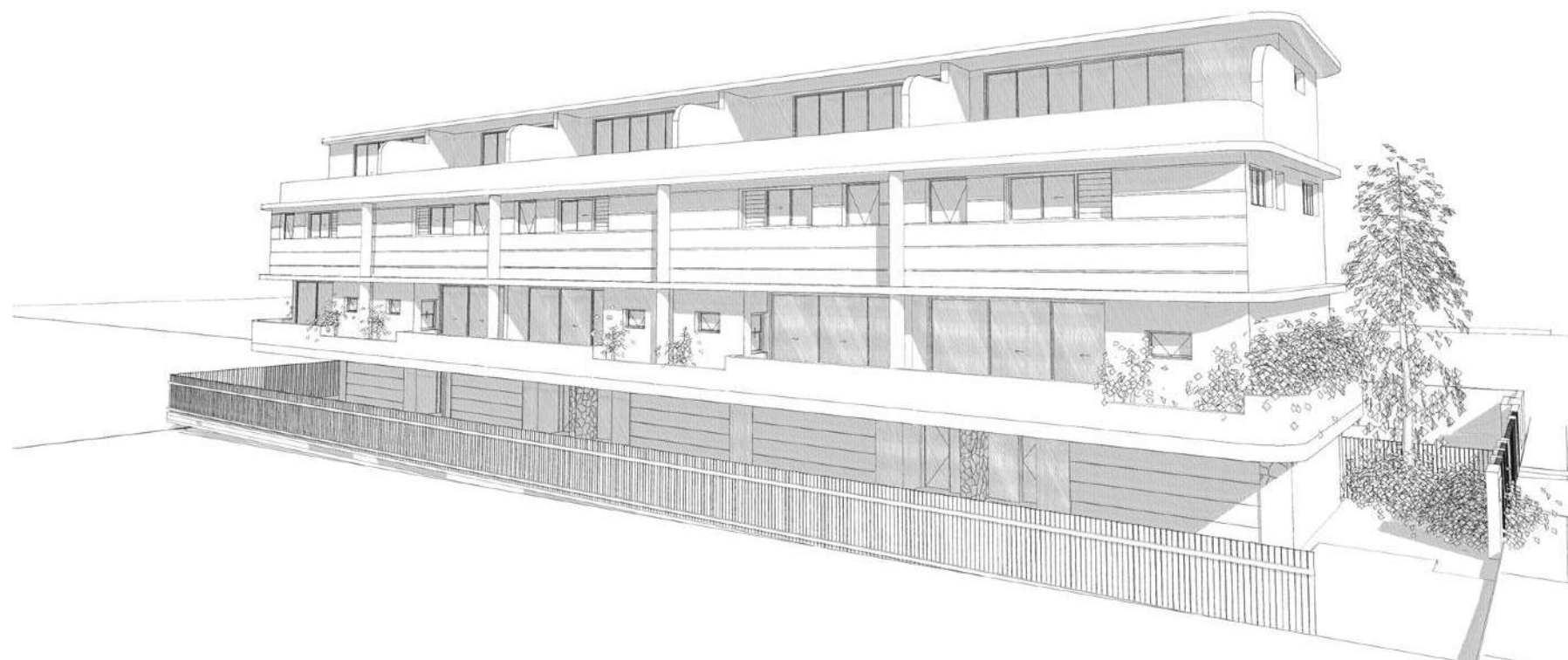
1:200, 1:100 @ A3





North Elevation

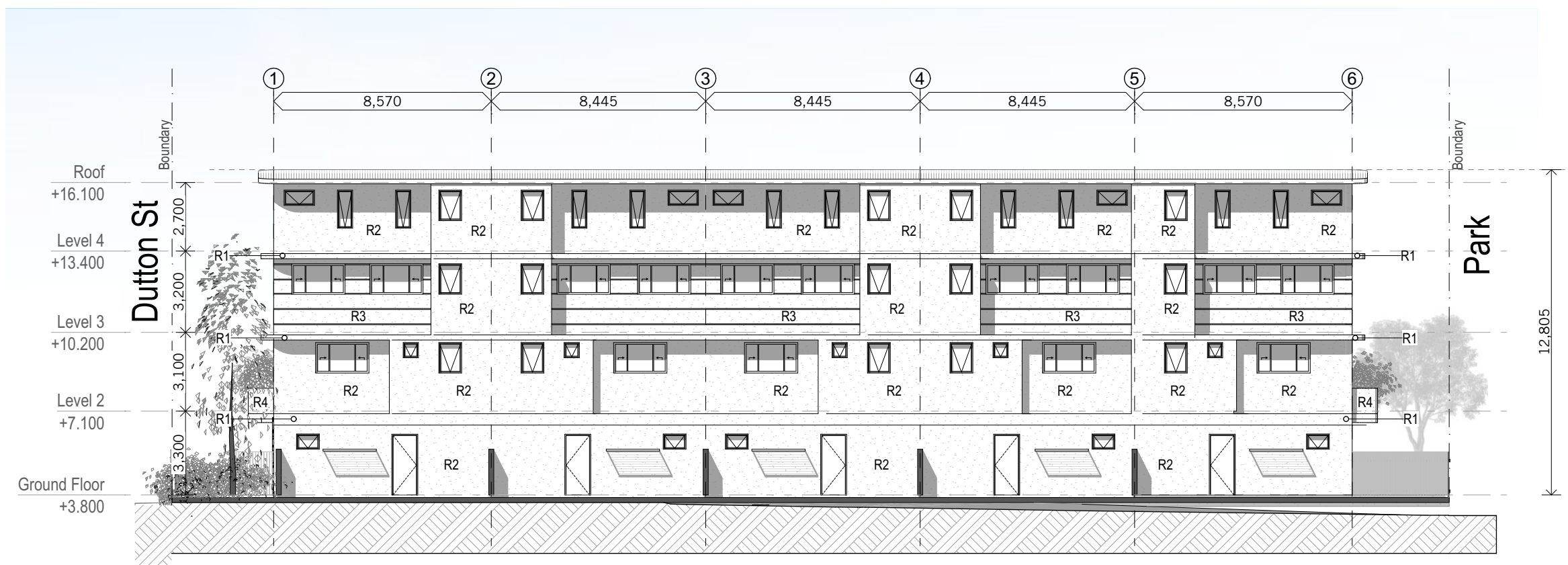
| Legend                       |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| R-1                          | Rendered Finish (Vivid White)                                        |
| R-2                          | Rendered Finish (Natural White)                                      |
| R-3                          | Textured Rendered Finish<br>with Ashlar Cut @600mm ctr (Vivid White) |
| CT-2                         | Crazy Paver (Sandblasted Finish)                                     |
| Refer DA 20.05 Colour Pallet |                                                                      |



North Elevation  
1:200, 1:100 @ A3







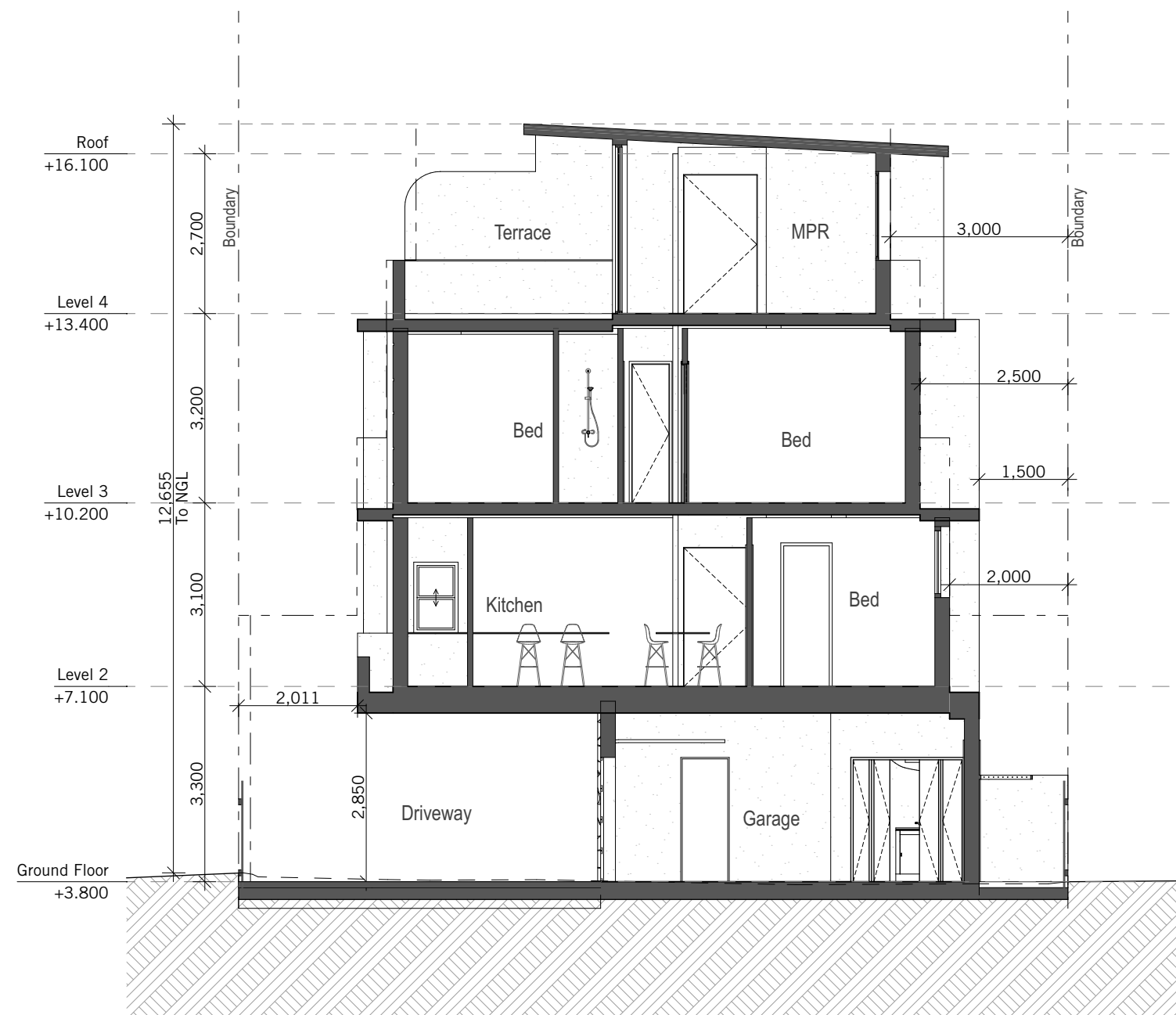
| Legend                       |                                                                      |
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| R-1                          | Rendered Finish (Vivid White)                                        |
| R-2                          | Rendered Finish (Natural White)                                      |
| R-3                          | Textured Rendered Finish<br>with Ashlar Cut @600mm ctr (Vivid White) |
| CT-2                         | Crazy Paver (Sandblasted Finish)                                     |
| Refer DA 20.05 Colour Pallet |                                                                      |

South Elevation



South Elevation  
1:200, 1:100 @ A3





Section A  
1:100 @ A3



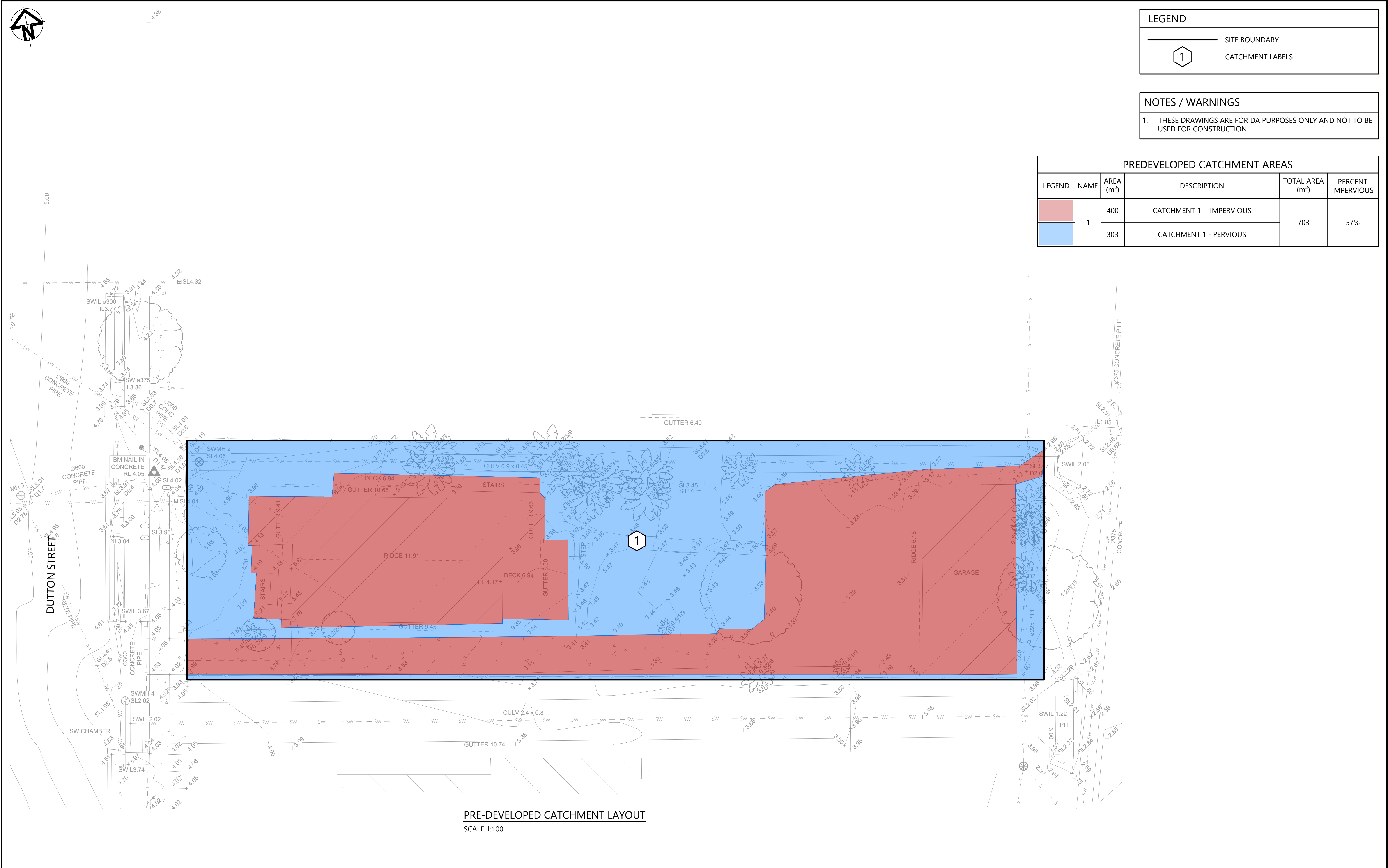


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# **Appendix B**

# **Engineering Drawings**

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**LEGEND**

SITE BOUNDARY

1

CATCHMENT LABELS

**NOTES / WARNINGS**

1. THESE DRAWINGS ARE FOR DA PURPOSES ONLY AND NOT TO BE USED FOR CONSTRUCTION

| PREDEVELOPED CATCHMENT AREAS |      |           |                          |                 |                    |
|------------------------------|------|-----------|--------------------------|-----------------|--------------------|
| LEGEND                       | NAME | AREA (m²) | DESCRIPTION              | TOTAL AREA (m²) | PERCENT IMPERVIOUS |
|                              | 1    | 400       | CATCHMENT 1 - IMPERVIOUS | 703             | 57%                |
|                              |      | 303       | CATCHMENT 1 - PERVIOUS   |                 |                    |

01

ORIGINAL ISSUE

MTB

30.04.25

ISSUE

DESCRIPTION

AUTHOR

DATE

STATUS

FOR DA APPROVAL  
NOT FOR CONSTRUCTION

R.P.E.Q No:

CERTIFIED

HEIGHT DATUM

AHD

DESIGNER

MTB

GRID

LOCAL

CHECKER

SC

ORIGINAL SIZE

A1

APPROVER

MB

SURVEYOR

USHER & COMPANY

Surveying & Land Development Consultants

25 Tallebudgera Creek Road  
Burleigh Heads, QLD, 4220  
07 5535 8346

SCALE

SCALE 1:100

1

0

1

2

3

4

5

1:100 (A1) - 1:200 (A3)

CLIENT

SOUTHERN CROSS  
PROPERTY HOLDINGS

ARCHITECT

LIGHTWAVE  
ARCHITECTURAL

1 Sands Street  
Tweed Heads, NSW 2485  
admin@lightwave.com.au

MICHAEL BALE  
& ASSOCIATES

Structural and Civil Engineering Consultancy

Level 3, 18 Orchid Avenue,  
Surfers Paradise  
PO BOX 1715, Surfers Paradise 4217  
Ph: 07 5538 0431  
mail@michaelbale.com.au

PROJECT TITLE:

60 DUTTON STREET  
COOLANGATTA

DRAWING TITLE:

PRE-DEVELOPED  
CATCHMENT  
LAYOUT PLAN

NOTES:

THESE DRAWINGS REMAIN THE PROPERTY OF MICHAEL BALE & ASSOCIATES PTY LTD. AND MUST NOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION. THESE DRAWINGS HAVE BEEN PREPARED FOR EXCLUSIVE USE BY OUR CLIENT. NO RESPONSIBILITY IS TAKEN FOR ANY THIRD PARTY THAT RELIES UPON OR USES THIS INFORMATION. THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS NOTED OR INSTRUCTED OTHERWISE BY MICHAEL BALE & ASSOCIATES. EXISTING SERVICES ARE SHOWN FOR INFORMATION ONLY AND NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THIS INFORMATION. ALL EXISTING SERVICES IN THE VICINITY OF THE SITE SHALL BE LOCATED BY CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.

DRAWING No.

PROJECT No.

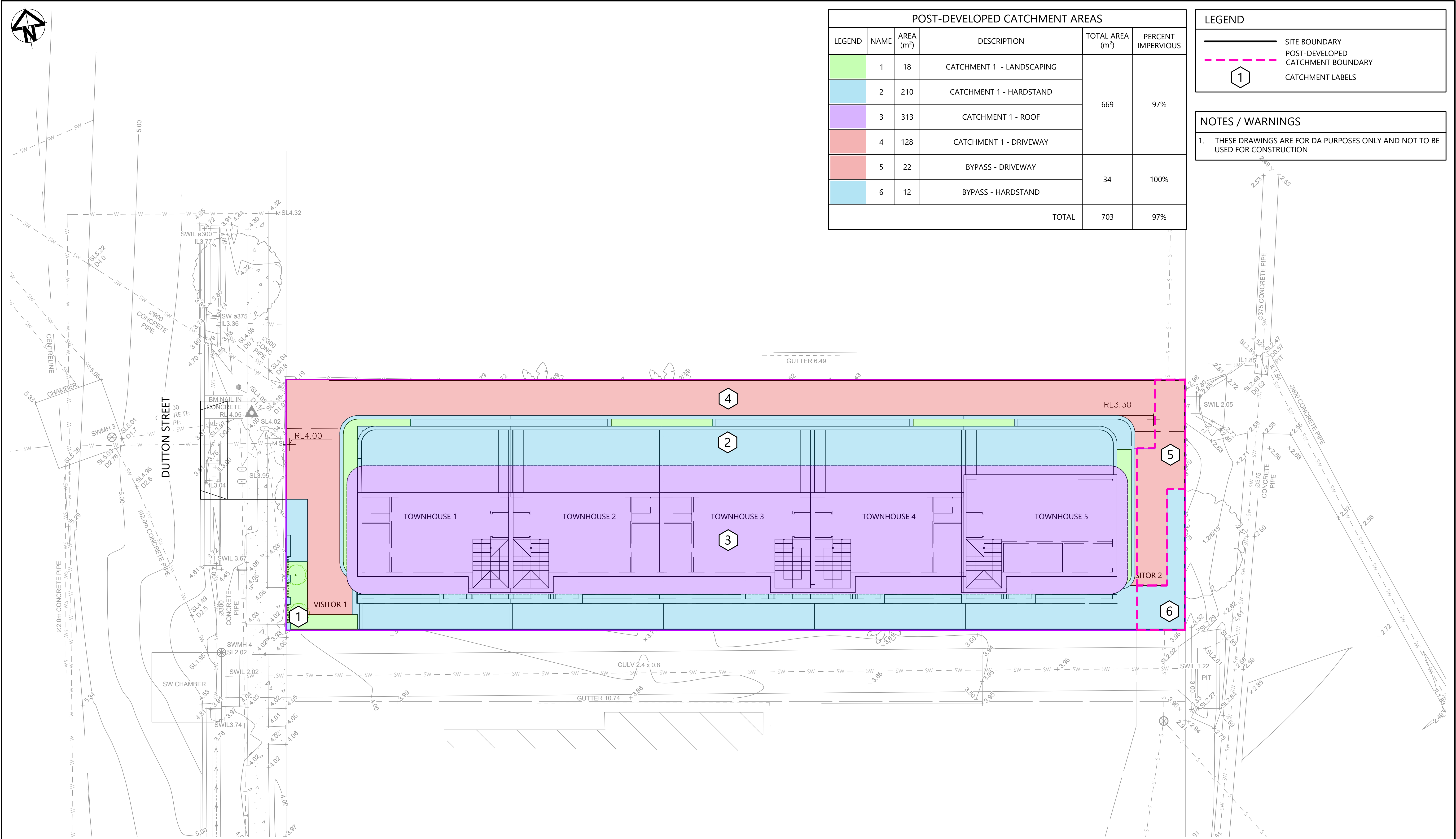
REVISION

DA01

G24095

- 01





| POST-DEVELOPED CATCHMENT AREAS |      |           |                           |                 |                    |
|--------------------------------|------|-----------|---------------------------|-----------------|--------------------|
| LEGEND                         | NAME | AREA (m²) | DESCRIPTION               | TOTAL AREA (m²) | PERCENT IMPERVIOUS |
|                                | 1    | 18        | CATCHMENT 1 - LANDSCAPING | 669             | 97%                |
|                                | 2    | 210       | CATCHMENT 1 - HARDSTAND   |                 |                    |
|                                | 3    | 313       | CATCHMENT 1 - ROOF        |                 |                    |
|                                | 4    | 128       | CATCHMENT 1 - DRIVEWAY    | 34              | 100%               |
|                                | 5    | 22        | BYPASS - DRIVEWAY         |                 |                    |
|                                | 6    | 12        | BYPASS - HARDSTAND        |                 |                    |
| TOTAL                          |      |           |                           | 703             | 97%                |

| LEGEND |                                   |
|--------|-----------------------------------|
|        | SITE BOUNDARY                     |
|        | POST-DEVELOPED CATCHMENT BOUNDARY |
|        | CATCHMENT LABELS                  |

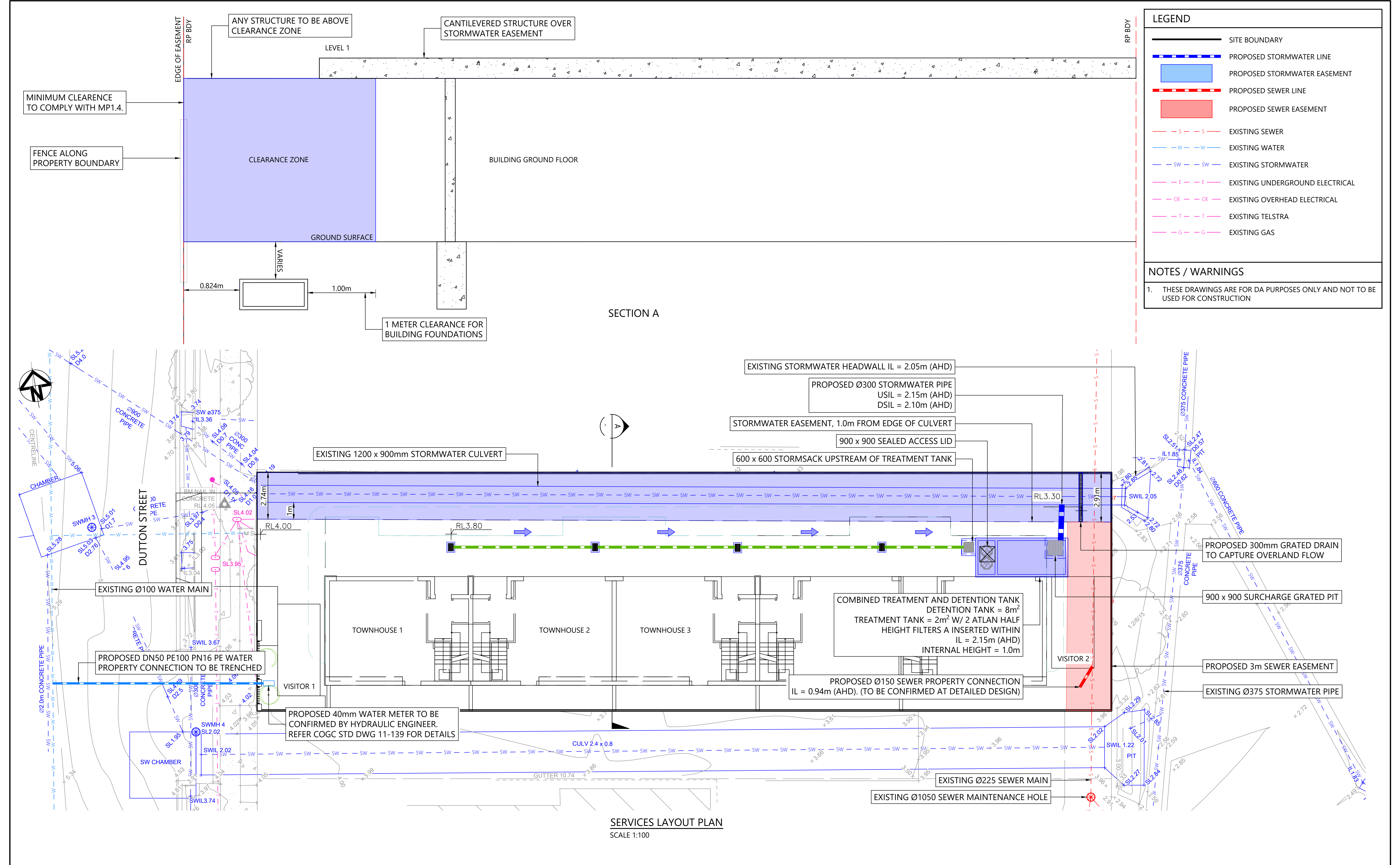
| NOTES / WARNINGS |                                                                             |
|------------------|-----------------------------------------------------------------------------|
| 1.               | THESE DRAWINGS ARE FOR DA PURPOSES ONLY AND NOT TO BE USED FOR CONSTRUCTION |

POST-DEVELOPED CATCHMENT LAYOUT  
SCALE 1:100

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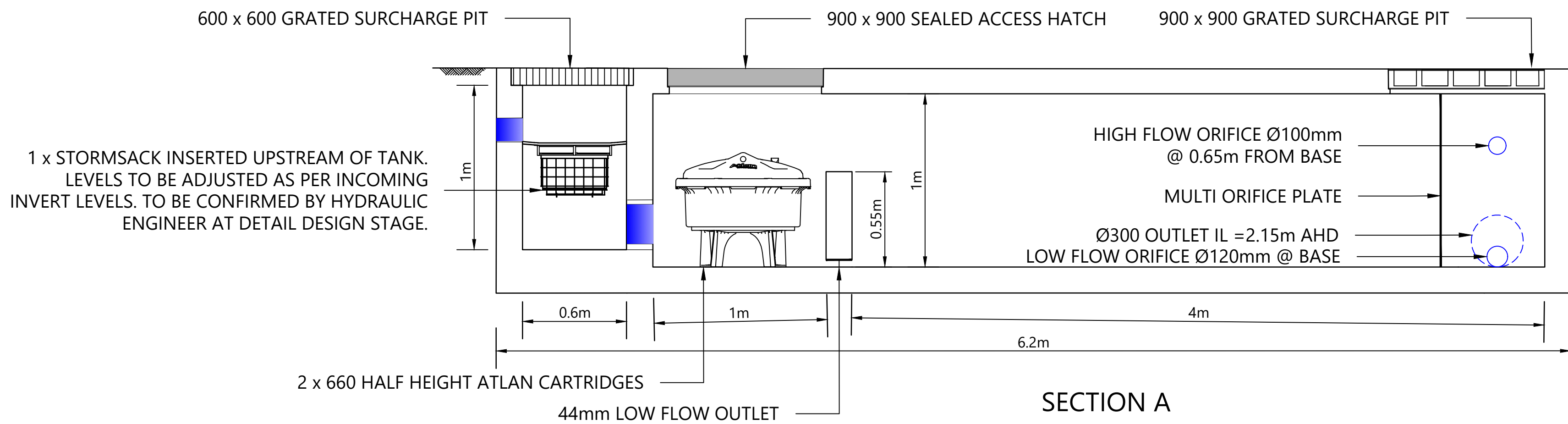
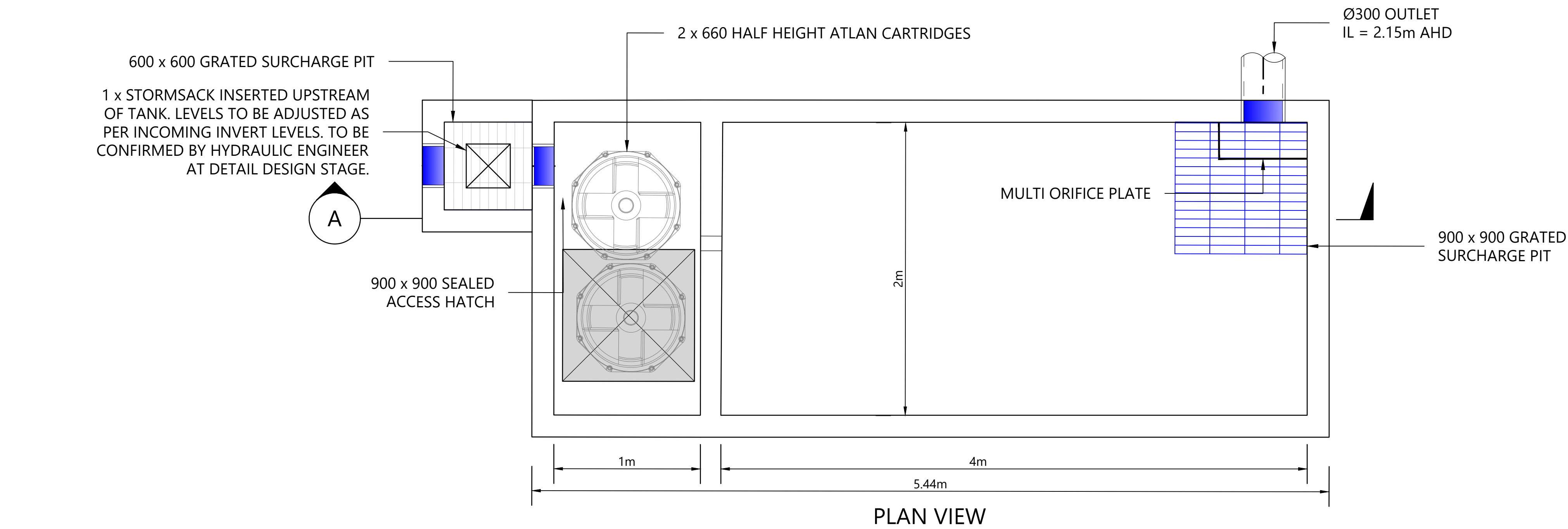
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STORMWATER TANK PLAN  
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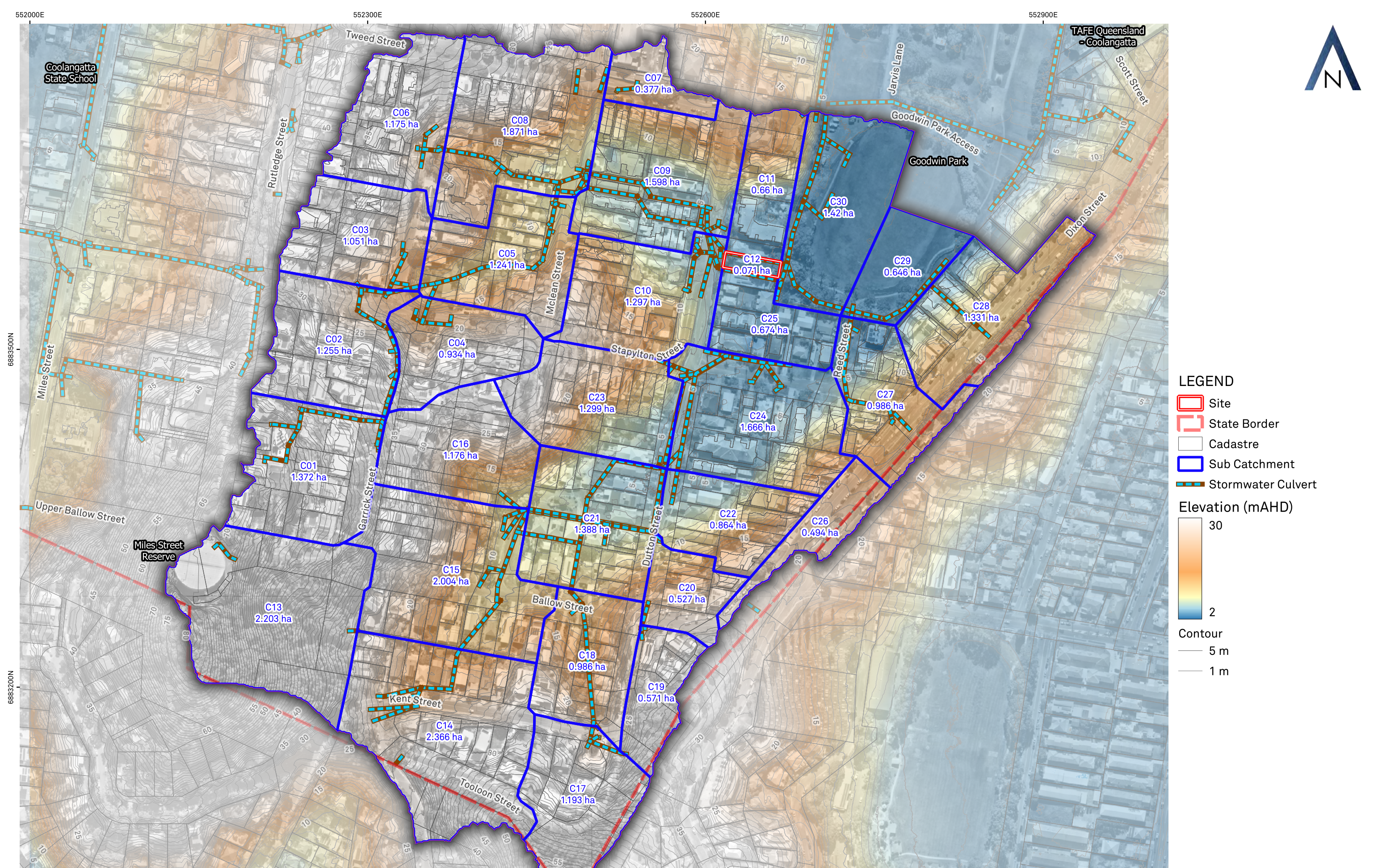
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# Appendix C

## Overland Flow Assessment

---





**FIGURE C1**  
**HYDROLOGIC MODEL LAYOUT**  
60 Dutton St, Coolangatta  
Overland Flow Assessment  
Southern Cross Property Holdings





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**DATE**  
02 August 2025  
**REFERENCE**  
J25030

**SIZE**  
A3  
**SCALE**  
1:1,200



**FIGURE C2**  
**HYDRAULIC MODEL LAYOUT**  
60 Dutton St, Coolangatta  
Overland Flow Assessment  
Southern Cross Property Holdings





#### LEGEND

- Site
- State Border
- Cadastre
- Model Features
  - Extent
- Roughness Class
  - Road Reserve
  - Open Space
  - Dense Vegetation
  - Lots





**LEGEND**

- Site
- Cadastre
- Model Features
  - Inlet
  - Manhole
  - Culvert
  - Connector
  - Grid Modification
  - Invert Forcing
- Elevation (mAHd)
  - 7.5
  - 2.5
- Contour
  - 1 m
  - 0.25 m

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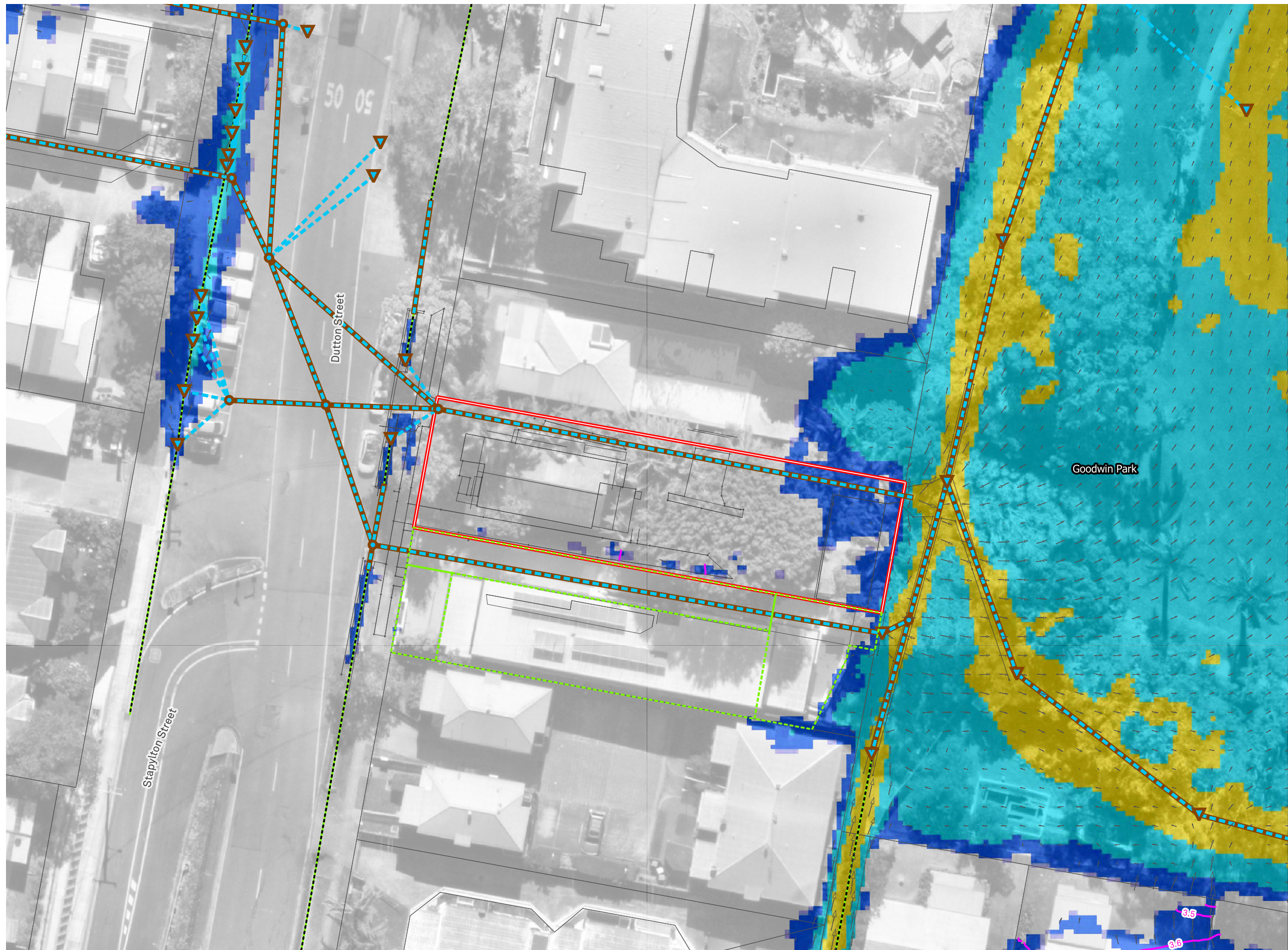
**SIZE**  
A3

**SCALE**  
1:400

0 6 12 18 24 30 m

**FIGURE C4**  
**EXISTING SITE LAYOUT**  
60 Dutton St, Coolangatta  
Overland Flow Assessment  
Southern Cross Property Holdings



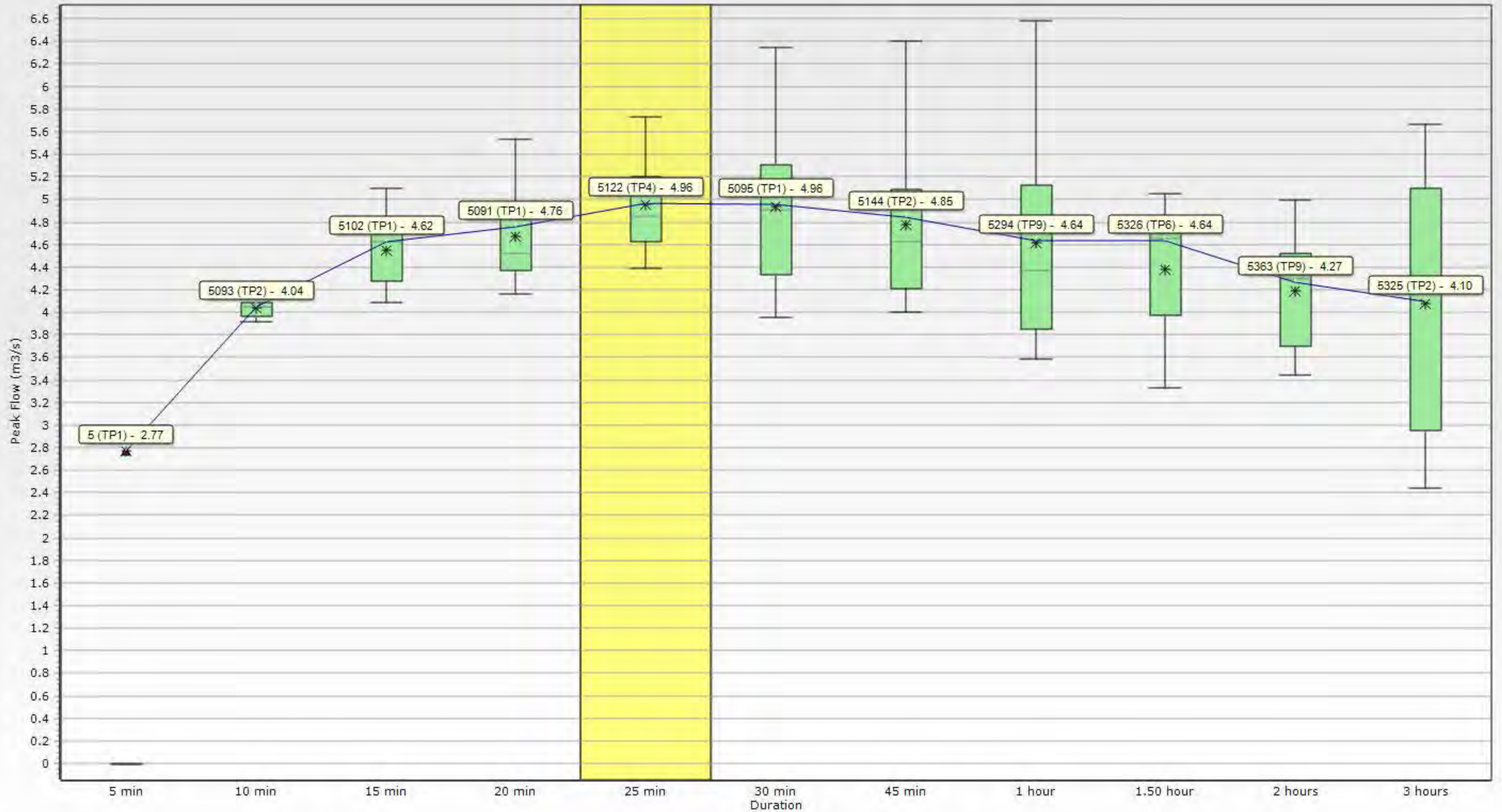


- LEGEND**
- Site
  - Cadastre
  - Model Features**
  - Culvert
  - Inlet
  - Manhole
  - Connector
  - Invert Forcing
  - Grid Modification
  - Flow Depth (m)**
  - 0.1 - 0.3
  - 0.3 - 0.6
  - 0.6 - 1.2
  - 1.2 - 2.0
  - Above 2.0
  - Flow Level Contour (mAHD)



Peak Flow (m3/s) Duration Analysis (1% AEP - C12)

☐ ● All Values ☒ \* Mean Values ☒ — Adopted Temporal Pattern





# TRAFFIC AND TRANSPORT ASSESSMENT



---

60 Dutton Street, Coolangatta t

# Traffic and Transport Assessment

## Proposed Multiple Dwelling Development

60 Dutton Street, Coolangatta



3 June 2026

**Prepared for:**

Southern Cross Property Holdings Pty Ltd

Report: 51080-RP01-A

**GELEON**



## Document control information

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**Prepared for:** Southern Cross Property Holdings Pty Ltd  
**Prepared by:** Alex Williams  
**Reviewed by:** James Goodman  
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## Revision history

### Authorised for issue

| Version | Issue Date  | Details        | Approved for Issue         |
|---------|-------------|----------------|----------------------------|
| A       | 3 June 2026 | Original Issue | James Goodman   RPEQ 29448 |

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| Appendix B | Swept path assessment      |
| Appendix C | Development code responses |

# 1 Introduction

## 1.1 Project background

Geleon has been engaged by Southern Cross Property Holdings Pty Ltd (the **Applicant**) to prepare a Traffic and Transport Assessment (**TTA**) to accompany a Development Application (**DA**) to establish a townhouse development (multiple dwelling land use) at 60 Dutton Street, Coolangatta (Lot 2 on RP86756) (**Figure 1.1**). The existing 703m<sup>2</sup> site is currently approved for a multiple dwelling land use with nine units (*COM/2025/157*).

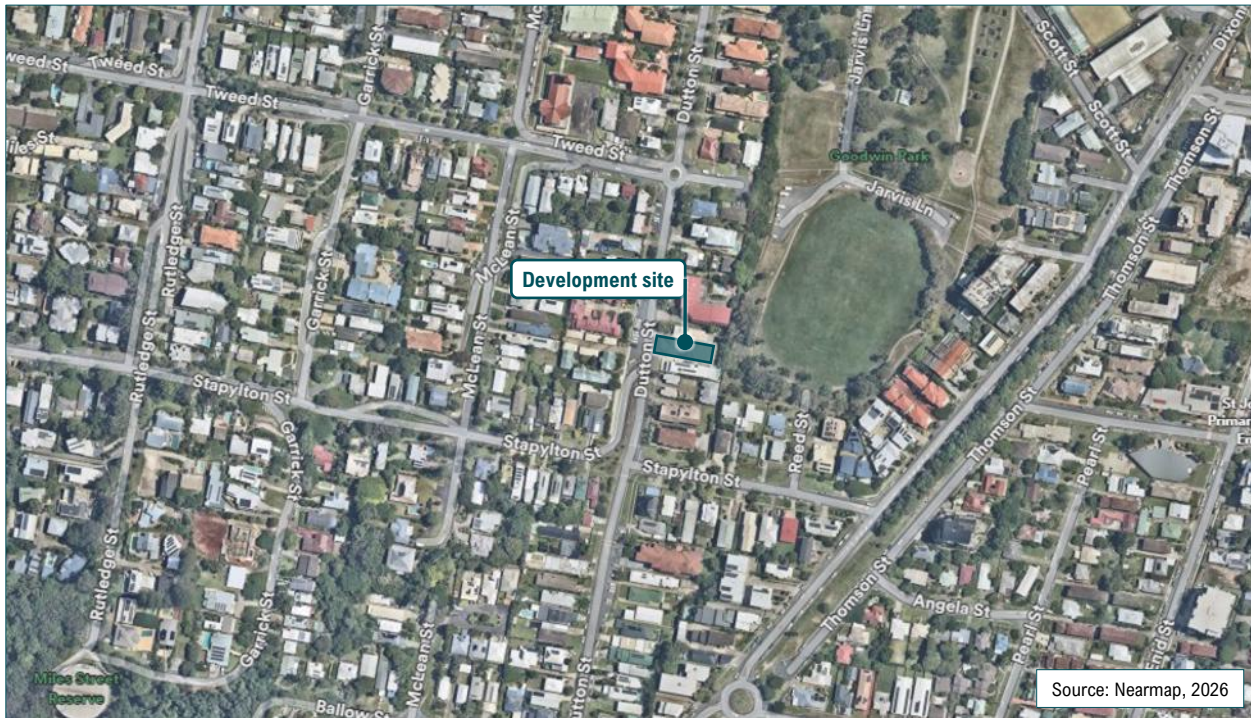


Figure 1.1 Locality Plan

## 1.2 Development details

The development proposes a multiple dwelling land use to establish townhouses on the subject site. Access to and from the development is proposed via a single two-lane, two-way vehicle crossing on Dutton Street that will provide access to the ground floor level car park.

Details of the approved and proposed development are provided in **Table 1.2**, with the ground floor shown in **Figure 1.2**. Relevant plans of development have been included in **Appendix A**.

Table 1.2 Development details

| Land use             | 4-bedroom units |
|----------------------|-----------------|
| Approved development |                 |
| Multiple dwelling    | 7               |
| Proposed development |                 |
| Multiple dwelling    | 5               |
| Net change           | -2              |





The proposed development site falls under the jurisdiction of the City of Gold Coast (Council) and is governed by the *City Plan – Version 13 (December 2025)*.

The scope of the assessment presented in this report is as follows:

- assess public transport, pedestrian and cycling accessibility to / from site and on-site
- calculate the anticipated development traffic generation and its impact to the external road network
- assess proposed car and bicycle parking supply against relevant Council requirements
- review design of on-site traffic and transport operations against Australian Standards and Council's requirements
- assess site access and access configuration against Council requirements
- assess servicing arrangements, and
- complete Council development code templates to accompany the development application.

## 2 Existing conditions

### 2.1 Road network

The hierarchy of the road network surrounding the development is shown in **Table 2.1**.

Table 2.1 Surrounding road network

| Road name        | Jurisdiction | No. of lanes (two-way) | Posted speed limit | Median divided | Hierarchy  | Footpath / bicycle lanes                   | On-street parking              |
|------------------|--------------|------------------------|--------------------|----------------|------------|--------------------------------------------|--------------------------------|
| Dutton Street    | Council      | 2                      | 50km/h             | No             | Local road | Footpaths on both sides / no bicycle lanes | Formal parking on both sides   |
| Stapylton Street | Council      | 2                      | 50km/h             | No             | Local road | Generally, no footpaths or bicycle lanes   | Informal parking on both sides |

### 2.2 Public transport

The development is not located within walking distance (<400m) of any public transport stops. The closest stop, known as 'Coolangatta Central, Coolangatta' (Stop ID: 300218) is located approximately 700m walking distance north of the development site (**Figure 2.2**). This stop is serviced by four public bus routes, known as '600', '700', '760' and '768', which have an average frequency of 15-30 minutes.

Locations of all stops within proximity to the development site are provided in **Figure 2.2**.



Figure 2.2 Public transport in proximity to site



## 2.3 Active transport

The subject site is serviced by a reasonable network of pedestrian footpaths as shown in **Figure 2.3.1** which illustrates the active transport network surrounding the proposed development.

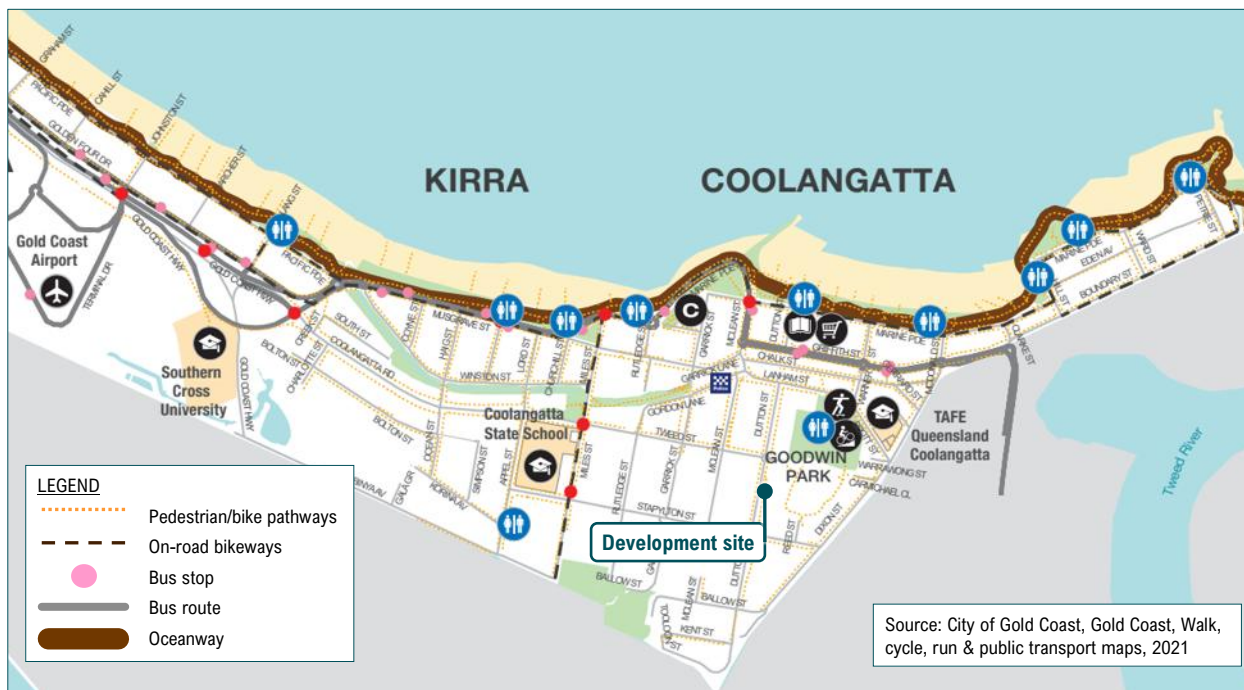


Figure 2.3.1 Active transport network

The subject site is in proximity to Tweed Street which forms part of TMR's *Southeast Queensland Principal Cycle Network*. The principal cycle network surrounding the proposed development and route priorities are illustrated in **Figure 2.3.2** and **Figure 2.3.3**.

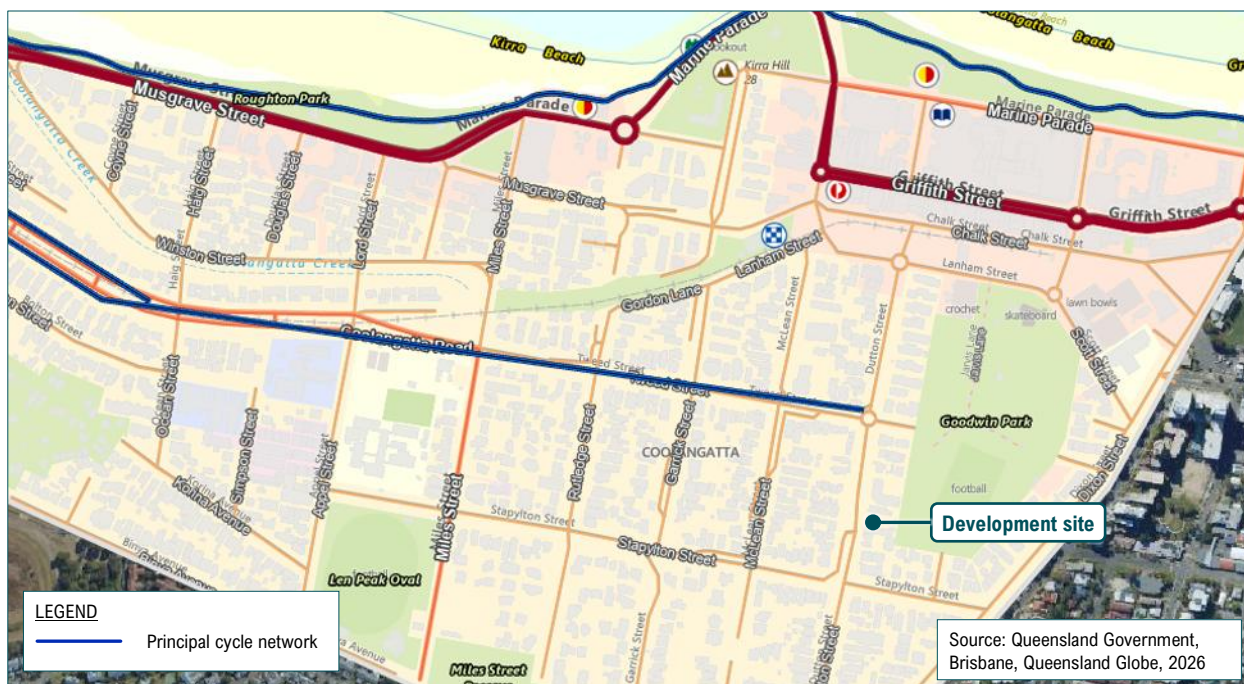


Figure 2.3.2 Principal cycle network



Figure 2.3.3 Priority route map



### 3 Traffic impact assessment

#### 3.1 Traffic generation

The development site currently has approval for a multiple dwelling land use. Accordingly, traffic generation from the approved use has been taken into consideration when determining the net change in trip generation for the proposed development.

A review of Council's *City Plan – 9.4.13 Transport Code (V13)* has not identified traffic generation rates for the proposed land use. In lieu of Council specific traffic generation rates, and to provide a comparable assessment to the approved use, traffic generation rates for both the proposed and approved development have been based on the rates for a multiple dwelling land use as provided in the *RMS Guide to Traffic Generating Developments – Technical Direction (TDT 2013/04)*, consistent with the Geleon Traffic and Transport Assessment Report: 50952-RP01-A dated 21 May 2025 (Geleon TTA).

A summary of the expected development traffic generation is shown in **Table 3.1**.

Table 3.1 Development traffic generation

| Land use                       | Car spaces | Peak period | Traffic generation rate  | Traffic generation volume |
|--------------------------------|------------|-------------|--------------------------|---------------------------|
| Approved development           |            |             |                          |                           |
| Multiple dwelling              | 23         | AM Peak     | 0.35 trips per car space | 9                         |
|                                |            | PM Peak     | 0.26 trips per car space | 6                         |
| Proposed development           |            |             |                          |                           |
| Multiple dwelling              | 12         | AM Peak     | 0.35 trips per car space | 5                         |
|                                |            | PM Peak     | 0.26 trips per car space | 4                         |
| Total (net) AM peak hour trips |            |             |                          | -4                        |
| Total (net) PM peak hour trips |            |             |                          | -2                        |

#### 3.2 Traffic impacts

A comparison between the approved development and proposed development with respect to development generated traffic shows that the proposed development generates less trips than the approved development. Therefore, the proposed development will have a reduced impact on the surrounding road network when compared to the traffic impacts already assessed in the previous development application assessment.

Therefore, no further traffic analysis or road safety investigations are required as part of this report.

## 4 Parking assessment

### 4.1 Car requirements

The car parking requirements for the development have been calculated in accordance with the land use requirements stipulated in Council's *City Plan – Transport code (V13)* as shown in **Table 4.1**.

Table 4.1 Car parking requirement

| Land use                      | 4-bedroom units | Car parking rate                              | Parking requirement |
|-------------------------------|-----------------|-----------------------------------------------|---------------------|
| Multiple dwelling             | 5               | 2 spaces per 4-bedroom unit                   | 10                  |
|                               |                 | Where 5 to 6 dwellings, 2 for visitor parking | 2                   |
| Total car parking requirement |                 |                                               | 12                  |

The total car parking requirement for the development is 12 car parking spaces comprising 10 resident spaces and two visitor spaces. In accordance with the *National Construction Code (NCC) – Volume 1* for a Class 2 building, there is no requirement to provide parking spaces for People with Disabilities (PWD).

### 4.2 Car parking provision

The development provides a total 12 car parking spaces comprising 10 resident spaces and two visitor spaces and therefore complies with Council requirements. Car parking design for the proposed development has been undertaken generally in accordance with Australian Standard *AS2890.1 – Parking Facilities* and Council's *City Plan – Transport code (V13)*. **Table 4.2** shows design parameters for each user class in accordance with *AS2890.1*.

Table 4.2 Car parking design requirements

| User class | Parking bay width (m) | Parking bay length (m) | Aisle width (m) | Use      |
|------------|-----------------------|------------------------|-----------------|----------|
| 1A         | 2.4                   | 5.4                    | 5.8             | Resident |
| 2          | 2.5                   | 5.4                    | 5.8             | Visitor  |

Other specific design parameters relating to the parking and internal road layout design have been developed generally in accordance with Australian Standard *AS2890.1 – Parking Facilities* and Council's *City Plan – Transport code (V13)*.

Consistent with the existing approval over the development site (COM/2025/157), no turnaround bay is provided for the visitor car parks.

### 4.3 Bicycle parking

Bicycle parking for the development has been calculated in accordance with the land use requirements stipulated in Council's *City Plan – Transport code (V13)* as shown in **Table 4.3**. There are no requirements for end of trip facilities for the proposed land use.

Table 4.3 Bicycle parking requirement

| Land use          | Quantity | Class              | Bicycle parking rate | Parking requirement |
|-------------------|----------|--------------------|----------------------|---------------------|
| Multiple dwelling | 5 Units  | Resident - class 2 | 1 per dwelling       | 5                   |
|                   |          | Visitor - class 3  | 1 per 12 dwellings   | 1                   |
| Total             |          |                    |                      | 6                   |



## 4.4 Bicycle parking provision

The development provides a total of six bicycle parking spaces comprising of five resident spaces (Class 2) and one visitor spaces (Class 3) and therefore complies with Council requirements. The visitor space (Class 3) is provided adjacent to the visitor car parking space, and the resident spaces (Class 2) will be provided within the individual units (**Appendix A**).

Bicycle parking will be appropriately signed in accordance with relevant Council requirements. Bicycle parking for the proposed development has been designed to comply with AS2890.3 as shown in **Table 4.4**.

Table 4.4 Bicycle parking design requirements

| User                                                                                  | Security level | Min. parking envelope width (m) | Min. parking envelope length (m) | Min. aisle width (m) |
|---------------------------------------------------------------------------------------|----------------|---------------------------------|----------------------------------|----------------------|
| Resident                                                                              | B <sup>1</sup> | 0.5                             | 1.8                              | 1.5                  |
| Visitor                                                                               | C <sup>1</sup> | 0.5                             | 1.8                              | 1.5                  |
| <i>Notes:</i>                                                                         |                |                                 |                                  |                      |
| 1. Parking requirements based on a horizontal parking layout with floor mounted rails |                |                                 |                                  |                      |

## 5 Access and servicing assessment

### 5.1 Access arrangement

The development proposes access from Dutton Street via a single two-lane, two-way 5.5m wide vehicle crossing with internal wings, designed generally in accordance with IPWEA *Standard Drawing RSD-100 – Vehicle crossings, residential driveways* positioned on the western side of the development site. While typically a ‘General Wide’ vehicle crossing designed in accordance with IPWEA *Standard Drawing RSD-102 – Vehicle crossings, heavy duty* is provided for a multiple dwelling development, to address other development outcomes including offsets to neighbouring properties, kerbside collection for wheelie bins and minimising the loss of on-street parking, a residential driveway is proposed. However, despite the alternate vehicle crossing, the functionality of the vehicle crossing is maintained (**Appendix B**).

The proposed vehicle crossing will result in a loss of one formally marked on-street car parking bay and the relocation of another, equating to a net loss of one on-street car parking bay.

### 5.2 Sight distance assessment

A sight distance assessment has been undertaken in accordance with *AS2890.1* to ensure that the location of the vehicle crossing provides sufficient sight distance for road users to find a safe gap in oncoming traffic when leaving the site. The minimum gap sight distance requirements (**MGSD**) for a vehicle departing the site are provided in **Table 5.2**.

The required sight distance has been calculated based on a frontage road speed along Dutton Street of 50km/h. With respect to vehicles turning into Dutton Street from Stapylton Street, it is expected that vehicles would be travelling at no more than 30km/h while traversing the Dutton Street / Stapylton Street priority-controlled intersection.

Table 5.2 Sight distance requirements

| Frontage road                     | Vehicle speed assessed (km/h) | Sight distance requirement |
|-----------------------------------|-------------------------------|----------------------------|
| Dutton Street                     | 50km/h                        | 69m                        |
| Vehicles exiting Stapylton Street | 30km/h                        | 42m                        |

**Figure 5.2** shows the required sight distance and associated sight lines for vehicles travelling along Dutton Street to vehicles departing the development site, demonstrating compliance with specified requirements. The dimensions are measured along the road centre.

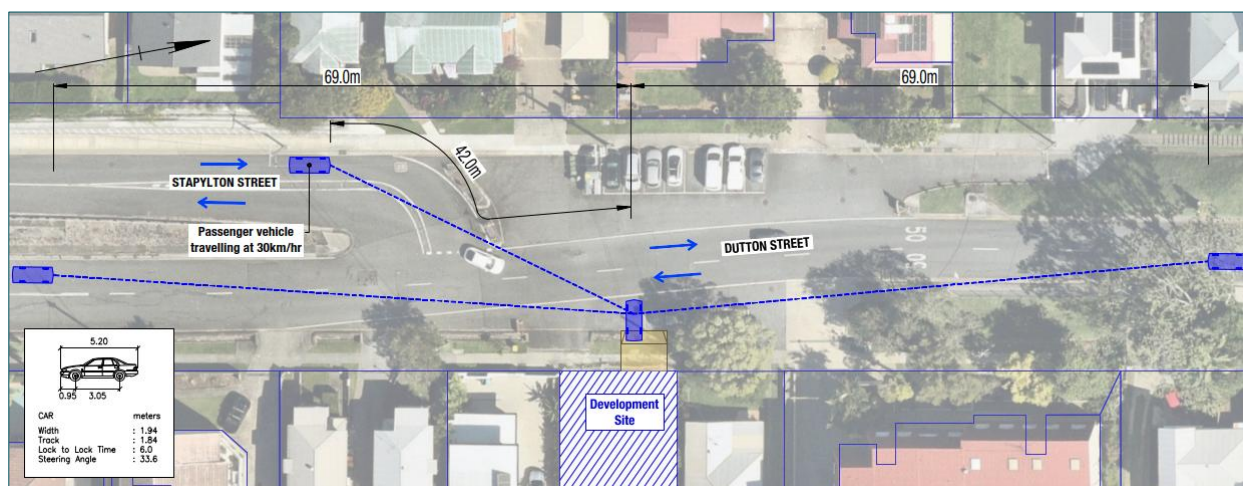


Figure 5.2 Sight distance assessment



## 5.3 Servicing

Council's *City Plan – Transport code (V13)* stipulates service vehicle requirements for the proposed development as shown in **Table 5.3**.

**Table 5.3** Service vehicle requirements

| Land use                                  | Service vehicle requirement      |
|-------------------------------------------|----------------------------------|
| Multiple dwelling (more than 3 dwellings) | Standing area for an MRV on-site |

Issues associated with providing a 4.5m vertical clearance for a MRV mean that an on-site standing area for an MRV cannot be accommodated. Therefore, compliance with AO3 and PO3 of the Transport Code cannot be achieved. However, the proposed development can comply with the overall outcomes, specifically OO2(e)(ii) which states “A road network is provided that ensures development impacts on amenity caused by traffic and parking is consistent with the communities reasonable expectations for the intended use” for the following reasons:

- for multiple dwelling units, groceries and large retail goods will typically be delivered by a van or SRV, while removalist activities will generally utilise a van, SRV or MRV. Therefore, provision has been made for a van on the ground floor level on the northern side of the driveway. Above the ground floor level driveway, a minimum 2.85m vertical clearance is achieved. A swept path assessment has been undertaken using AutoTURN software to demonstrate that a van, can reverse into the standing area from Dutton Street, stand in the servicing area, and exit the development site in a forward gear (**Appendix B**). The swept path assessment also demonstrates that B99 passenger vehicles can enter and exit the development site in a forward gear if a van is parked on the ground floor level
- it is known that removalist / delivery companies generally ask their customers at the time of quoting about on site and on-street parking restrictions and availability. Given the site constraints, it is expected that residents undertaking full moves will consult with removalist companies regarding the parking availability in the vicinity prior to moving and recommend that an alternative smaller removalist vehicle be used
- the frequency of vehicles attending the site to deliver goods and undertake maintenance could occur weekly, however the demand for larger removalist vehicles is based on how often residents move. A review of census data from 2011 identified that approximately 8.34% of Australian residents move each year. When applied to all five units this equates to approximately one movement every 29 months (assuming all residents in each dwelling move together). Therefore, the demand for large removalist vehicles will be low
- if in the rare occasion MRV servicing is required, this can be accommodated along Dutton Street however is likely to only be required once every 29 months. It is important to note that Council has recently approved an extensive list of multiple dwelling development's with MRV servicing on-street e.g. PDA/2024/8, MCU/2023/348, and
- provision of MRV servicing on street is consistent with the existing approval (COM/2025/157).

Based on the above justification, the proposed development has a servicing arrangement consistent with what the community has come to expect from a development of this type and nature in this area, achieving compliance with OO2(e)(ii) of Council's *City Plan – Transport Code (V13)*. Infrequent disruptions associated with full dwelling moves by large removalist vehicles and associated short-term impacts would not be of any significance that would create long lasting amenity issues considered unreasonable by the community.

## 6 Response to development codes

A detailed review of the proposed development against Council's *Driveways and vehicle crossings code (V13)* and *Transport code (V13)* is provided in **Appendix C**.

## 7 Conclusion

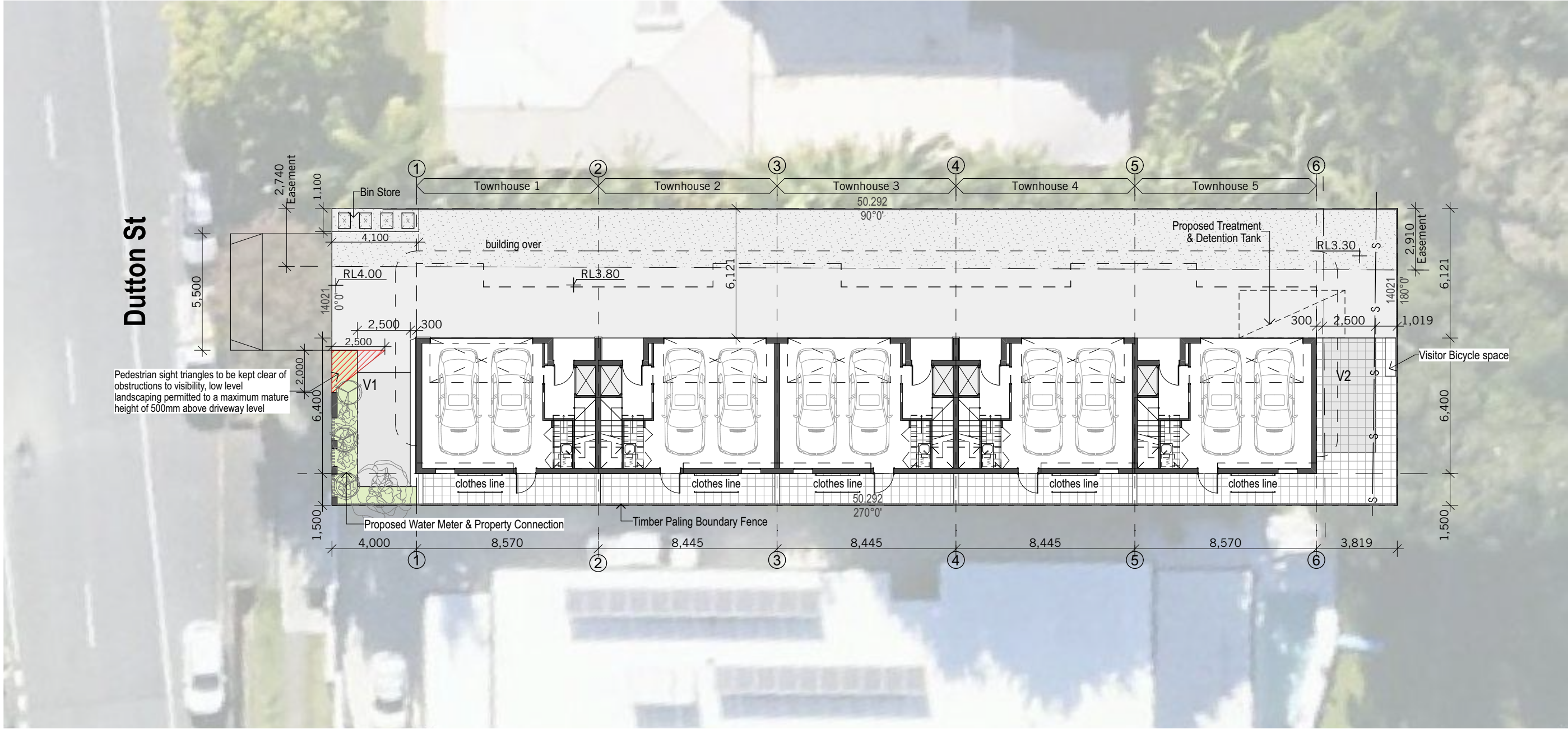
This report presents the findings related to assessment of traffic and transport related matters for a proposed development located at 60 Dutton Street, Coolangatta. Based on the assessment undertaken, it can be concluded that the proposed development will not introduce any adverse traffic or transport impacts which would prevent its approval with appropriate conditions.

## 8 References

1. City of Gold Coast, *City Plan – Version 13 (December 2025)*, Gold Coast.
2. Queensland Government (Department of Transport and Main Roads), *Guide to Traffic Impact Assessment*, December 2018, Brisbane.
3. New South Wales Government (Roads and Maritime Services), *Guide to Traffic Generating Developments - Technical Direction (TDT2013/04)*, Sydney, 2014.
4. Australian Building Codes Board, *National Construction Code (NCC) Volume 1*, May 2023.
5. Standards Australia/Standards New Zealand 2004, *AS2890.1: Off-street Car Parking Facilities*.
6. Standards Australia/Standards New Zealand 2018, *AS2890.2: Off-street Commercial Vehicle Facilities*.
7. Standards Australia/Standards New Zealand 2015, *AS2890.3: Bicycle Parking*.



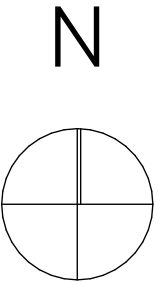
## Appendix A Plans of development



Floor Areas (Internal Townhouse 1-4)

Floor Areas (Internal Townhouse 5)

|                       | Area (sqM) |                       | Area (sqM) |
|-----------------------|------------|-----------------------|------------|
| Ground Floor          | 46.57      | Ground Floor          | 46.57      |
| Level 2               | 69.78      | Level 2               | 69.91      |
| Level 2 Balcony       | 8.13       | Level 2 Balcony       | 9.38       |
| Level 3               | 72.10      | Level 3               | 72.10      |
| Level 4               | 36.86      | Level 4               | 45.18      |
| Lvl 4 Terrace         | 28.80      | Lvl 4 Terrace         | 20.87      |
| 262.24 m <sup>2</sup> |            | 264.01 m <sup>2</sup> |            |

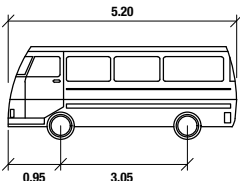


Site Plan  
1:200, 1:1 @ A3





## Appendix B      Swept path assessment



**AUSTROADS PASSENGER VAN**

Width : 1.94m  
Track : 1.84m  
Lock to Lock Time : 6.0s  
Steering Angle : 33.9°

**LEGEND**

- Vehicle Swept Path Forward Envelope  
Vehicle Swept Path Reverse Envelope  
Vehicle Body Clearance (300mm)



**GELEON**

ABN 58 668 001 303  
Suite 12, Level 1, 3029 The Boulevard  
Emerald Lakes, Carrara  
PO Box 454 Nerang Qld 4211  
tel +61 7 5594 4473

0 1 2 3 4m

60 DUTTON STREET, COOLANGATTA  
PROPOSED MULTIPLE DWELLING DEVELOPMENT

**SWEPT PATH ASSESSMENT  
AUSTROADS PASSENGER VAN  
ACCESS TO STANDING AREA**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Project No.<br><b>51080</b>         | Issue Date<br><b>03/06/26</b> |
| Drawing No.<br><b>51080-SP001-A</b> |                               |
| Series No. 1 of 4                   |                               |





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60 DUTTON STREET, COOLANGATTA  
PROPOSED MULTIPLE DWELLING DEVELOPMENT

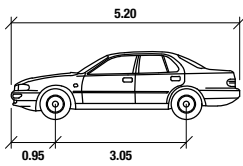
**SWEPT PATH ASSESSMENT  
B99 PASSENGER VEHICLE  
ENTRY PAST HOLDING VAN**

Project No.  
**51080** Issue Date  
**03/06/26**

Drawing No.  
**51080-SP002-A**

Series No. 2 of 4





**B99 PASSENGER VEHICLE**

Width : 1.94m  
Track : 1.84m  
Lock to Lock Time : 6.0s  
Steering Angle : 33.9°

**LEGEND**

- Vehicle Swept Path Forward Envelope
- Vehicle Swept Path Reverse Envelope
- Vehicle Body Clearance (300mm)
- Additional 300mm Outside Clearance

**GELEON**

ABN 58 668 001 303  
Suite 12, Level 1, 3029 The Boulevard  
Emerald Lakes, Carrara  
PO Box 454 Nerang Qld 4211  
tel +61 7 5594 4473

0 1 2 3 4m

60 DUTTON STREET, COOLANGATTA  
PROPOSED MULTIPLE DWELLING DEVELOPMENT

**SWEPT PATH ASSESSMENT  
B99 PASSENGER VEHICLE  
EXIT PAST HOLDING VAN**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Project No.<br><b>51080</b>         | Issue Date<br><b>03/06/26</b> |
| Drawing No.<br><b>51080-SP003-A</b> |                               |
| Series No. 3 of 4                   |                               |





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tel +61 7 5594 4473

0 1 2 3 4m

60 DUTTON STREET, COOLANGATTA  
PROPOSED MULTIPLE DWELLING DEVELOPMENT

**SWEPT PATH ASSESSMENT  
AUSTROADS PASSENGER VAN  
EXIT FROM DEVELOPMENT SITE**

Project No.  
**51080** Issue Date  
**03/06/26**

Drawing No.  
**51080-SP004-A**

Series No. 4 of 4

## Appendix C      Development code responses



# City Plan code template

This code template supports the preparation of a development application against either the acceptable outcome(s) or performance outcome(s) contained in the code. Development assessment rules are outlined in **Section 5.3.3** of the City Plan.

**Please note:**

For assessment against the overall outcomes, refer to the appropriate code.

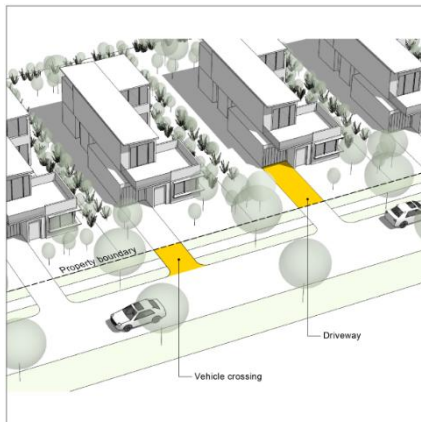
**Note:** The whole of the planning scheme is identified as the assessment benchmark for impact assessable development. This specifically includes assessment of impact assessable development against this strategic framework. The strategic framework may contain intentions and requirements that are additional to and not necessarily repeated in zone, overlay or other codes. In particular, the performance outcomes in zone codes address only a limited number of aspects, predominantly related to built form. Development that is impact assessable must also be assessed against the overall outcomes of the code as well as the strategic framework.

## 9.4.2 Driveways and vehicle crossings code

### 9.4.2.1 Application

This code applies to assessing operational work for vehicle access works and material change of use for any development involving vehicle access works where indicated within **Part 5 Tables of assessment**.

When using this code, reference should be made to **Section 5.3.2** and, where applicable, **Section 5.3.3**, in **Part 5**.



**Figure 9.4.2-1**

Illustration showing the driveway and vehicle crossing components of vehicle access works

#### **9.4.2.2 Purpose**

- (1) The purpose of the Driveways and vehicle crossings code is to provide design standards for the construction, repair or modification to a driveway and/or a vehicle crossing.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) Vehicle crossings are designed to a standard in accordance with **SC6.12 City Plan policy – Land development guidelines** or with RPEQ certification to provide safe access for vehicles required to access the site from the edge of the road carriageway to the property boundary.
  - (b) Driveways provide safe access for all vehicles required to access the site from the property boundary to the on-site vehicle accommodation or standing area.
  - (c) Vehicle crossings avoid adverse impacts on City or utility infrastructure.
  - (d) Driveways and vehicle crossings are of an appropriate standard to meet the needs of the development.
  - (e) Vehicle crossings ensure that there is minimal loss of on-street car parking spaces.
  - (f) Driveways and vehicle crossings are designed and sited to maintain streetscape elements and retain space for the future planting of street trees.
  - (g) Vehicle crossings allow for the safety of all users of the existing and planned road and active transport networks.
  - (h) Driveways and vehicle crossings are designed such that vertical and horizontal alignments provide a continuous, smooth access of good rideability and clearance for all vehicles required to access the site.
  - (i) Driveways and vehicle crossings are designed and sited to mitigate stormwater drainage impacts.

#### **9.4.2.3 Specific benchmarks for assessment**



## PART B – ASSESSABLE DEVELOPMENT BENCHMARKS

Table 9.4.2-2: Driveways and vehicle crossings code – assessable development

| Performance outcomes                                                                                                                                                                                                                                                                        | Acceptable outcomes                                                                                                                                                       | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                                                                                                                                                     | Internal use     |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--|--|
| Design                                                                                                                                                                                                                                                                                      |                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |  |  |
| <b>PO1</b><br>The driveway is designed in accordance with the applicable requirements in <i>AS2890:2009 – Parking Facilities</i> .                                                                                                                                                          | <b>AO1</b><br>No acceptable outcome provided.                                                                                                                             | <b>COMPLIES WITH PO1</b><br>The proposed driveway meets the requirements of <i>AS2890.1:2004</i> and <i>AS2890.2:2018</i> .<br><br>For further details in this regard refer to <b>Section 5</b> of Geleon Traffic and Transport Assessment report <b>51080-RP01-A</b> .                                                                                                                                               |                  |  |  |
| <b>PO2</b><br>Design of the vehicle crossing is certified by a RPEQ confirming compliance with:<br>(a) <i>Disability Discrimination Act 1992</i> ;<br>(b) Applicable requirements in <i>AS2890: 2009 – Parking Facilities</i> ; and<br>(c) <i>QUDM (Queensland Urban Drainage Manual)</i> . | <b>AO2</b><br>The vehicle crossing is designed in accordance with <b>SC6.12 City Plan policy – Land development guidelines, Section 2 – Transport network standards</b> . | <b>COMPLIES WITH AO2</b><br>The proposed vehicle crossing has been designed generally in accordance with IPWEA Standard Drawing No. ' <i>RSD-100 – Vehicle crossings, residential driveways</i> ' as stipulated in SC6.12 City Plan policy – Land development guidelines.<br><br>For further details in this regard refer to <b>Section 5</b> of Geleon Traffic and Transport Assessment report <b>51080-RP01-A</b> . |                  |  |  |
|                                                                                                                                                                                                                                                                                             | <b>AO3</b><br>Vehicle crossings are separated from:<br><table><tr><td>Instance</td><td>Minimum distance</td></tr></table>                                                 | Instance                                                                                                                                                                                                                                                                                                                                                                                                              | Minimum distance |  |  |
| Instance                                                                                                                                                                                                                                                                                    | Minimum distance                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |  |  |

| Performance outcomes                                                                                                                         | Acceptable outcomes                                                                                                                                    |                             | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Internal use |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>PO3</b><br>The vehicle crossing avoids damage to utility services, pathways, kerbs, road pavement and seal and other city infrastructure. | Traffic management devices and transport services, stormwater management devices, power supply services and telecommunication supply services          | 1m                          | <b>COMPLIES WITH AO3</b><br>The vehicle crossing has been located to avoid damage to utility services, pathways, kerbs, road pavement and seal and other city infrastructure. Where required, utility services will be relocated.<br>The proposed vehicle crossing will require the removal of kerb and channel along the Dutton Street frontage.<br>The vehicle crossing servicing the existing property will be demolished and the kerb and channel reinstated.<br>For further details in this regard refer to <b>Section 5</b> of Geleon Traffic and Transport Assessment report <b>51080-RP01-A</b> . |              |
|                                                                                                                                              | Water and sewerage service assets on the surface (including water meter enclosures, sewerage inspection or maintenance pits, fire hydrants and valves) | 300mm (horizontal distance) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |



| Performance outcomes                                                                                                                                                                                                                                                                                           | Acceptable outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                                                                                                                                                     | Internal use |                                                                                                                              |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|---|--|--|
| Maximum number of vehicle crossings                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                       |              |                                                                                                                              |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
| <b>PO4</b><br>The number of vehicle crossings are minimised to avoid loss of streetscape elements and on-street car parking spaces and to prevent adverse interference with:<br>(a) the safety, capacity and operations of the existing or planned road network; and<br>(b) cycleways or pedestrian footpaths. | <b>AO4</b><br>The maximum number of vehicular crossings per site, for the following land uses, is as follows:                                                                                                                                                                                                                                                                                                                                                                                                 | <b>COMPLIES WITH AO4</b><br>The development proposes one access from Dutton Street.<br>The vehicle crossing servicing the existing residential properties will be demolished and the kerb and channel reinstated.<br><br>For further details in relation to the location and form of the proposed vehicle crossing, refer to <b>Section 5</b> of Geleon Traffic and Transport Assessment report <b>51080-RP01-A</b> . |              |                                                                                                                              |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
|                                                                                                                                                                                                                                                                                                                | <table><tr><th>Land use</th><th>Maximum number of vehicle crossings</th></tr><tr><td>Dwelling house</td><td>1<br/>OR<br/>2 - when the road frontage at the kerb is at least 40m subject to achieving a minimum of 7m between the crossings</td></tr><tr><td>Dual occupancy<br/>Multiple dwelling</td><td>1<br/>OR<br/>2 - where the road frontage at the kerb is greater than 20m subject to achieving a minimum of 7m between the crossings</td></tr><tr><td>Non-residential use</td><td>2</td></tr></table> |                                                                                                                                                                                                                                                                                                                                                                                                                       |              | Land use                                                                                                                     | Maximum number of vehicle crossings | Dwelling house | 1<br>OR<br>2 - when the road frontage at the kerb is at least 40m subject to achieving a minimum of 7m between the crossings | Dual occupancy<br>Multiple dwelling | 1<br>OR<br>2 - where the road frontage at the kerb is greater than 20m subject to achieving a minimum of 7m between the crossings | Non-residential use | 2 |  |  |
|                                                                                                                                                                                                                                                                                                                | Land use                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                       |              | Maximum number of vehicle crossings                                                                                          |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
|                                                                                                                                                                                                                                                                                                                | Dwelling house                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                       |              | 1<br>OR<br>2 - when the road frontage at the kerb is at least 40m subject to achieving a minimum of 7m between the crossings |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
|                                                                                                                                                                                                                                                                                                                | Dual occupancy<br>Multiple dwelling                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1<br>OR<br>2 - where the road frontage at the kerb is greater than 20m subject to achieving a minimum of 7m between the crossings                                                                                                                                                                                                                                                                                     |              |                                                                                                                              |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
| Non-residential use                                                                                                                                                                                                                                                                                            | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                       |              |                                                                                                                              |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
| <b>Note: the maximum number of vehicle crossings and separation distance is shown above unless otherwise approved in a current development approval.</b>                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                       |              |                                                                                                                              |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
| Separation distances                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                       |              |                                                                                                                              |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
| <b>PO5</b><br>Vehicle crossings are appropriately separated from other vehicle                                                                                                                                                                                                                                 | <b>AO5</b><br>Vehicle crossings are separated from:                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>COMPLIES WITH AO5</b>                                                                                                                                                                                                                                                                                                                                                                                              |              |                                                                                                                              |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
|                                                                                                                                                                                                                                                                                                                | <table><tr><th>Instance</th><th>Minimum distance (m)</th></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                       |              | Instance                                                                                                                     | Minimum distance (m)                |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |
| Instance                                                                                                                                                                                                                                                                                                       | Minimum distance (m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                       |              |                                                                                                                              |                                     |                |                                                                                                                              |                                     |                                                                                                                                   |                     |   |  |  |

| Performance outcomes                                                                                                                                                                                                                            | Acceptable outcomes                                                                                                 |      | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                                        | Internal use |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| crossings and side property boundaries to prevent interference with:<br><br>(a) the safety, capacity and operations of the existing or planned road network;<br><br>(b) adjoining properties; and<br><br>(c) cycleways or pedestrian footpaths. | Vehicle crossings on adjoining properties                                                                           | 1m   | A separation of greater than 1.0m is achieved to the nearest vehicle crossing and property boundary.<br><br>For further details in relation to the location and form of the proposed vehicle crossing, refer to <b>Section 5</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> . |              |
|                                                                                                                                                                                                                                                 | Any side property boundary:                                                                                         |      |                                                                                                                                                                                                                                                                                                          |              |
|                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"><li>for residential development with approved built-to-boundary setback</li></ul> | 0.5m |                                                                                                                                                                                                                                                                                                          |              |
|                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"><li>for all other developments</li></ul>                                          | 1m   |                                                                                                                                                                                                                                                                                                          |              |



| Performance outcomes                                                                                                                                           | Acceptable outcomes                                                                                                                                                                                                                                                                                    | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                   | Internal use |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Location</b>                                                                                                                                                |                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                     |              |
| <b>PO6</b><br>Vehicle access to a public roadway is safe and does not compromise the efficiency, function, convenience of use or capacity of the road network. | <b>AO6.1</b><br>The location of the vehicle crossing to a public roadway is consistent with the applicable requirements in <i>AS/NZS 2890.1:2004 Parking facilities Part 1: Off-street car parking</i> and <i>AS 2890.2-2002 Parking facilities Part 2: Off-street commercial vehicle facilities</i> . | <b>COMPLIES WITH AO6.1</b><br>The location of the vehicle crossing is consistent with <i>AS2890.1:2004</i> .<br>For further details in relation to the proposed vehicle crossing, refer to <b>Section 5</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> . |              |
|                                                                                                                                                                | <b>AO6.2</b><br>No new vehicle crossings are created on roads identified on the <b>Functional road hierarchy</b> as shown on the Zone maps or the <b>Pacific motorway service road types overlap map</b> .                                                                                             | <b>COMPLIES WITH PO6</b><br>The development proposes one access from Dutton Street which is the development's only road frontage and not listed on Council's Functional Road Hierarchy.                                                                                             |              |

| Performance outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Acceptable outcomes                                                                                                                                                                              | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Internal use |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>PO7</b><br>Driveways and vehicle crossings:<br>(a) ensure existing street trees within the verge are retained;<br>(b) provide an appropriate separation distance to existing street trees within the verge in accordance with <i>AS4970:2009 – Protection of trees on development site</i> ; and<br>(c) retain space for the future planting of street trees within the verge in accordance with <b>SC6.13 City Plan policy – Landscape work</b> .<br><b>Note: The location of the driveway and vehicle crossing is considered at the design stage of the development.</b> | <b>AO7</b><br>No acceptable outcome provided.                                                                                                                                                    | <b>COMPLIES WITH PO7</b><br>The proposed vehicle crossing location has been designed to ensure existing street trees within the verge are retained, provide an appropriate separation distance to existing street trees within the verge in accordance with <i>AS4970:2009 – Protection of trees on development site</i> and retain space for the future planting of street trees within the verge in accordance with SC6.13 City Plan policy – Landscape work.<br>For further details in relation to the proposed vehicle crossing, refer to the plans of development and <b>Section 5</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> . |              |
| <b>Sight distances and lines</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| <b>PO8</b><br>Vehicle crossings are designed to provide safe travel for vehicles, cyclists and pedestrians.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>AO8</b><br>Vehicle crossings are designed to provide sight distances and lines in accordance with <i>AS 2890.2-2002 Parking facilities Part 2: Off-street commercial vehicle facilities</i> . | <b>COMPLIES WITH AO8</b><br>At the proposed access, Minimum Gap Sight Distance (MGSD) requirements can be achieved.<br>For further details in this regard, refer to <b>Section 5</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> .                                                                                                                                                                                                                                                                                                                                                                                                        |              |



## City Plan code template

This code template supports the preparation of a development application against either the acceptable outcome(s) or performance outcome(s) contained in the code. Development assessment rules are outlined in **Section 5.3.3** of the City Plan.

**Please note:**

For assessment against the overall outcomes, refer to the appropriate code.

**Note:** The whole of the planning scheme is identified as the assessment benchmark for impact assessable development. This specifically includes assessment of impact assessable development against this strategic framework. The strategic framework may contain intentions and requirements that are additional to and not necessarily repeated in zone, overlay or other codes. In particular, the performance outcomes in zone codes address only a limited number of aspects, predominantly related to built form. Development that is impact assessable must also be assessed against the overall outcomes of the code as well as the strategic framework.

### 9.4.13 Transport code

#### 9.4.13.1 Application

This code applies to assessing a material change of use where indicated within **Part 5 Tables of assessment** unless the development is listed as accepted subject to requirements and is:

- (a) establishing in an existing lawful non-residential premises; and
- (b) involving:
  - (i) no building work (other than an internal fit-out); or
  - (ii) only minor building work; and
- (c) the development results in no loss of car parking spaces.

When using this code, reference should be made to **Section 5.3.2** and, where applicable, **Section 5.3.3**, in **Part 5**.

#### 9.4.13.2 Purpose

- (1) The purpose of the Transport code is to ensure transport needs associated with the development of land are met.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) Development ensures that:
    - (i) on-site access, parking and facilities, manoeuvring and servicing areas are designed to:

- (A) meet the needs of the development;
  - (B) result in a functional and efficient site layout that minimises impacts on surrounding areas and traffic movement;
  - (C) create a safe pedestrian and cyclist focussed environment; and
  - (D) promote a high quality public realm.
- (ii) the function and capacity of the road network is not compromised and impacts on amenity, safety and operation of existing and planned roads are appropriately mitigated.
- (b) An integrated transport system is provided that:
  - (i) is convenient, efficient and flexible, being able to accommodate major events and provide a high level of connectivity between all activity centres, urban neighbourhoods, mixed use and industrial areas, inclusive of all modes, including active transport networks;
  - (ii) supports well designed urban development, which is concentrated within activity centres and urban neighbourhoods, that is easy to access via frequent public transport, walking and cycling, thereby reducing the need to travel by car;
  - (iii) supports community and privately operated transport services as viable alternatives to the private car;
  - (iv) reduces congestion and car dependency and significantly increases levels of walking, cycling and public transport use; and
  - (v) ensures existing and future transport corridors are protected.
- (c) Active transport networks are provided that:
  - (i) are direct, safe, pleasant and comfortable to make walking and cycling an attractive alternative to the car;
  - (ii) ensure development within centres and urban neighbourhoods, including the light rail corridor have access to high quality active transport infrastructure including paths, bicycle parking and end of trip facilities;
  - (iii) are directly connected to local attractions and services;
  - (iv) are clear and easily accessed; and
  - (v) ensure the active transport infrastructure are completed in the early stages of development.
- (d) Public transport networks are provided that:
  - (i) are of a standard and quality to provide an attractive alternative to the car;
  - (ii) ensure district and regional level community uses are within walking distance of public transport facilities; and
  - (iii) are clear and easily accessed.
- (e) A road network is provided that:



- (i) is developed and managed efficiently and meets the city's needs for the movement of people and goods, and can be safely shared by all users;
- (ii) ensures development impacts on amenity caused by traffic and parking is consistent with the community's reasonable expectations for the intended use;
- (iii) develops local road networks that are permeable and legible to facilitate a high level of connectivity, are safe and are shared with active and public transport;
- (iv) ensures developments are designed for safe and efficient waste collection, carried out with minimal disruption or impact to the road network; and
- (v) within the Coomera Town Centre area, provides an integrated network of predominantly public streets to ensure efficient movement of pedestrians, cyclists, vehicles and strong public transport connections that is guided by the indicative access and mobility outcomes in Figure 9.4.13-2 Coomera Town Centre Indicative Access and Mobility.
- (f) Major freight corridors and haulage routes:
  - (i) are protected from incompatible uses and ensure their safe and efficient operation.
- (g) Navigable waterways:
  - (i) support active and public transport facilities in waterfront locations for public water transport and enhance access to the city's waterways.

### 9.4.13.3 Specific benchmarks for assessment

## PART B – ASSESSABLE DEVELOPMENT BENCHMARKS

**Table 9.4.13-2: Transport code – for assessable development**

| Performance outcomes                                                                                                        | Acceptable outcomes                                                                                                    | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome | Internal use |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Car parking and travel demand</b>                                                                                        |                                                                                                                        |                                                                                                                                                   |              |
| <b>PO1</b><br>Development provides off-street car parking to accommodate the parking demand and allows for various modes of | <b>AO1</b><br>Off- street car parking spaces are provided in accordance with the identified relevant table as follows: | <b>COMPLIES WITH AO1</b>                                                                                                                          |              |

| Performance outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Acceptable outcomes                                                                                                                   |                                                                                                          | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets either the performance outcome or overall outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Internal use |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <p>travel to reduce dependency on private vehicle usage.</p> <p>OR</p> <p>Where located in the Centre zone or the Southport Priority Development Area, development:</p> <ul style="list-style-type: none"> <li>(a) maximises the efficiency of car parking provided;</li> <li>(b) reduces congestion and car dependency; and</li> <li>(c) encourages alternative transport options such as walking, cycling and the use of public transport.</li> </ul> <p><b>Note:</b> For an increase in scale or intensity of an existing lawful use, this PO and AO applies to the extent of the increase, provided existing car parking areas are not reduced or disturbed.</p> |                                                                                                                                       |                                                                                                          | <p>The total car parking requirement for the development is 12 car parking spaces comprising 10 resident spaces and two visitor spaces. In accordance with the National Construction Code – Volume 1 for a Class 2 building, there is no requirement to provide parking spaces for People with Disabilities. The development provides a total of 12 car parking spaces, comprising 10 resident spaces and two visitor spaces and therefore complies with Council requirements.</p> <p>Refer to <b>Section 4.0</b> of Geleon Traffic and Transport Assessment report <b>51080-RP01-A</b>.</p> |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Location</b>                                                                                                                       | <b>Off-street car parking rate</b>                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Centre zone and High density residential zone where nominated in the Transport hub area in <b>Figure 9.4.13-1: Transport hub area</b> | <b>Table 9.4.13-4: Car parking rates – Centre zone and High density residential zone – Transport hub</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Centre zone not nominated in the Transport hub area in <b>Figure 9.4.13-1: Transport hub area</b>                                     | <b>Table 9.4.13-5: Car parking rates – Centre zone – outside Transport hub area</b>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Special purposes zone – Special development area precinct – Southport Priority Development Area                                       | <b>Table 9.4.13-6: Car parking rates – Southport Priority</b>                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |



| Performance outcomes                                                                                                                                                                                                                                              | Acceptable outcomes                                                                                                                                                                        |                                                                                                                                                                    | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                                                                                                                                                 | Internal use |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                                                                                                                                                                                                                                                                   |                                                                                                                                                                                            | Development Area                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                   |              |
|                                                                                                                                                                                                                                                                   | All other zones                                                                                                                                                                            | Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area |                                                                                                                                                                                                                                                                                                                                                                                                                   |              |
|                                                                                                                                                                                                                                                                   |                                                                                                                                                                                            |                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                   |              |
| <b>PO2</b><br><br>Car parking spaces for employees and visitors to the development are maximised and allow for efficient functioning of the site and surrounding traffic network.                                                                                 | <b>AO2</b><br>Car parking spaces for employees and visitors to the development are accessible at all times and not restricted by allocation of spaces, gateways, doors or similar devices. |                                                                                                                                                                    | <b>COMPLIES WITH AO2</b><br><br>Access to the ground floor level car park will remain accessible at all times.<br><br>For further details in this regard, refer to the plans of development.                                                                                                                                                                                                                      |              |
| <b>Servicing</b>                                                                                                                                                                                                                                                  |                                                                                                                                                                                            |                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                   |              |
| <b>PO3</b><br>Development accommodates the required design service vehicle (including waste collection) in accordance with:<br>(a) <b>Table 9.4.13-8: Service vehicle requirements</b> ; and<br>(b) <b>Table 9.4.13-9: Minimum class of service vehicle</b> ; and | <b>AO3</b><br>No acceptable outcome provided.                                                                                                                                              |                                                                                                                                                                    | <b>COMPLIES WITH OO(a)(I) &amp; (e)(II)</b><br><br>Issues associated with providing a 4.5m vertical clearance for a MRV mean that an on-site standing area for an MRV cannot be accommodated. Therefore, compliance with AO3 and PO3 of the Transport Code cannot be achieved. However, the proposed development can comply with the overall outcomes, specifically OO(a)(I) & (e)(II) for the following reasons: |              |

| Performance outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Acceptable outcomes | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Internal use |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <p>(c) <i>AS2890.2: Parking facilities Part 2: Off-street commercial vehicle facilities</i> to allow for:</p> <ul style="list-style-type: none"> <li>(i) loading and unloading of service vehicles wholly within the site;</li> <li>(ii) pathways from service areas to tenancies at a width and grade that allows for unimpeded manoeuvring of goods (i.e. clear of doors, gates or landscaping);</li> <li>(iii) waste collection vehicles to appropriately service the development;</li> <li>(iv) safe pickup and set-down of passengers on-site;</li> <li>(v) unobstructed access to off-street parking areas; and</li> <li>(vi) an efficient and safe traffic network.</li> </ul> |                     | <ul style="list-style-type: none"> <li>▪ for multiple dwelling units, groceries and large retail goods will typically be delivered by a van or SRV, while removalist activities will generally utilise a van, SRV or MRV. Therefore, provision has been made for a van on the ground floor level on the northern side of the driveway. Above the ground floor level driveway, a minimum 2.85m vertical clearance is achieved. A swept path assessment has been undertaken using AutoTURN software to demonstrate that a van can reverse into the standing area from Dutton Street, stand in the servicing area, and exit the development site in a forward gear. The swept path assessment also demonstrates that B99 passenger vehicles can enter and exit the development site in a forward gear if a van is parked on the ground floor level</li> <li>▪ it is known that removalist / delivery companies generally ask their customers at the time of quoting about on site and on-street parking restrictions and availability. Given the site constraints, it is expected that residents undertaking full moves will consult with removalist companies regarding the parking availability in the vicinity prior to moving and recommend that an alternative smaller removalist vehicle be used</li> </ul> |              |



| Performance outcomes                                                                                                                          | Acceptable outcomes                               | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets either the performance outcome or overall outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Internal use |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                                                                                                                                               |                                                   | <ul style="list-style-type: none"> <li>the frequency of vehicles attending the site to deliver goods and undertake maintenance could occur weekly, however the demand for larger removalist vehicles is based on how often residents move. A review of census data from 2011 identified that approximately 8.34% of Australian residents move each year. When applied to all five units this equates to approximately one movement every 29 months (assuming all residents in each dwelling move together). Therefore, the demand for large removalist vehicles will be low</li> <li>if in the rare occasion MRV servicing is required, this can be accommodated along Dutton Street however is likely to only be required once every 29 months. It is important to note that Council has recently approved an extensive list of multiple dwelling development's with MRV servicing on-street e.g. PDA/2024/8, MCU/2023/348, and</li> <li>provision of MRV servicing on street is consistent with the existing approval (COM/2025/157).</li> </ul> <p>For further details in this regard, refer to <b>Section 5.3</b> of Geleon Traffic and Transport Assessment report <b>51080-RP01-A</b>.</p> |              |
| <b>PO4</b><br>Development ensures that service vehicle routes to and from the development minimise impacts on residential safety and amenity. | <b>AO4</b><br><br>No acceptable outcome provided. | <b>COMPLIES WITH PO4</b><br>A designated standing area for a van is provided within the ground floor car park to service the proposed development.<br>For further details in this regard, refer to <b>Section 5.3</b> of Geleon Traffic and Transport Assessment report <b>51080-RP01-A</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |

| Performance outcomes                                                                                                                                                                                                                                                                                  | Acceptable outcomes                                                                                                                                                                                                                                                                                                                                       | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome | Internal use |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Public transport network</b>                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                   |              |
| <b>PO5</b><br><br>Development that attracts large numbers of people, integrates the provision of on-site public transport facilities which are connected to:<br>(a) adjoining uses;<br>(b) the existing road network;<br>(c) existing or future public transport facilities; and<br>(d) public areas. | <b>AO5.1</b><br><br>On-site public transport facilities (including stops) are integrated with the following land uses:<br>(a) Air services;<br>(b) Educational establishment (new and existing);<br>(c) Hospital;<br>(d) Major sport, recreation and entertainment facility;<br>(e) Shop (2,000m <sup>2</sup> or greater); and<br>(f) Tourist attraction. | Not applicable - the development does not attract a high proportion of people using high frequency public transport.                              |              |
|                                                                                                                                                                                                                                                                                                       | <b>AO5.2</b><br>Development provides safe, attractive and convenient pedestrian and cycle pathways connected to:<br>(a) adjoining uses;<br>(b) the existing road network;<br>(c) existing or future public transport facilities; and<br>(d) public areas.                                                                                                 | Not applicable - the development does not attract a high proportion of people using high frequency public transport.                              |              |
| <b>PO6</b><br><br>Development within 400m walking distance of a high frequency public transport stop or rail station provides attractive, safe and convenient linkages to this infrastructure.                                                                                                        | <b>AO6</b><br><br>No acceptable outcome provided.                                                                                                                                                                                                                                                                                                         | <b>COMPLIES WITH AO6</b><br>Refer to the plans of development.                                                                                    |              |



| Performance outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Acceptable outcomes                                                                                                                                                                                                                                                   | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets either the performance outcome or overall outcome                                                                                                                                                                                                                                                                                                    | Internal use |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Active transport network</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |
| <b>PO7</b><br><br>Off-street bicycle parking and off-street end-of-trip facilities are provided to encourage active transport and are:<br>(a) designed to meet the needs and volumes of pedestrians and cyclists; and<br>(b) located in safe, convenient and highly accessible areas.<br><br><b>Note: This PO does not apply to the following uses:</b> <ul style="list-style-type: none"> <li>• Dwelling house;</li> <li>• Dual occupancy; or</li> <li>• Multiple dwelling (where there are 3 dwellings)</li> </ul> | <b>AO7.1</b><br>Development provides off-street bicycle parking and off-street end-of-trip facilities in accordance with <b>Table 9.4.13-10: Bicycle parking rates</b> and <b>Table 9.4.13-11: End-of-trip facilities for active travel users</b> .                   | <b>COMPLIES WITH AO7.1</b><br>The total bicycle parking requirement for the development is six spaces including five Class 2 spaces and one Class 3 space. The development provides a total of six bicycle parking spaces comprising five resident spaces (Class 2) and one visitor space (Class 3).<br>For further details in this regard, refer to <b>Section 4</b> of Geleon Traffic and Transport Assessment report <b>51080-RP01-A</b> . |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>AO7.2</b><br>Location of off-street, end-of-trip facilities are:<br>(a) within 50m to off-street bicycle parking; and<br>(b) clearly signed off-street bicycle parking areas.                                                                                      | Not applicable - end-of-trip facilities are not required for a multiple dwelling land use.                                                                                                                                                                                                                                                                                                                                                    |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>AO7.3</b><br>Signage indicating location of off-street bicycle parking is:<br>(a) clearly identifiable within the site;<br>(b) at ground level, external to buildings; and<br>(c) in accordance with <i>AS2890.3: Parking facilities Part 3: Bicycle parking</i> . | <b>COMPLIES WITH AO7.3</b><br>Bicycle parking will be appropriately signed in accordance with relevant council requirements.                                                                                                                                                                                                                                                                                                                  |              |

| Performance outcomes                                                                                                                                                                                                                                                      | Acceptable outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                    | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome        | Internal use |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                                                                                                                                                                                                                                                                           | <b>AO7.4</b><br>Off-street bicycle parking areas are:<br>(a) clear of pedestrian movement paths;<br>(b) visible from the street to allow casual surveillance;<br>(c) located clear of vehicle movement;<br>(d) well lit;<br>(e) protected from the weather;<br>(f) connected from the road via direct pathways/ramps; and<br>(g) in accordance with the cycling aspects of austroads and <i>AS2890.3: Parking facilities Part 3: Bicycle parking</i> . | <b>COMPLIES WITH AO7.4</b><br>Refer to plans of development and <b>Section 4</b> of Geleon Traffic and Transport Assessment report <b>51080-RP01-A</b> . |              |
| <b>PO8</b><br>Development provides pedestrian and cyclist pathways to all street frontages and set down areas, and:<br>(a) allows for safe movement;<br>(b) is convenient and direct;<br>(c) is clearly identifiable; and<br>(d) is clear of potential vehicle movements. | <b>AO8.1</b><br>Development provides a pathway from the primary street frontage and car parking set-down areas, to connect to the main entry of the building.<br>OR<br>For development with 21 dwellings or more, a pathway is provided for each road frontage and car parking set-down area(s) to the main entry of the building.                                                                                                                     | <b>COMPLIES WITH AO8.1</b><br>Refer to the plans of development.                                                                                         |              |
|                                                                                                                                                                                                                                                                           | <b>AO8.2</b><br>Pathways are to be designed and constructed in accordance with <i>AS 1428.1: Design for access and mobility</i>                                                                                                                                                                                                                                                                                                                        | <b>COMPLIES WITH AO8.2</b><br>Pathways will be designed and constructed in accordance with <i>AS1428.1</i> .                                             |              |



| Performance outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Acceptable outcomes                                                                                                                                                                                       | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                               | Internal use |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <i>Part 1: General requirements for access – New building work.</i>                                                                                                                                       |                                                                                                                                                                                                                                                 |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>AO8.3</b><br>Pathways are separated from vehicle movements.                                                                                                                                            | <b>COMPLIES WITH AO8.3</b><br>Refer to plans of development                                                                                                                                                                                     |              |
| <b>PO9</b><br>Public pathways are provided:<br>(a) within the road reserve, adjacent to, and for the full length of, the sites road frontage; and<br>(b) in accordance with <b>SC6.12 City Plan policy – Land development guidelines</b> .<br><br><b>Note: This PO does not apply to the following uses:</b> <ul style="list-style-type: none"> <li>• Dwelling house;</li> <li>• Dual occupancy; or</li> <li>• Multiple dwelling (where there are 3 dwellings).</li> </ul> | <b>AO9</b><br>No acceptable outcome provided.                                                                                                                                                             | <b>COMPLIES WITH PO9</b><br>Dutton Street is the only public road that fronts the development. Existing pathways are provided along the Dutton Street road frontage. No changes to active transport facilities are proposed by the development. |              |
| <b>PO10</b><br>Development contributes to the safe and efficient provision and operation of the bicycle and pedestrian network.                                                                                                                                                                                                                                                                                                                                            | <b>AO10.1</b><br>Pathways and on-road cycle lanes are designed and constructed in accordance with <b>SC6.12 City Plan policy – Land development guidelines, Section 2 – Transport network standards</b> . | Not applicable – public pathways and cycle lanes are not proposed along the road reserve.                                                                                                                                                       |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>AO10.2</b><br>Development does not remove or compromise existing on-road and off-road bicycle and pedestrian infrastructure and facilities.                                                            | <b>COMPLIES WITH AO10.2</b><br>Refer to the plans of the development.                                                                                                                                                                           |              |

| Performance outcomes                                                                                                                                                                                                                                                                                                                                                                                   | Acceptable outcomes                                                                                                                                                                                                                                                                                                                                         | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome | Internal use |
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| <b>Roads and freight</b>                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                   |              |
| <b>PO11</b><br>Public roads including upgrades are designed to an appropriate standard and are designed to: <ul style="list-style-type: none"> <li>(a) prevent the need for traffic calming devices to manage vehicle design speed;</li> <li>(b) deter through traffic if the roads function is primarily for access; and</li> <li>(c) create safe conditions for pedestrians and cyclists.</li> </ul> | <b>AO11</b><br>New roads and upgrades to roads are designed and constructed in accordance with <b>SC6.12 City Plan policy – Land development guidelines, Section 2 – Transport network standards.</b>                                                                                                                                                       | Not applicable – no new roads or upgrades are proposed.                                                                                           |              |
| <b>PO12</b><br>Corner lots include truncations at each roadway intersection to ensure the intersection and sight lines are safe and functional.                                                                                                                                                                                                                                                        | <b>AO12.1</b><br>Corner lots are truncated at each roadway intersection by: <ul style="list-style-type: none"> <li>(a) three equal chords of a 6m radius for non-industrial lots and are dedicated to Council as public road; or</li> <li>(b) three equal chords of a 8m radius for industrial lots and are dedicated to Council as public road.</li> </ul> | Not applicable.                                                                                                                                   |              |
|                                                                                                                                                                                                                                                                                                                                                                                                        | <b>AO12.2</b><br>At roundabouts and intersections, corner truncations are wider to maintain verge widths and sight line requirements.                                                                                                                                                                                                                       | Not applicable.                                                                                                                                   |              |



| Performance outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Acceptable outcomes                                                                                                                                                                                          | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets either the performance outcome or overall outcome                                                                                                                                                | Internal use |
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| <b>PO13</b><br>New intersections:<br>(a) are safe and do not compromise the efficiency, function, convenience of use or capacity of the road network;<br>(b) have verge areas that provide sufficient area for safe pedestrian and cycling movement; and<br>(c) have sufficient area to provide essential services and infrastructure, including traffic management.                                                                                                                                                                                                                    | <b>AO13</b><br>New intersections are designed and constructed in accordance with <i>Austroads</i> and <b>SC6.12 City Plan policy – Land development guidelines, Section 2 – Transport network standards.</b> | Not applicable.                                                                                                                                                                                                                                                                           |              |
| <b>Ingress and egress</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                           |              |
| <b>PO14</b><br>All vehicles enter and exit the site in a forward gear (restricted manoeuvring is allowed for service vehicles identified in <b>Table 9.4.13-8: Service vehicle requirements</b> ).<br><b>Note: This PO does not apply to the following uses:</b> <ul style="list-style-type: none"> <li>• Dwelling house;</li> <li>• Dual occupancy; or</li> <li>• Multiple dwelling (where there are 3 dwellings).</li> </ul> <b>Editor's note – Access to State controlled roads may require additional approvals in accordance with the <i>Transport Infrastructure Act 1994</i></b> | <b>AO14</b><br>No acceptable outcome provided.                                                                                                                                                               | <b>COMPLIES WITH PO14</b><br>A designated standing area for a van is provided within the ground floor level car park to service the proposed development.<br>Refer to plans of development and <b>Section 5.3</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> . |              |
| <b>PO15</b><br>Where identified on the functional road hierarchy (as shown on the zone maps in Schedule 2) and a lot has two or more                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>AO15</b><br>No acceptable outcome provided.                                                                                                                                                               | Not applicable.                                                                                                                                                                                                                                                                           |              |

| Performance outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Acceptable outcomes                               | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                              | Internal use |
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| road frontages, vehicle access is provided from the road with the least on-road traffic.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                   |                                                                                                                                                                                                                |              |
| <b>Integrated transport and land use</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                   |                                                                                                                                                                                                                |              |
| <b>PO16</b><br>Development:<br>(a) does not compromise the function and capacity of the existing and planned road network; and<br>(b) appropriately mitigates impacts on the safety and operation of the existing and planned road network.<br><b>Note:</b> A Traffic Impact Assessment is Council's preferred method of addressing the above Performance outcome particularly in the following instances:<br>(a) when the development is identified as "any other use not listed in this table" or "any other undefined use" in Part 5 – Tables of assessment;<br>(b) freight dependent development; or<br>(c) site access is to a road identified on the Functional road hierarchy (indicated on the Zone maps in Schedule 2);<br>(d) site access is from a road identified on the Pacific motorway service road types overlay map;<br>(e) site access is within 100m of a signalised intersection;<br>(f) site access is within 50m of a roundabout; or | <b>AO16</b><br>No acceptable outcome is provided. | <b>COMPLIES WITH PO16</b><br>Refer to <b>Section 3</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> which presents the findings of an impact assessment on the external road network. |              |



| Performance outcomes                                                                                                                                                                                                                                                                                                                                                   | Acceptable outcomes                                                                                                | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome | Internal use |
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| (g) a new intersection is proposed;<br>(h) density outcomes in a Zone code are exceeded; or<br>(i) development has the potential to increase existing background traffic (peak period or daily traffic movements) $\geq 5$ percent.                                                                                                                                    |                                                                                                                    |                                                                                                                                                   |              |
| <b>PO17</b><br>Development within the Coomera Town Centre area provides an integrated network of predominantly public streets to ensure efficient movement of pedestrians, cyclists, vehicles and strong public transport connections.<br><br><b>Note:</b> Indicative access and mobility outcomes for the Coomera Town Centre area are identified on Figure 9.4.13-2. | <b>AO17</b><br>No acceptable outcome provided.                                                                     | <b>COMPLIES WITH PO18</b><br>The development is not located in the Coomera Town Centre area.                                                      |              |
| <b>General</b>                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                    |                                                                                                                                                   |              |
| <b>PO18</b><br>Continuous circulation aisles are provided within carparking areas to avoid the use of the road network when accessing areas within the development.                                                                                                                                                                                                    | <b>AO18.1</b><br>All off-street car parking modules and service areas are accessed by internal circulation aisles. | <b>COMPLIES WITH AO18.1</b><br>Refer to <b>Section 4.2</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> .                |              |
|                                                                                                                                                                                                                                                                                                                                                                        | <b>AO18.2</b><br>Circulation aisles are not disconnected by car parking modules or service areas.                  | <b>COMPLIES WITH AO18.2</b><br>Refer to <b>Section 4.2</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> .                |              |
|                                                                                                                                                                                                                                                                                                                                                                        | <b>AO18.3</b><br>All access driveways are linked by circulation aisles and free from parking manoeuvres.           | <b>COMPLIES WITH AO18.3</b><br>Refer to <b>Section 4.2</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> .                |              |

| Performance outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Acceptable outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                       | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets either the performance outcome or overall outcome                                                     | Internal use |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>AO18.4</b><br>All vehicles can circulate throughout the site in a forward gear without performing reverse manoeuvres.                                                                                                                                                                                                                                                                                                                                  | <b>COMPLIES WITH AO18.3</b><br>Refer to <b>Section 4.2</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> .                                                             |              |
| <b>PO19</b><br>Off street car parking areas:<br>(a) provide a legible and efficient internal layout;<br>(b) ensure the safety and security of users;<br>(c) are clearly distinguishable from pedestrian paths and entry points;<br>(d) are easily negotiated by vehicles and pedestrians including persons with a disability;<br>(e) ensure that there are no disruptions to or queues onto the public road network;<br>(f) provide sight distances from driveways to ensure visibility between vehicles on the driveway and pedestrians on the verge;<br>(g) are designed, marked and maintained to the current relevant standard; and<br>(h) promote driver expectations consistent with conventional road rules (e.g. keep to the left). | <b>AO19.1</b><br>Off street car parking provided in accordance with AS 2890.1: <i>Parking facilities – Part 1: Off-street car parking</i> , AS 2890.2: <i>Parking facilities – Part 2: Off-street commercial vehicle facilities</i> , AS/NZS 2890.6: <i>Parking facilities Part 6: Off-street parking for people with disabilities</i> and AS 1428.1: <i>Design for access and mobility Part 1: General requirements for access – New building work</i> . | <b>COMPLIES WITH AO19.1</b><br>Refer to <b>Section 4.2</b> of Geleon Traffic and Transport Assessment Report <b>51080-RP01-A</b> .                                                             |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>AO19.2</b><br>Development does not provide pavement humps or raised platforms in queuing areas.                                                                                                                                                                                                                                                                                                                                                        | <b>COMPLIES WITH AO19.2</b><br>Refer to the plans of development.                                                                                                                              |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>AO19.3</b><br>Development is designed so that vehicles do not reverse across marked pedestrian crossings.                                                                                                                                                                                                                                                                                                                                              | <b>COMPLIES WITH AO19.3</b><br>All vehicles can manoeuvre throughout the development site without being required to reverse across pedestrian crossings.<br>Refer to the plans of development. |              |
| <b>PO20</b><br>Any proposed porte-cocheres are designed to enable safe manoeuvring and access of vehicles on-site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>AO20</b><br>Any proposed porte-cocheres are designed to:                                                                                                                                                                                                                                                                                                                                                                                               | Not applicable.                                                                                                                                                                                |              |



| Performance outcomes                                                                                                                                                                                                                        | Acceptable outcomes                                                                                                                                                                                                 | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets either the performance outcome or overall outcome | Internal use |
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|                                                                                                                                                                                                                                             | (a) have a minimum vertical clearance of 4.5m;<br>(b) accommodate vehicles entirely within the site, including the queuing of vehicles; and<br>(c) allow vehicles to circulate in a forward direction at all times. |                                                                                                                                            |              |
| <b>PO21</b><br>Staged development is planned, designed and constructed to ensure that for each stage:<br>(a) sufficient car parking is provided; and<br>(b) appropriate connections to active and public transport facilities are provided. | <b>AO21</b><br>No acceptable outcome is provided.                                                                                                                                                                   | <b>COMPLIES WITH PO21</b><br>The development will be staged accordingly.                                                                   |              |

**Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area**

This table sets out the minimum number of car parking spaces required according to the use applied for. Where the calculated number of car spaces is not a whole number, the number of car parking spaces required must be the next higher whole number.

| Land use                           | Minimum number of off-street car parking spaces                                                                                                           |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Adult store</b>                 | 5 per 100m <sup>2</sup> of TUA (total use area)                                                                                                           |
| <b>Agricultural supplies store</b> | 2 per tenancy or lot plus 1 per 50m <sup>2</sup> of TUA up to and including 500m <sup>2</sup> , and 1 per 100m <sup>2</sup> of TUA over 500m <sup>2</sup> |
| <b>Animal husbandry</b>            | 1 per staff in addition to parking provided for the primary dwelling                                                                                      |
| <b>Animal keeping</b>              | 1 per staff in addition to parking provided for the primary dwelling                                                                                      |
| <b>Bar</b>                         | 5 per 100m <sup>2</sup> of TUA                                                                                                                            |
| <b>Brothel</b>                     | 1 per each room plus 1 per 2 staff                                                                                                                        |

| Land use                  | Minimum number of off-street car parking spaces                                                                                                           |                                                                                                        |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Bulk landscape supplies   | 2 per tenancy or lot plus 1 per 50m <sup>2</sup> of TUA up to and including 500m <sup>2</sup> , and 1 per 100m <sup>2</sup> of TUA over 500m <sup>2</sup> |                                                                                                        |
| Caretaker's accommodation | 2                                                                                                                                                         |                                                                                                        |
| Car wash                  | DIY car wash                                                                                                                                              | 0                                                                                                      |
|                           | Hand-wash                                                                                                                                                 | 1 per 2 staff                                                                                          |
| Child care centre         | 1 per 4 children, which may be provided as a passenger set-down/pick-up area                                                                              |                                                                                                        |
| Club                      | 6 per 100m <sup>2</sup> of TUA                                                                                                                            |                                                                                                        |
| Community care centre     | 14, plus 5 per 100m <sup>2</sup> of TUA                                                                                                                   |                                                                                                        |
| Community use             | 6 per 100m <sup>2</sup> of TUA                                                                                                                            |                                                                                                        |
| Crematorium               | 10 per 100m <sup>2</sup> of TUA                                                                                                                           |                                                                                                        |
| Cropping                  | 1 per staff in addition to parking provided for the primary dwelling                                                                                      |                                                                                                        |
| Dual occupancy            | 2 per dwelling                                                                                                                                            |                                                                                                        |
| Dwelling house            | Dwelling house                                                                                                                                            | 1 per 1 bedroom dwelling                                                                               |
|                           |                                                                                                                                                           | 2 per dwelling with 2 or more bedrooms                                                                 |
|                           | Secondary dwelling where 80m <sup>2</sup> or less                                                                                                         | 1                                                                                                      |
|                           | Secondary dwelling where greater than 80m <sup>2</sup>                                                                                                    | 2                                                                                                      |
| Dwelling unit             | 2                                                                                                                                                         |                                                                                                        |
| Educational establishment | Preparatory                                                                                                                                               | 1 per staff, plus 1 per 5 children enrolled which may be provided as a passenger set-down/pick-up area |
|                           | Primary                                                                                                                                                   | 1 per staff                                                                                            |
|                           | Secondary                                                                                                                                                 | 1 per staff plus 1 per 10 Year 12 students                                                             |
|                           | Before and after school care                                                                                                                              | 1 per staff, plus 1 per 5 children enrolled which may be provided as a passenger set-down/pick-up area |



| Land use                           | Minimum number of off-street car parking spaces                                                                                                                         |                                                                           |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
|                                    | <b>Tertiary and further education</b>                                                                                                                                   | To be determined upon submission of a Car Parking Assessment to Council   |
|                                    | In addition to the car parking requirements a set down/pick-up area is provided.                                                                                        |                                                                           |
| <b>Food and drink outlet</b>       | 5 per 100m <sup>2</sup> of TUA, plus queuing area for 10 vehicles for any drive-thru facility from the collection point                                                 |                                                                           |
| <b>Function facility</b>           | 10 per 100m <sup>2</sup> of TUA                                                                                                                                         |                                                                           |
| <b>Funeral parlour</b>             | The greater of:<br>(a) 1 per 10m <sup>2</sup> of TUA; or<br>(b) 1 per 2.5 persons, based on maximum occupancy                                                           |                                                                           |
| <b>Garden centre</b>               | 10, plus 1 space per 100m <sup>2</sup> of TUA in excess of 3,000m <sup>2</sup>                                                                                          |                                                                           |
| <b>Hardware and trade supplies</b> | 2 per tenancy or lot plus 1 per 50m <sup>2</sup> of TUA up to and including 500m <sup>2</sup> , and 1 per 100m <sup>2</sup> of TUA over 500m <sup>2</sup>               |                                                                           |
| <b>Health care services</b>        | The greater of:<br>(a) 1 per 20m <sup>2</sup> of TUA; or<br>(b) 2 per consulting room, plus 1 space per staff                                                           |                                                                           |
| <b>High impact industry</b>        | 2 per tenancy or lot plus 1 per 50m <sup>2</sup> of TUA up to and including 500m <sup>2</sup> , and 1 per 100m <sup>2</sup> of TUA over 500m <sup>2</sup>               |                                                                           |
| <b>Home based business</b>         | <b>Bed and breakfast</b>                                                                                                                                                | 1 per guest room in addition to parking provided for the primary dwelling |
|                                    | <b>Home office</b>                                                                                                                                                      | 1, in addition to parking provided for the primary dwelling               |
|                                    | <b>Home based child care</b>                                                                                                                                            | 0                                                                         |
|                                    | <b>Home based business n.e.i.</b>                                                                                                                                       | 2, in addition to parking provided for the primary dwelling               |
| <b>Hospital</b>                    | 0.8 per staff plus 1 per 2 beds                                                                                                                                         |                                                                           |
| <b>Hotel</b>                       | 6 per 100m <sup>2</sup> of TUA and 1 space per short term/serviced apartment plus queuing area for 10 vehicles for any drive-through facility from the collection point |                                                                           |
| <b>Indoor sport and recreation</b> | <b>Gymnasium (where 24hr and no classes)</b>                                                                                                                            | 1 per 20m <sup>2</sup> of TUA                                             |
|                                    | <b>Amusement parlour</b>                                                                                                                                                | 5 per 100m <sup>2</sup> TUA                                               |

| Land use                         | Minimum number of off-street car parking spaces                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  | <b>Squash or enclosed tennis court</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6 per court                                                                                                                                               |
|                                  | <b>Indoor cricket or other court game</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 20 per court                                                                                                                                              |
|                                  | <b>Swimming pool or skating rink</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 15, plus 1 per 100m <sup>2</sup> of TUA                                                                                                                   |
|                                  | <b>Any other operation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1 per 10m <sup>2</sup> of TUA                                                                                                                             |
| <b>Intensive animal industry</b> | 1 per staff in addition to parking provided for primary dwelling                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                           |
| <b>Intensive horticulture</b>    | 1 per staff in addition to parking provided for primary dwelling                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                           |
| <b>Low impact industry</b>       | 2 per tenancy or lot plus 1 per 50m <sup>2</sup> of TUA up to and including 500m <sup>2</sup> , and 1 per 100m <sup>2</sup> of TUA over 500m <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                           |
| <b>Marine industry</b>           | 2 per tenancy or lot plus 1 per 50m <sup>2</sup> of TUA up to and including 500m <sup>2</sup> , and 1 per 100m <sup>2</sup> of TUA over 500m <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                           |
| <b>Market</b>                    | 1 per 2 stalls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                           |
| <b>Medium impact industry</b>    | <b>Medium impact industry</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2 per tenancy or lot plus 1 per 50m <sup>2</sup> of TUA up to and including 500m <sup>2</sup> , and 1 per 100m <sup>2</sup> of TUA over 500m <sup>2</sup> |
|                                  | <b>Salvage Yard</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.7 per 100m <sup>2</sup> of TUA, with a minimum of 5 spaces                                                                                              |
| <b>Multiple dwelling</b>         | (a) 1 per 1 bedroom unit or dwelling;<br>(b) 1.25 per 2 bedroom unit or dwelling;<br>(c) 1.5 per 3 bedroom unit or dwelling;<br>(d) 2 per 4 bedroom unit or dwelling;<br>Plus:<br>(a) where 3 to 4 dwellings, 1 for visitor parking; or<br>(b) where 5 to 6 dwellings, 2 for visitor parking; or<br>(c) where 7 to 9 dwellings, 3 for visitor parking; or<br>(d) where 10 or more dwellings, 3 plus 1 per 10 dwellings for visitor parking thereafter<br><b>Note: At least 50% of visitor parking to be provided in a single location</b> |                                                                                                                                                           |
| <b>Nightclub</b>                 | 5 per 100m <sup>2</sup> of TUA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                           |
| <b>Office</b>                    | <b>Office, if real estate agent</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | To be determined upon submission of a Car Parking Assessment to Council                                                                                   |

| Land use                         | Minimum number of off-street car parking spaces                                                                                                           |                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  | Office, if call centre                                                                                                                                    | To be determined upon submission of a Car Parking Assessment to Council                                                                                                                                                                                                                                                                          |
|                                  | Office n.e.i                                                                                                                                              | 3 per 100m <sup>2</sup> of TUA                                                                                                                                                                                                                                                                                                                   |
| Outdoor sales                    | Vehicle hire                                                                                                                                              | 3 per 100m <sup>2</sup> of TUA plus 1 per 1.5 vehicles in the vehicle hire fleet and 1 on-site wash bay                                                                                                                                                                                                                                          |
|                                  | Motor vehicles sale yard                                                                                                                                  | 3 per 100m <sup>2</sup> of TUA plus 0.5 per 100m <sup>2</sup> of display area                                                                                                                                                                                                                                                                    |
| Outdoor sport and recreation     | Tennis court                                                                                                                                              | 4 per court                                                                                                                                                                                                                                                                                                                                      |
|                                  | Lawn bowls (stand-alone)                                                                                                                                  | 20 per green                                                                                                                                                                                                                                                                                                                                     |
|                                  | Swimming pool                                                                                                                                             | 15, plus 1 per 100m <sup>2</sup> of TUA                                                                                                                                                                                                                                                                                                          |
|                                  | Golf course                                                                                                                                               | The greater of:<br>(a) 4 per hole, plus 3 per 100m <sup>2</sup> of TUA of clubhouse; or<br>(b) 6 per 100m <sup>2</sup> of TUA of clubhouse                                                                                                                                                                                                       |
|                                  | Football ground                                                                                                                                           | 50 per field                                                                                                                                                                                                                                                                                                                                     |
|                                  | Any other court game                                                                                                                                      | 20 per court                                                                                                                                                                                                                                                                                                                                     |
| Permanent plantation             | 1 per staff in addition to parking provided for the primary dwelling                                                                                      |                                                                                                                                                                                                                                                                                                                                                  |
| Place of worship                 | 1 per 2.5 persons, based on maximum occupancy                                                                                                             |                                                                                                                                                                                                                                                                                                                                                  |
| Port services                    | Marina                                                                                                                                                    | (a) 0.6 per wet berth designed for boats 10m and under;<br>(b) 0.8 per wet berth designed for boats between 10m and 15m;<br>(c) 1 per wet berth designed for boats greater than 15m;<br>(d) 0.2 per dry berth or swing mooring; plus<br>(e) 0.5 per staff;<br>(f) 1 per 50m <sup>2</sup> TUA of ancillary activities associated with the marina. |
| Relocatable home park            | Relocatable home park                                                                                                                                     | 1 per relocatable home plus 1 per 5 homes for visitors                                                                                                                                                                                                                                                                                           |
| Research and technology industry | 2 per tenancy or lot plus 1 per 50m <sup>2</sup> of TUA up to and including 500m <sup>2</sup> , and 1 per 100m <sup>2</sup> of TUA over 500m <sup>2</sup> |                                                                                                                                                                                                                                                                                                                                                  |



| Land use                  | Minimum number of off-street car parking spaces                                                                                                                                                                                                                                            |                                                                             |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Residential care facility | 1 per 2 beds for visitor car parking, and 1 per staff based on maximum residential occupancy<br><b>Note: 50% of visitor parking to be provided in a single location</b>                                                                                                                    |                                                                             |
| Resort complex            | 1 per 4 dwellings                                                                                                                                                                                                                                                                          |                                                                             |
| Retirement facility       | (a) 1 per independent living, self contained dwelling; plus<br>(b) 1 per 4 independent living, self contained dwellings for visitor car parking; plus<br>(c) 1 per staff based on maximum residential occupancy<br><b>Note: 50% of visitor parking to be provided in a single location</b> |                                                                             |
| Roadside stall            | 4                                                                                                                                                                                                                                                                                          |                                                                             |
| Rooming accommodation     | Off-site Student accommodation                                                                                                                                                                                                                                                             | 1 per 2 students, based on maximum occupancy plus 1 for a manager residence |
|                           | Hostel                                                                                                                                                                                                                                                                                     | 1 per room, excluding communal areas, plus 1 for a manager residence        |
|                           | Other                                                                                                                                                                                                                                                                                      | To be determined upon submission of a Car Parking Assessment to Council     |
| Rural industry            | 1 per staff in addition to parking provided for primary dwelling plus 1 visitor space                                                                                                                                                                                                      |                                                                             |
| Sales office              | Sales office                                                                                                                                                                                                                                                                               | 5                                                                           |
|                           | Display dwelling                                                                                                                                                                                                                                                                           | 0                                                                           |
| Service industry          | Service industry                                                                                                                                                                                                                                                                           | 5 per 100m <sup>2</sup> of TUA                                              |
|                           | Laundromat                                                                                                                                                                                                                                                                                 | 5 per 100m <sup>2</sup> of TUA                                              |
| Service station           | 2, plus 5 per 100m <sup>2</sup> of TUA                                                                                                                                                                                                                                                     |                                                                             |
| Shop                      | 5 per 100m <sup>2</sup> of TUA                                                                                                                                                                                                                                                             |                                                                             |
| Short-term accommodation  | Backpackers accommodation                                                                                                                                                                                                                                                                  | 1 per 8 beds plus 1 for a shuttle bus                                       |
|                           | Other                                                                                                                                                                                                                                                                                      | 1 per room plus 1 per managers residence                                    |
| Showroom                  | 2 per tenancy or lot plus 1 per 50m <sup>2</sup> of TUA up to and including 500m <sup>2</sup> , and 1 per 100m <sup>2</sup> of TUA over 500m <sup>2</sup>                                                                                                                                  |                                                                             |

| Land use            | Minimum number of off-street car parking spaces                         |                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Theatre             | Stand-alone                                                             | To be determined upon submission of a Car Parking Assessment to Council                                                                                                                                                                                                                                                                                                                                        |
|                     | Where part of a shopping centre                                         | 1 per 8 seats                                                                                                                                                                                                                                                                                                                                                                                                  |
| Tourist attraction  | Existing                                                                | To be determined upon submission of a Car Parking Assessment to Council                                                                                                                                                                                                                                                                                                                                        |
| Tourist park        | Caravan park                                                            | 11 per 10 sites plus 1 per 10 sites for visitors                                                                                                                                                                                                                                                                                                                                                               |
|                     | Holiday cabins                                                          | 1 per site or cabin plus 1 per 10 sites for visitors                                                                                                                                                                                                                                                                                                                                                           |
| Transport depot     | To be determined upon submission of a Car Parking Assessment to Council |                                                                                                                                                                                                                                                                                                                                                                                                                |
| Veterinary services | 5 per 100m <sup>2</sup> of TUA                                          |                                                                                                                                                                                                                                                                                                                                                                                                                |
| Warehouse           | Warehouse                                                               | 2 per tenancy or lot plus 1 per 50m <sup>2</sup> of TUA up to and including 500m <sup>2</sup> , and 1 per 100m <sup>2</sup> of TUA over 500m <sup>2</sup>                                                                                                                                                                                                                                                      |
|                     | Self storage sheds<br>0 – 3,000m <sup>2</sup> GLA                       | (a) 3 plus 1 for trailer<br>(b) This rate includes staff parking requirements<br>(c) All spaces are located beside or adjacent to the office administration building<br>(d) Where storage units are proposed to be located in a multi-storey building and access to the units is via stairs or lifts, an additional 2 parking spaces are to be provided behind a secured gate and at the entry to the building |
|                     | Self storage sheds<br>3,001m <sup>2</sup> - 6,000m <sup>2</sup> GLA     | (a) 4 plus 1 for trailer<br>(b) This rate includes staff parking requirements<br>(c) All spaces are located beside or adjacent to the office administration building<br>(d) Where storage units are proposed to be located in a multi-storey building and access to the units is via stairs or lifts, an additional 5 parking spaces are to be provided behind a secured gate                                  |
|                     | Self storage sheds<br>6,001m <sup>2</sup> - 9,500m <sup>2</sup> GLA     | (a) 5 plus 1 for trailer<br>(b) This rate includes staff parking requirements                                                                                                                                                                                                                                                                                                                                  |

| Land use                                        | Minimum number of off-street car parking spaces                                |                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                 |                                                                                | (c) All spaces are located beside or adjacent to the office administration building<br>(d) Where storage units are proposed to be located in a multi-storey building and access to the units is via stairs or lifts, an additional 5 parking spaces are to be provided behind a secured gate |
|                                                 | <b>Self storage sheds<br/>≥ 9,501m<sup>2</sup> GLA</b>                         | To be determined upon submission of a Car Parking Assessment to Council                                                                                                                                                                                                                      |
| <b>Wholesale nursery</b>                        | 10, plus 1 space per 100m <sup>2</sup> of TUA in excess of 3,000m <sup>2</sup> |                                                                                                                                                                                                                                                                                              |
| <b>Winery</b>                                   | To be determined upon submission of a Car Parking Assessment to Council        |                                                                                                                                                                                                                                                                                              |
| <b>Any other land use or land use operation</b> | To be determined upon submission of a Car Parking Assessment to Council        |                                                                                                                                                                                                                                                                                              |

**Note:** The Car sharing travel demand measure may be applied to reduce car parking requirements in accordance with Table 9.4.13-7: Travel demand measures.

**Note:** Tandem car parking spaces (limited to 2 vehicles parked one behind the other) can be counted as 2 spaces in the following instances:

- (a) the spaces are designated and signed for the occupants of the same dwelling or the same non-residential tenancy;
- (b) the minimum length of the tandem car space is 10.4m; and
- (c) the minimum length of a tandem garage (if proposed) is 11m.

**Table 9.4.13-4: Car parking rates – Centre zone and High density residential zone – Transport Hub Area**

This table sets out the minimum number of car parking spaces required according to the use applied for. Where the calculated number of car spaces is not a whole number, the number of car parking spaces required must be the next higher whole number.

| Zone               | Site proximity to a light rail station                                                      | Land use                                        | Minimum number of off-street car parking spaces                                                                                                       |
|--------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Centre zone</b> | Where the property boundary of a development directly adjoins a Light rail station platform | Non-residential                                 | 0                                                                                                                                                     |
| <b>Centre zone</b> | Within 400m walking distance                                                                | Residential – permanent/long-term accommodation | 0.75 per unit or dwelling and 1 per 10 units or dwelling for visitors. A minimum of 17.5% residential parking, excluding visitor, is to be unbundled. |



| Zone                          | Site proximity to a light rail station             | Land use                                                                                                   | Minimum number of off-street car parking spaces                                                                                                      |
|-------------------------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               |                                                    | Residential –Short-term accommodation (not including Backpackers accommodation) and Rooming accommodation  | 1 per 4 units or dwellings                                                                                                                           |
|                               |                                                    | Residential – Short-term accommodation if Backpackers accommodation                                        | 1 per 8 beds plus 1 for a shuttle bus                                                                                                                |
|                               |                                                    | Non-residential                                                                                            | 1 per 100m <sup>2</sup> of TUA                                                                                                                       |
|                               |                                                    |                                                                                                            |                                                                                                                                                      |
| Centre zone                   | Within 800m walking distance                       | Residential – permanent/long-term accommodation                                                            | 0.9 per unit or dwelling and 1 per 10 units or dwelling for visitors. A minimum of 17.5% residential parking, excluding visitor, is to be unbundled. |
|                               |                                                    | Residential – Short-term accommodation (not including Backpackers accommodation) and Rooming accommodation | 1 per 4 units or dwellings                                                                                                                           |
|                               |                                                    | Residential – Short-term accommodation if Backpackers accommodation                                        | 1 per 8 beds plus 1 for a shuttle bus                                                                                                                |
|                               |                                                    | Non-residential                                                                                            | 1 per 75m <sup>2</sup> of TUA                                                                                                                        |
| High density residential zone | Within mapped boundaries of the Transport hub area | Residential – permanent/long-term accommodation                                                            | 1 per unit or dwelling and 1 per 10 units or dwelling for visitors                                                                                   |
|                               |                                                    | Residential – Short-term accommodation (not including Backpackers accommodation) and Rooming accommodation | 1 per 4 units or dwellings                                                                                                                           |
|                               |                                                    | Residential – Short-term accommodation if Backpackers accommodation                                        | 1 per 8 beds plus 1 for a shuttle bus                                                                                                                |

| Zone                          | Site proximity to a light rail station | Land use        | Minimum number of off-street car parking spaces |
|-------------------------------|----------------------------------------|-----------------|-------------------------------------------------|
| High density residential zone | Within 400m walking distance           | Non-residential | 1 per 100m <sup>2</sup> of TUA                  |
| High density residential zone | Within 800m walking distance           | Non-residential | 1 per 75m <sup>2</sup> of TUA                   |

**Note:** Where 1 space is provided per unit or dwelling, there is no requirement to unbundle car parking.

**Note:** The Car sharing travel demand measure may be applied to reduce car parking requirements in accordance with Table 9.4.13-7: Travel demand measures.

**Note:** Tandem car parking spaces (limited to 2 vehicles parked one behind the other) can be counted as 2 spaces in the following instances:

- (a) the spaces are designated and signed for the occupants of the same dwelling or the same non-residential tenancy;
- (b) the minimum length of the tandem car space is 10.4m; and
- (c) the minimum length of a tandem garage (if proposed) is 11m.

**Table 9.4.13-5: Car parking rates – Centre zone – outside Transport hub area**

This table sets out the minimum number of car parking spaces required according to the use applied for. Where the calculated number of car spaces is not a whole number, the number of car parking spaces required must be the next higher whole number.

| Centre zone                             | Land Use                                            | Minimum number of off-street car parking spaces                                                                                                                                    |
|-----------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Principal centre</b>                 |                                                     |                                                                                                                                                                                    |
| <b>Coomera</b>                          | Residential – permanent/long-term accommodation     | 1 per unit or dwelling and 1 per 10 units or dwellings for visitors                                                                                                                |
|                                         | Residential – serviced and short-term accommodation | 1 per 4 units                                                                                                                                                                      |
|                                         | Non-residential                                     | 1 per 100m <sup>2</sup> of TUA                                                                                                                                                     |
| <b>Specialist centre</b>                |                                                     |                                                                                                                                                                                    |
| <b>Bundall</b>                          | Office                                              | 2.5 per 100m <sup>2</sup> of TUA                                                                                                                                                   |
|                                         | Food and drink outlet, shop, service industry       | 2.5 per 100m <sup>2</sup> of TUA                                                                                                                                                   |
|                                         | Any other land use                                  | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Varsity Central/ Bond University</b> | Residential – permanent/long-term accommodation     | 1 per unit or dwelling and 1 per 10 units or dwellings for visitors                                                                                                                |

| Centre zone                   | Land Use                                                                        | Minimum number of off-street car parking spaces                                                                                                                                    |
|-------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bond University campus        | Residential – serviced and short-term accommodation                             | 1 per 2 units, plus 1 for a manager residence                                                                                                                                      |
|                               | Non-residential                                                                 | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
|                               | Residential – serviced and short-term accommodation where on Lot 10 on SP148599 | 1 per 4 units, plus 1 for a manager residence                                                                                                                                      |
| Varsity Station Village       | Residential                                                                     | 1 per unit or dwelling and 1 per 10 units or dwellings for visitors                                                                                                                |
|                               | Non-residential                                                                 | 1 per 100m <sup>2</sup> of TUA                                                                                                                                                     |
| Biggera Waters (Harbour Town) | Residential                                                                     | 1 per unit or dwelling and 1 per 10 units or dwellings for visitors                                                                                                                |
|                               | Non-residential                                                                 | 3.3 per 100m <sup>2</sup> of TUA                                                                                                                                                   |
| <b>Major centre</b>           |                                                                                 |                                                                                                                                                                                    |
| Nerang                        | Residential                                                                     | 1 per unit or dwelling and 1 per 10 units or dwellings for visitors                                                                                                                |
|                               | Non-residential                                                                 | 3.3 per 100m <sup>2</sup> of TUA                                                                                                                                                   |
| Coolangatta                   | Residential                                                                     | 1 per unit or dwelling and 1 per 10 units or dwellings for visitors                                                                                                                |
|                               | Non-residential                                                                 | 3.3 per 100m <sup>2</sup> of TUA                                                                                                                                                   |
| Helensvale                    | Residential                                                                     | 1 per unit or dwelling and 1 per 10 units or dwellings for visitors                                                                                                                |
|                               | Non-residential                                                                 | 1 per 100m <sup>2</sup> of TUA                                                                                                                                                     |
| <b>District centres</b>       |                                                                                 |                                                                                                                                                                                    |
| Burleigh                      | Residential                                                                     | 1 per unit or dwelling and 1 per 10 units or dwellings for visitors                                                                                                                |
|                               | Non-residential                                                                 | 3.3 per 100m <sup>2</sup> of TUA                                                                                                                                                   |
| Oxenford                      | All                                                                             | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| Ormeau                        | Residential                                                                     | 1 per unit or dwelling and 1 per 10 units or dwellings for visitors                                                                                                                |
|                               | Non-residential                                                                 | 5 per 100m <sup>2</sup>                                                                                                                                                            |



| Centre zone                                                                   | Land Use | Minimum number of off-street car parking spaces                                                                                                                                    |
|-------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pimpama</b><br>Old Pacific Highway,<br>Pimpama                             | All      | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Coomera City Centre</b><br>Days Rd and City Centre Drive                   | All      | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Hope Island</b><br>Marina Quays Dr                                         | All      | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Runaway Bay Shopping Centre</b><br>Cnr Morala and Lae Dr                   | All      | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Ashmore City</b><br>Cnr Southport-Nerang Rd and Currumburra Rd             | All      | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Ashmore Plaza</b><br>Cotlew St                                             | All      | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Southport Park Shopping Centre</b><br>Cnr Drury Av, Ferry Rd and Benowa Rd | All      | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Q-Superstore</b><br>Cnr Bermuda and Markeri St                             | All      | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Mudgeeraba Village</b>                                                     | All      | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Treetops (Urbia)</b><br>Cnr Bermuda Street and Reedy Creek Rd              | All      | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |

| Centre zone                                                              | Land Use        | Minimum number of off-street car parking spaces                                                                                                                                    |
|--------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>West Burleigh Shopping Centre</b><br>Reedy Creek Rd, Burleigh Waters  | All             | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Palm Beach</b>                                                        | Residential     | 1 per unit or dwelling and 1 per 10 units or dwellings for visitors                                                                                                                |
|                                                                          | Non-residential | 3.3 per 100m <sup>2</sup> of TUA                                                                                                                                                   |
| <b>The Pines Shopping Centre</b><br>Cnr K P McGrath Dr and Guineas Creek | All             | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |
| <b>Tugun</b>                                                             | Residential     | 1 per unit or dwelling plus 1 per 10 for visitors                                                                                                                                  |
|                                                                          | Non-residential | 3.3 per 100m <sup>2</sup> of TUA                                                                                                                                                   |
| <b>All other centres</b>                                                 | All             | Refer to <b>Table 9.4.13-3: Car parking rates – all zones except Centre zone or Special purpose zone – Special development area precinct – Southport Priority Development Area</b> |

**Note:** The Car sharing travel demand measure may be applied to reduce car parking requirements in accordance with Table 9.4.13-7: Travel demand measures.

**Note:** Tandem car parking spaces (limited to 2 vehicles parked one behind the other) can be counted as 2 spaces in the following instances:

- (a) the spaces are designated and signed for the occupants of the same dwelling or the same non-residential tenancy;
- (b) the minimum length of the tandem car space is 10.4m; and
- (c) the minimum length of a tandem garage (if proposed) is 11m.

**Table 9.4.13-6: Car parking rates – Southport Priority Development Area**

This table sets out the minimum number of car parking spaces required according to the use applied for. Where the calculated number of car spaces is not a whole number, the number of car parking spaces required must be the next higher whole number.

| Precinct          | Site proximity to a light rail station                                                      | Land use                                        | Minimum number of off-street car parking spaces                                                                                                                                                       |
|-------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precinct 1</b> | Where the property boundary of a development directly adjoins a Light rail station platform | Residential – permanent/long term accommodation | 0.75 per unit or dwelling and 1 per 10 units or dwelling for visitors.<br>A minimum of 17.5% residential parking, excluding visitor, is to be unbundled and provided in a pooled parking arrangement. |

| Precinct   | Site proximity to a light rail station                                  | Land use                                                                                                   | Minimum number of off-street car parking spaces                                                                                                                                                       |
|------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            |                                                                         | Residential – Short-term accommodation (not including Backpackers accommodation) and Rooming accommodation | 1 per 4 units or dwellings                                                                                                                                                                            |
|            |                                                                         | Residential – Short-term accommodation if Backpackers accommodation                                        | 1 per 8 beds plus 1 for a shuttle bus                                                                                                                                                                 |
|            |                                                                         | Non-residential                                                                                            | 0                                                                                                                                                                                                     |
|            | Within 400m walking distance                                            | Residential – permanent/long-term accommodation                                                            | 0.75 per unit or dwelling and 1 per 10 units or dwelling for visitors.<br>A minimum of 17.5% residential parking, excluding visitor, is to be unbundled and provided in a pooled parking arrangement. |
|            |                                                                         | Residential – Short-term accommodation (not including Backpackers accommodation) and Rooming accommodation | 1 per 4 units or dwellings                                                                                                                                                                            |
|            |                                                                         | Residential – Short-term accommodation if Backpackers accommodation                                        | 1 per 8 beds plus 1 for a shuttle bus                                                                                                                                                                 |
|            |                                                                         | Non-residential                                                                                            | 1 per 100m <sup>2</sup> of TUA                                                                                                                                                                        |
|            | Outside 400m walking distance and within the boundaries of the precinct | Residential – permanent/long term accommodation                                                            | 0.9 per unit or dwelling and 1 per 10 units or dwellings for visitors.<br>A minimum of 17.5% residential parking, excluding visitor, is to be unbundled and provided in a pooled parking arrangement. |
|            |                                                                         | Residential – Short-term accommodation (not including Backpackers accommodation) and Rooming accommodation | 1 per 4 units or dwellings                                                                                                                                                                            |
|            |                                                                         | Residential – Short-term accommodation if Backpackers accommodation                                        | 1 per 8 beds plus 1 for a shuttle bus                                                                                                                                                                 |
|            |                                                                         | Non-residential                                                                                            | 1 per 75m <sup>2</sup> TUA                                                                                                                                                                            |
| Precinct 2 | Within the boundaries of the precinct                                   | Residential – permanent/long-term accommodation                                                            | 0.9 per unit or dwelling and 1 per 10 units or dwellings for visitors.<br>A minimum of 17.5% residential parking, excluding visitor, is to be unbundled and provided in a pooled parking arrangement. |
|            |                                                                         | Residential – Short-term accommodation (not including Backpackers accommodation) and Rooming accommodation | 1 per 4 units or dwellings                                                                                                                                                                            |



| Precinct   | Site proximity to a light rail station                                  | Land use                                                                                                   | Minimum number of off-street car parking spaces                                                                                                                                                           |
|------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precinct 3 |                                                                         | Residential – Short-term accommodation if Backpackers accommodation                                        | 1 per 8 beds plus 1 for a shuttle bus                                                                                                                                                                     |
|            |                                                                         | Non-residential                                                                                            | 1 per 75m <sup>2</sup> TUA                                                                                                                                                                                |
|            | Within 400m walking distance                                            | Residential – permanent/long term accommodation                                                            | 0.75 per unit or dwelling and<br>1 per 10 units or dwellings for visitors.<br>A minimum of 17.5% residential parking, excluding visitor, is to be unbundled and provided in a pooled parking arrangement. |
|            |                                                                         | Residential – Short-term accommodation (not including Backpackers accommodation) and Rooming accommodation | 1 per 4 units or dwellings                                                                                                                                                                                |
|            |                                                                         | Residential – Short-term accommodation if Backpackers accommodation                                        | 1 per 8 beds plus 1 for a shuttle bus                                                                                                                                                                     |
|            |                                                                         | Non-residential                                                                                            | 1 per 100m <sup>2</sup> TUA                                                                                                                                                                               |
|            | Outside 400m walking distance and within the boundaries of the precinct | Residential – permanent/long term accommodation                                                            | 0.9 per unit or dwelling and<br>1 per 10 units or dwellings for visitors.<br>A minimum of 17.5% residential parking, excluding visitor, is to be unbundled and provided in a pooled parking arrangement.  |
|            |                                                                         | Residential – Short-term accommodation (not including Backpackers accommodation) and Rooming accommodation | 1 per 4 units or dwellings                                                                                                                                                                                |
|            |                                                                         | Residential – Short-term accommodation if Backpackers accommodation                                        | 1 per 8 beds plus 1 for a shuttle bus                                                                                                                                                                     |
|            |                                                                         | Non-residential                                                                                            | 1 per 75m <sup>2</sup> TUA                                                                                                                                                                                |

**Note:** The Car sharing travel demand measure may be applied to reduce car parking requirements in accordance with Table 9.4.13-7: Travel demand measures.

**Note:** Tandem car parking spaces (limited to 2 vehicles parked one behind the other) can be counted as 2 spaces in the following instances:

- (a) the spaces are designated and signed for the occupants of the same dwelling or the same non-residential tenancy;
- (b) the minimum length of the tandem car space is 10.4m; and
- (c) the minimum length of a tandem garage (if proposed) is 11m.

**Table 9.4.13-7: Travel demand measures**

This table sets out the travel demand measures that can be applied to development. The indicative reduction of each travel demand measure is to be subtracted from the car parking requirement indicated in the tables: Table 9.4.13-3 to Table 9.4.13-6.

| Travel demand measure                                                                                             | Indicative reduction to car parking rates                                                        |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Car sharing                                                                                                       | Each car share vehicle off-sets 5 spaces (equates to a relaxation of 4 spaces)                   |
| Unbundled parking                                                                                                 | 20% to 50% unbundled – 30% reduction in minimum rate                                             |
| Motorcycle/motor scooter parking                                                                                  | Every 2 motorcycles spaces can replace 1 car space, up to 15% of the minimum parking requirement |
| Bicycle parking (where provided in excess of the requirement under relevant section of this code)                 | Every 6 bicycles offsets 1 car space, up to 15% of the minimum parking requirement               |
| Any other travel demand measure<br><b>Note: This travel demand measure only applies to assessable development</b> | To be approved by Council                                                                        |

**Table 9.4.13-8: Service vehicle requirements**

| Site area (m <sup>2</sup> )                  | Service vehicle requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Less than 1,000m <sup>2</sup>                | Demonstrate that the development can accommodate the design service vehicle – in accordance with <b>Table 9.4.13-9: Minimum class of service vehicle</b> – a separate service bay is not required and restricted manoeuvring areas from a public roadway are allowed.                                                                                                                                                                                                        |
| 1,000m <sup>2</sup> to < 2,000m <sup>2</sup> | <ul style="list-style-type: none"> <li>(a) Service bay to accommodate the design service vehicle in accordance with <b>Table 9.4.13-9: Minimum class of service vehicle</b>.</li> <li>(b) Restricted manoeuvring from a public roadway is allowed for a heavy rigid vehicle (HRV) and/or articulated vehicle (AV) is the design service vehicle.</li> <li>(c) Full on-site manoeuvring is required for all other classes of service vehicle (Van, SRV &amp; MRV).</li> </ul> |
| 2,000m <sup>2</sup> to <4,000m <sup>2</sup>  | <ul style="list-style-type: none"> <li>(a) Service bay to accommodate the design service vehicle in accordance with <b>Table 9.4.13-9: Minimum class of service vehicle</b>.</li> <li>(b) Restricted manoeuvring from a public roadway is allowed for an articulated vehicle.</li> <li>(c) Full on-site manoeuvring is required for all other classes of service vehicle (Van, SRV, MRV, LRV, RCV &amp; HRV).</li> </ul>                                                     |
| 4,000m <sup>2</sup> and greater              | <ul style="list-style-type: none"> <li>(a) Service bay to accommodate the design service vehicle in accordance with <b>Table 9.4.13-9: Minimum class of service vehicle</b>.</li> <li>(b) Full on-site manoeuvring is required for all classes of service vehicle.</li> </ul>                                                                                                                                                                                                |

Editor's note – Restricted manoeuvring is designed as a single point reverse manoeuvre from the public roadway into the site to access a servicing area. This manoeuvre may be performed from the kerbside lane where it is clearly demonstrated that the design vehicle can achieve the manoeuvre to access the service area.

**Table 9.4.13-9: Minimum class of service vehicle**

Where waste collection is required to be provided for on-site, and the stated service vehicle in the table below is less than a Council refuse collection vehicle, then the development must be designed to cater for a waste collection vehicle in accordance with **SC6.15 City Plan policy – Solid waste management** (or as amended) and **SC6.12 City Plan policy – Land development guidelines, Section 2 – Transport network standards** (or as amended) as required.

| Land use                    | Minimum class of service vehicle |
|-----------------------------|----------------------------------|
| Adult store                 | SRV                              |
| Agricultural supplies store | AV                               |
| Animal husbandry            | AV                               |
| Animal keeping              | Van                              |



| Land use                                                                                                 | Minimum class of service vehicle |
|----------------------------------------------------------------------------------------------------------|----------------------------------|
| Brothel                                                                                                  | Van                              |
| Bulk landscape supplies                                                                                  | AV                               |
| Caretaker's accommodation                                                                                | Not applicable                   |
| Car wash                                                                                                 | SRV                              |
| Child care centre                                                                                        | Van                              |
| Club                                                                                                     | SRV                              |
| Community care centre                                                                                    | SRV                              |
| Community residence                                                                                      | Van                              |
| Community use                                                                                            | SRV                              |
| Crematorium                                                                                              | SRV                              |
| Cropping                                                                                                 | Not applicable                   |
| Dual occupancy                                                                                           | Not applicable                   |
| Dwelling house                                                                                           | Not applicable                   |
| Dwelling unit                                                                                            | Not applicable                   |
| Educational establishment                                                                                | SRV                              |
| Food and drink outlet                                                                                    | SRV                              |
| Food and drink outlet if:<br>(a) a take away food premises; or<br>(b) including a drive through facility | HRV                              |
| Function facility                                                                                        | MRV                              |
| Funeral parlour                                                                                          | SRV                              |
| Garden centre                                                                                            | HRV                              |
| Hardware and trade supplies                                                                              | AV                               |
| Health care services                                                                                     | SRV                              |
| High impact industry                                                                                     | AV                               |

| Land use                                           | Minimum class of service vehicle |
|----------------------------------------------------|----------------------------------|
| Home based business                                | Not applicable                   |
| Hospital                                           | AV                               |
| Hotel                                              | HRV                              |
| Indoor sport and recreation                        | SRV                              |
| Intensive animal industry                          | AV                               |
| Intensive horticulture                             | AV                               |
| Low impact industry                                | AV                               |
| Marine Industry                                    | AV                               |
| Market                                             | Not applicable                   |
| Medium impact industry                             | AV                               |
| Multiple dwelling if:<br>(a) 3 dwellings           | Not applicable                   |
| Multiple dwelling if:<br>(a) more than 3 dwellings | Standing area for an MRV on-site |
| Nightclub                                          | SRV                              |
| Office                                             | Van                              |
| Outdoor sales                                      | AV                               |
| Outdoor sport and recreation                       | SRV                              |
| Permanent plantation                               | AV                               |
| Place of worship                                   | SRV                              |
| Relocatable home park                              | Van                              |
| Research and technology industry                   | AV                               |
| Residential care facility                          | HRV                              |
| Resort complex                                     | HRV                              |
| Retirement facility                                | HRV                              |

| Land use                                            | Minimum class of service vehicle                              |
|-----------------------------------------------------|---------------------------------------------------------------|
| Roadside stall                                      | Not applicable                                                |
| Rooming accommodation                               | SRV                                                           |
| Student accommodation                               | SRV                                                           |
| Hostel accommodation                                | SRV                                                           |
| Rural industry                                      | AV                                                            |
| Sales office                                        | Not applicable                                                |
| Service industry                                    | SRV                                                           |
| Service station                                     | SRV and AV (fuel tanker)                                      |
| Shop                                                | SRV                                                           |
| Shop (GFA less than 400m <sup>2</sup> )             | SRV                                                           |
| Shop (GFA 400m <sup>2</sup> - 1,500m <sup>2</sup> ) | HRV                                                           |
| Shop (GFA greater than 1,500m <sup>2</sup> )        | AV                                                            |
| Short-term accommodation                            | Coach                                                         |
| Showroom                                            | AV                                                            |
| Tourist park                                        | Coach                                                         |
| Tourist park if:<br>(a) a caravan park              | Van                                                           |
| Transport depot                                     | AV                                                            |
| Veterinary services                                 | Van                                                           |
| Veterinary hospital                                 | MRV                                                           |
| Warehouse                                           | AV                                                            |
| Warehouse if:<br>(a) for self storage sheds         | Not applicable                                                |
| Wholesale nursery                                   | AV                                                            |
| Any other land use                                  | As determined upon submission of a Service vehicle assessment |



| Land use | Minimum class of service vehicle |
|----------|----------------------------------|
|----------|----------------------------------|

Editor's note – A Van is a 99.8th percentile vehicle equivalent to the AS2890.1:2004 – *Parking facilities – Part 1: Off-street car parking* B99 vehicle or large car.

Editor's note – A Coach is an inter-city 12.5m tourist bus from *Austroroads*.

**Table 9.4.13-10: Bicycle Parking Rates**

This table sets out the minimum number of bicycle spaces required according to the use applied for. Where the calculated number of spaces is not a whole number, the number of bicycle spaces required is the next highest whole number.

| Land use                    | Long and medium term off-street bicycle parking (staff and residents – Security level B)                   | Short term off-street bicycle parking (visitors – Security level C) | Additional end-of-trip facilities required (refer to Table 9.4.13-11: End of trip facilities for active travel users) |
|-----------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Adult store                 | 1 per 100m <sup>2</sup> TUA                                                                                | 1 per 50m <sup>2</sup> TUA                                          | No                                                                                                                    |
| Child care centre           | 1 per 10 staff                                                                                             | 2 per centre                                                        | Yes                                                                                                                   |
| Club                        | 1 per 25m <sup>2</sup> TUA public bar area plus 1 per 100m <sup>2</sup> public lounge and beer garden area | 1 per 100m <sup>2</sup> TUA                                         | Yes                                                                                                                   |
| Educational establishment   | 1 per 3 students Year 4 and above plus 1 per 10 staff                                                      | N/A                                                                 | Yes                                                                                                                   |
| Food and drink outlet       | 1 per 100m <sup>2</sup> TUA                                                                                | 1 per 50m <sup>2</sup> TUA                                          | No                                                                                                                    |
| Health care services        | 1 per 8 consultation rooms                                                                                 | 1 per 4 consultation rooms                                          | Yes                                                                                                                   |
| High impact industry        | 1 per 800m <sup>2</sup> TUA                                                                                | N/A                                                                 | No                                                                                                                    |
| Hotel                       | 1 per 25m <sup>2</sup> TUA public bar area plus 1 per 100m <sup>2</sup> public lounge and beer garden area | 1 per 100m <sup>2</sup> TUA                                         | No                                                                                                                    |
| Indoor sport and recreation | 1 per 4 employees                                                                                          | 1 per 200m <sup>2</sup> TUA                                         | Yes                                                                                                                   |
| Low impact industry         | 1 per 150m <sup>2</sup> TUA                                                                                | N/A                                                                 | No                                                                                                                    |

| Land use                              | Long and medium term off-street bicycle parking (staff and residents – Security level B)                                | Short term off-street bicycle parking (visitors – Security level C) | Additional end-of-trip facilities required (refer to Table 9.4.13-11: End of trip facilities for active travel users) |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Medium impact industry                | 1 per 150m <sup>2</sup> TUA                                                                                             | N/A                                                                 | No                                                                                                                    |
| Multiple dwelling                     | 1 per dwelling                                                                                                          | 1 per 12 dwellings, to a maximum of 20 spaces                       | No                                                                                                                    |
| Office                                | 1 per 100m <sup>2</sup> where within 800m walking distance to light rail station, otherwise 1 per 200m <sup>2</sup> TUA | 1 per 500m <sup>2</sup> TUA                                         | Yes                                                                                                                   |
| Rooming accommodation                 | 1 per bedroom                                                                                                           | N/A                                                                 | No                                                                                                                    |
| Rooming accommodation if for a hostel | 1 per 3 rooms                                                                                                           | 1 per 12 rooms                                                      | No                                                                                                                    |
| Residential care facility             | 1 per 5 beds                                                                                                            | 1 per 10 staff, based on maximum residential occupancy              | No                                                                                                                    |
| Retirement facility                   | 1 per dwelling                                                                                                          | 1 per 3 dwellings                                                   | No                                                                                                                    |
| Service industry                      | 1 per 100m <sup>2</sup> TUA                                                                                             | 1 per 50m <sup>2</sup> TUA                                          | No                                                                                                                    |
| Service station                       | 1 per 200m <sup>2</sup> TUA                                                                                             | 2 per Service station                                               | No                                                                                                                    |
| Shop                                  | 1 per 100m <sup>2</sup> TUA                                                                                             | 1 per 50m <sup>2</sup> TUA                                          | No                                                                                                                    |
| Short-term accommodation              | 1 per 40 dwellings                                                                                                      | 1 per 20 dwellings                                                  | No                                                                                                                    |
| Showroom                              | 1 per 800m <sup>2</sup> TUA                                                                                             | 1 per 200m <sup>2</sup> TUA                                         | No                                                                                                                    |
| Warehouse                             | 1 per 800m <sup>2</sup> TUA                                                                                             | 1 per 200m <sup>2</sup> TUA                                         | No                                                                                                                    |
| Waterfront industry                   | 1 per 150m <sup>2</sup> TUA                                                                                             | N/A                                                                 | No                                                                                                                    |

**Note:** User Class as referred to and defined in *AS 2890.3:2015 Parking facilities Part 3: Bicycle parking*.



**Table 9.4.13-11: End of trip facilities for active travel users**

This table sets out the minimum number of end of trip facilities required according to the number of long-term bicycle spaces to be provided. Where the calculated number is not a whole number, the number required is the next highest whole number.

| Number of long-term bicycle spaces to be provided | Number of lockers to be provided | Number of showers (within an associated change room) to be provided |                                                              | Number of toilets to be provided         | Number of wash basin stations (including mirrors, electrical outlet & counter top) |
|---------------------------------------------------|----------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------|------------------------------------------------------------------------------------|
|                                                   |                                  | Male                                                                | Female                                                       |                                          |                                                                                    |
| 1-5                                               | 1.5 per bicycle space            | 1 shower and change room of unisex design                           |                                                              | 1                                        | 1                                                                                  |
| 6-10                                              | 1.5 per bicycle space            | 1 plus change room                                                  | 1 plus change room                                           | 1                                        | 2                                                                                  |
| 11-20                                             | 1.5 per bicycle space            | 2 plus change room                                                  | 2 plus change room                                           | 2                                        | 4                                                                                  |
| 21-30                                             | 1.5 per bicycle space            | 3 plus change room                                                  | 3 plus change room                                           | 2                                        | 6                                                                                  |
| 31-40                                             | 1.5 per bicycle space            | 4 plus change room                                                  | 4 plus change room                                           | 3                                        | 8                                                                                  |
| 41-50                                             | 1.5 per bicycle space            | 5 plus change room                                                  | 5 plus change room                                           | 1 per 3 showers required or part thereof | 1 per shower                                                                       |
| 50+                                               | 1.5 per bicycle space            | 4 showers, plus 1 shower for each 10 bicycle spaces provided        | 4 showers, plus 1 shower for each 10 bicycle spaces provided | 1 per 3 showers required or part thereof | 1 per shower                                                                       |

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# WASTE MANAGEMENT PLAN



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60 Dutton Street, Coolangatta



# Waste Management Plan

## Proposed Multiple Dwelling Development 60 Dutton Street, Coolangatta



3 June 2026

**Prepared for:**

Southern Cross Property Holdings Pty Ltd

Report: 51080-RP02-A

**GELEON**

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| Version | Issue Date  | Details        | Approved for Issue         |
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# 1 Introduction

## 1.1 Project background

Geleon has been engaged by Southern Cross Property Holdings Pty Ltd (the **Applicant**) to prepare a Waste Management Plan (**WMP**) to accompany a Development Application (**DA**) to establish townhouse development (multiple dwelling land use) at 60 Dutton Street, Coolangatta (Lot 2 on RP86756) (**Figure 1.1**). The existing 703m<sup>2</sup> site is currently approved for a multiple dwelling land use with nine units (*COM/2025/157*).

The purpose of this WMP is to ensure that the waste storage and collection activities for the operational phase of the development are in accordance with the City of Gold Coast (Council) *City Plan Policy – Solid waste management* (SC6.16) and *Solid waste management code* (V13).

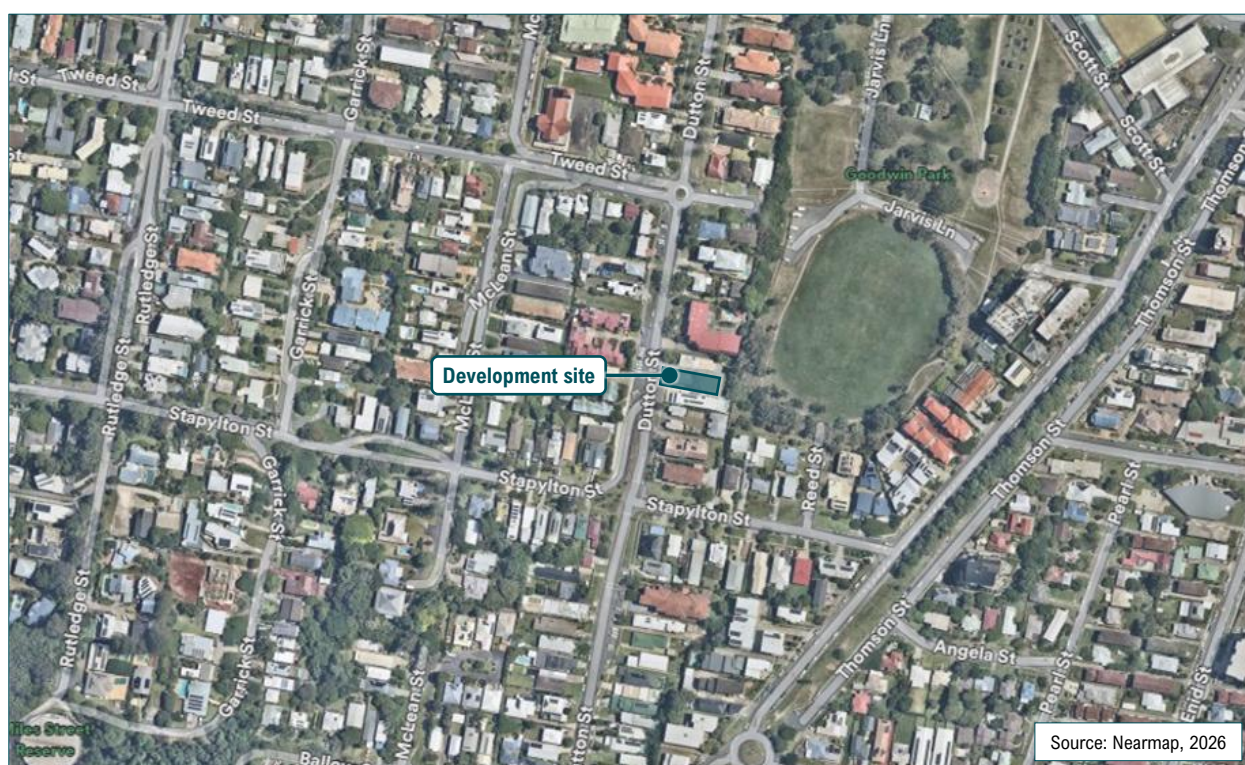


Figure 1.1 Locality plan

## 1.2 Applicable planning scheme

The proposed development site falls under the jurisdiction of City of Gold Coast (Council) and is governed by the *City Plan – Version 13 (December 2025)*.

Other applicable documents include:

- Environmental Protection Regulation 2019
- Waste Reduction and Recycling Act 2011
- Waste Reduction and Recycling Regulation 2023

## 1.3 Purpose and scope

The purpose of this WMP is to outline the waste management provisions for the proposed development to demonstrate the efficient, safe, and sustainable management of waste during the operational phase of the development. This report has been prepared to address the requirements of *City Plan – SC6.16 Solid waste management (V13)*.

The scope of works for this WMP includes:

- detailing the anticipated type and quantity of waste to be generated by the development
- detailing the waste storage room and bin requirements
- detailing the proposed waste collection arrangements for the proposed development, and
- addressing Council's *Solid waste management code (V13)*.

## 1.4 Definitions and abbreviations

Table 1.4 Definitions and abbreviations

| Term                       | Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bin carting route          | the proposed route to move bins between the storage point and the servicing point.                                                                                                                                                                                                                                                                                                                                                                               |
| Common servicing point     | a common area where more than two dwellings/tenancies stand their wheelie bins for servicing.                                                                                                                                                                                                                                                                                                                                                                    |
| Common storage point       | a common area where more than two dwellings/tenancies store their wheelie bins.                                                                                                                                                                                                                                                                                                                                                                                  |
| Constructed hardstand area | a hardstand area, for example a concrete pad which has been constructed for bin storage.                                                                                                                                                                                                                                                                                                                                                                         |
| General waste              | waste, other than domestic clean-up waste, green waste, recyclable waste, interceptor waste or waste discharged to a sewer, produced as a result of the ordinary use or occupation of domestic or commercial premises.                                                                                                                                                                                                                                           |
| Recyclable waste           | clean and inoffensive waste that is declared by the local government to be recyclable waste for the area. In the City of Gold Coast the following wastes are deemed recyclable: <ul style="list-style-type: none"> <li>▪ all household plastics, bottles and containers;</li> <li>▪ aluminium and steel cans and aerosols;</li> <li>▪ bottles and jars made only of glass;</li> </ul> clean cardboard, newspaper, loose paper, junk mail, magazines and cartons. |
| Servicing point            | the designated area allocated to the temporary storage of waste bins for the period of servicing only. The point may be within or external to a development.                                                                                                                                                                                                                                                                                                     |
| Storage point              | the area allocated to the permanent storage of waste bins. This is the normal location of the waste bins and excludes the period where the bin is serviced. A storage point may be a common storage point or an individual bin storage point.                                                                                                                                                                                                                    |
| Waste carting distance     | the distance required for a person to transport their waste from the nearest point of exit of their dwelling / tenancy to a storage point (or in the case of a multilevel building, to the nearest waste disposal point).                                                                                                                                                                                                                                        |
| Waste storage room         | a room used for the storage of waste bins.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Wheelie bin                | two wheeled mobile garbage bins, made from high density polyethylene (HDPE). Wheelie bins are collected by a side-lift truck.                                                                                                                                                                                                                                                                                                                                    |

## 2 Proposed development

### 2.1 Development details

The development proposes a multiple dwelling land use to establish townhouses on the subject site. Access to and from the development is proposed via a single two-lane, two-way vehicle crossing on Dutton Street that will provide access to the ground floor level car park.

Details of the approved and proposed development are provided in **Table 2.1**, with the ground floor shown in **Figure 2.1**. Relevant plans of development have been included in **Appendix A**.

Table 2.1 Development details

| Land use             | 4-bedroom units |
|----------------------|-----------------|
| Approved development |                 |
| Multiple dwelling    | 7               |
| Proposed development |                 |
| Multiple dwelling    | 5               |
| <b>Net change</b>    | <b>-2</b>       |

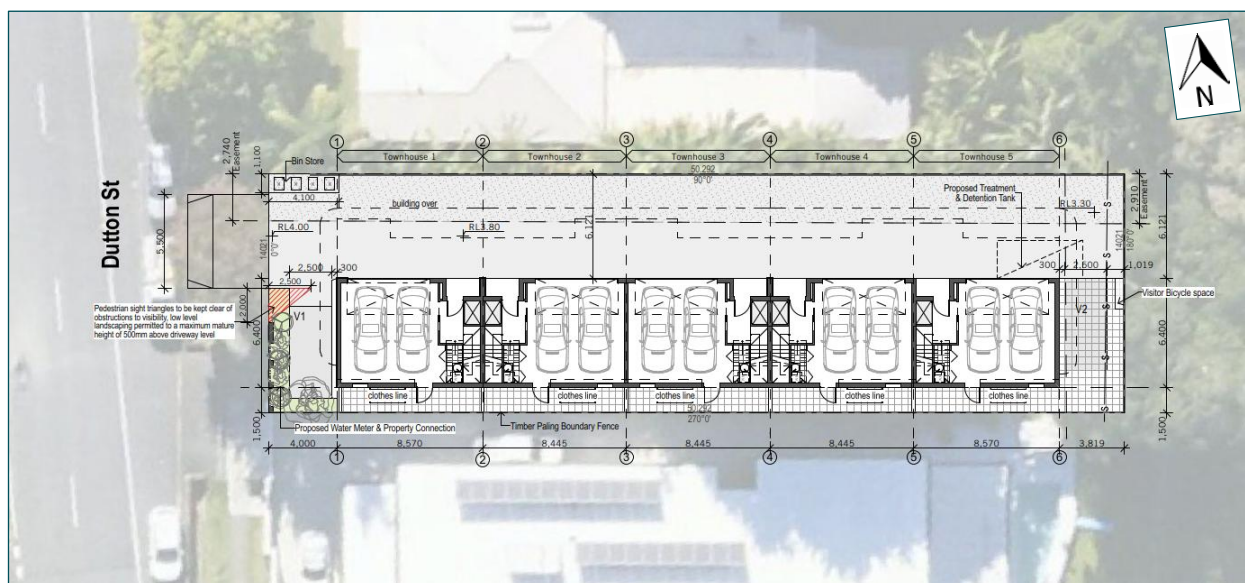


Figure 2.1 Plans of development – ground floor



### 3 Development related waste

Details of waste generation, storage, and collection for the proposed development are provided in the following sections.

#### 3.1 Waste streams

The anticipated types of waste that will be generated by the development are shown in **Table 3.1**.

Table 3.1 Predicted waste types

| Land use          | Predicted waste types       |
|-------------------|-----------------------------|
| Multiple dwelling | General and recycling waste |

#### 3.2 Waste generation

Waste quantities for the development site have been calculated in accordance with typical waste generation rates stipulated in *SC6.16 City Plan Policy: Solid waste management (V13)*. A summary of the waste generating characteristics of the site are provided in **Table 3.2**.

Table 3.2 Waste generating characteristics

| Land use          | 3-bed and above units | General waste generation rate | Total (L/week) | Recycling rate per day    | Total (L/week) |
|-------------------|-----------------------|-------------------------------|----------------|---------------------------|----------------|
| Multiple dwelling | 5                     | 120L per dwelling per week    | 600            | 80L per dwelling per week | 400            |

#### 3.3 Waste container provisions

To accommodate the waste generated by the proposed development, wheelie bins will be utilised to store site generated waste as detailed in **Table 3.3**.

Table 3.3 Refuse bin requirements

| Waste type      | Anticipated waste quantity (L/week) | Waste bin provision  | Collection frequency | Total waste provision           |
|-----------------|-------------------------------------|----------------------|----------------------|---------------------------------|
| General waste   | 600                                 | 2 x 360L wheelie bin | One time per week    | 2 x 360L x 1 collections = 720L |
| Recycling waste | 400                                 | 2 x 360L wheelie bin | One time per week    | 2 x 360L x 1 collections = 720L |

#### 3.4 Dimensions of waste containers

**Table 3.4** provides the dimensions of wheelie bins to be used on-site.

Table 3.4 Dimensions of waste containers

| Bin type    | Volume (L) | Length (mm) | Width (mm) | Height (mm) | Collection vehicle type      |
|-------------|------------|-------------|------------|-------------|------------------------------|
| Wheelie bin | 360        | 865         | 650        | 1,100       | Side load collection vehicle |

#### 3.5 Waste storage room

The development provides a waste storage room located within the ground floor car park as shown in **Figure 3.5.1**. Maintaining a storage area of 1m<sup>2</sup> for each wheelie bin, the dimensions of the proposed waste storage room comprise an internal length of 4.0m and a width of 1.0m (**Figure 3.5.2**). General and recycling waste will be carted independently by each resident to the applicable bins and does not exceed a 60m carting route from the exit / entry of each dwelling.

It is intended that the waste storage rooms will only be accessible by site management / authorised persons to remove any potential health and safety implications that may arise if these areas were to have been freely accessible.

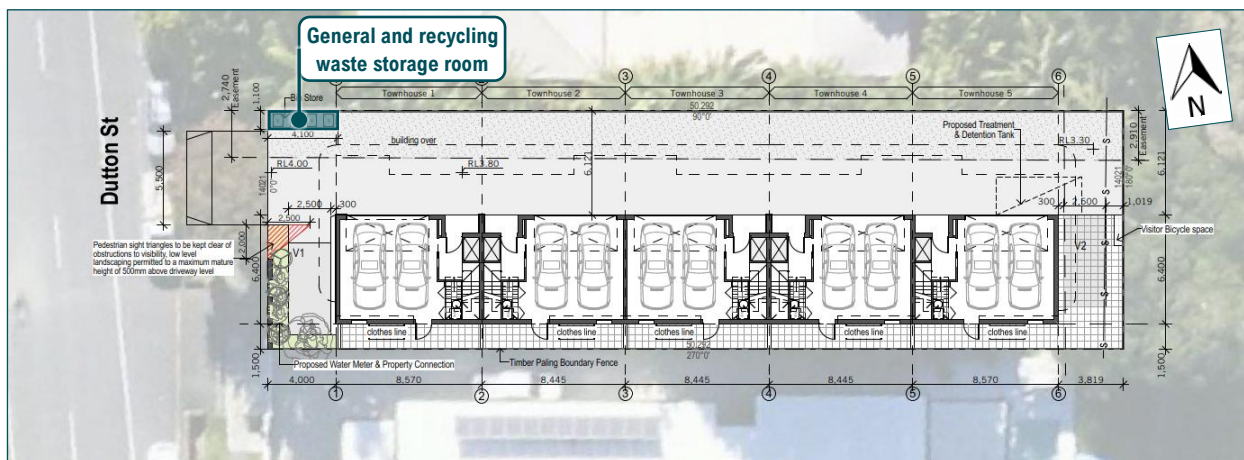


Figure 3.5.1 Waste storage room – ground floor

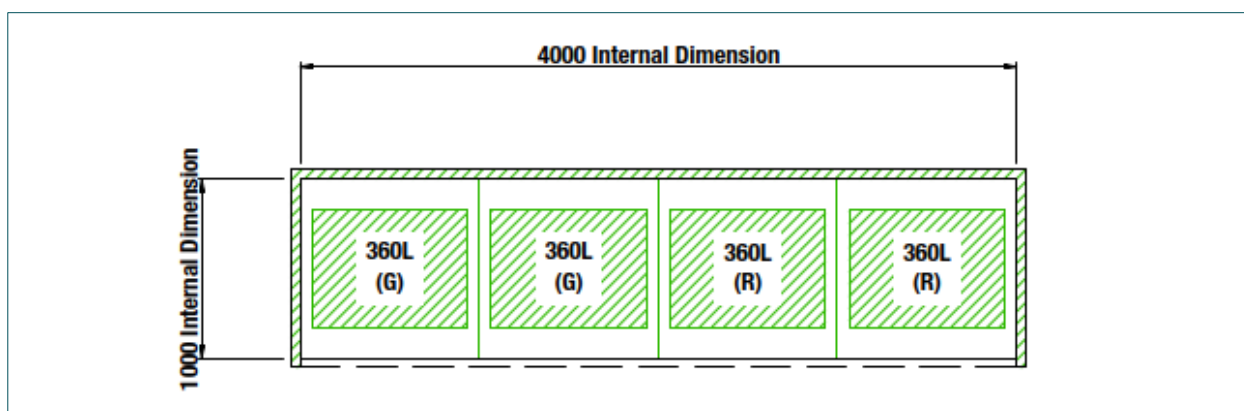


Figure 3.5.2 Waste storage room dimensions

The waste storage areas will be designed and constructed to meet the following requirements:

- allow the bins to be serviced in situ or easily transported to a separate servicing point
- located at least five (5) metres from any door, window or fresh air intake within the development or any adjoining site (excluding the storage of wheelie bins at each individual dwelling)
- screened to ensure bins are not visible from a public place or sensitive land use
- provide safe access to the disposal area
- sized to provide a minimum of 1m<sup>2</sup> per bin
- provide adequate storage for recyclable waste that all users can safely and easily access
- constructed as a hardstand area with a solid concrete base, or an approved equivalent surface
- be fitted with a hose cock and drained to the sewer, and
- not located within a building structure unless:
  - it is within a purpose-built waste storage room that is air-locked, fly- and vermin-proof, and used solely for waste storage
  - it is located within a well-ventilated section of the basement and more than thirty (30) metres from any opening to a food premises or food handling area, or
  - an open-air carport.

## 4 Waste collection requirements

### 4.1 Collection arrangement

Based on the calculations detailed in **Section 3.2** and the waste bin provisions determined in **Section 3.3** of this report, both general waste and recycling waste will require servicing once per week. Once the development is operational, the collection frequency will be reviewed to ensure that it is sufficient but not excessive for the development.

Details of the servicing frequencies are provided in **Table 4.1**.

**Table 4.1** Bin collection frequency

| Waste type      | Waste bin provision  | Collection frequency |
|-----------------|----------------------|----------------------|
| General waste   | 2 x 360L wheelie bin | Once per week        |
| Recycling waste | 2 x 360L wheelie bin | Once per week        |

### 4.2 Servicing and collection vehicle access

In accordance with Council's *City Plan – Transport Code (V13)*, developments with site areas less than 1,000m<sup>2</sup> do not require full on-site manoeuvring for a refuse collection vehicle (RCV). As the site area for this development is 703m<sup>2</sup>, refuse collection will be undertaken kerbside on Dutton Street by a side-loading RCV, which is consistent with the approved development (COM/2025/157) and other developments located along Dutton Street. The Dutton Street frontage has sufficient capacity to store all four wheelie bins if each bin is allocated 1.0m at the kerbside.

On pre-arranged collection days, the site manager / members of the body corporate committee / residents will transport the refuse bins from the waste storage room to the Dutton Street frontage of the site (**Figure 4.2**). Upon completion of servicing, the site manager / members of the body corporate committee / residents will return the bins to the waste storage room. Details of the refuse collection vehicle dimensions are provided in **Table 4.2** for reference.



**Figure 4.2** Kerbside collection point



Table 4.2      Service vehicle dimensions

| Dimension              | 9.8m side-loading RCV                      |
|------------------------|--------------------------------------------|
| Width                  | 2.5m                                       |
| Length                 | 9.8m                                       |
| Travelling height      | 4.1m                                       |
| Servicing height       | 4.25m                                      |
| Minimum turning circle | 25.0m                                      |
| Minimum turning radius | 11.5m (wall to wall), 10.5m (kerb to kerb) |

## 5      Response to development codes

A detailed review of the proposed development against Council's *City Plan – Solid Waste Management Code (V13)* is provided in **Appendix B**.

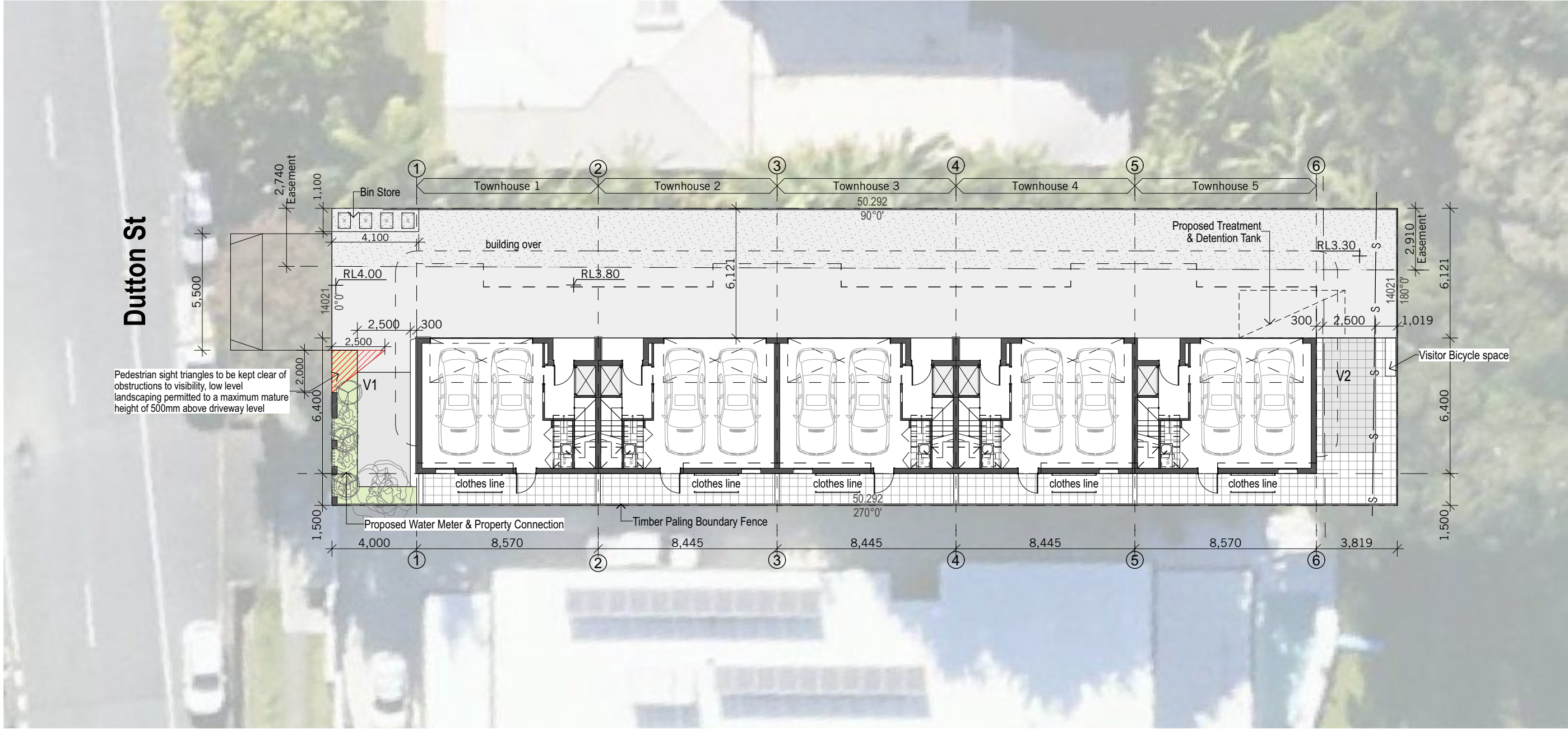
## 6      Conclusion

This report presents the findings related to the assessment of waste management related matters for a proposed development located at 60 Dutton Street, Coolangatta. Based on the information presented within this report, it has been demonstrated that the development proposes a waste management solution aligning with Council's requirements.

## 7      References

1.    City of Gold Coast, *City Plan – Version 13 (December 2025)*, Gold Coast.
2.    City of Gold Coast, *City Plan – Version 13 – SC6.16 Solid waste management (December 2025)*, Gold Coast.
3.    State of Queensland, *Environmental Protection Regulation 2019 (2019)*, Brisbane.
4.    State of Queensland, *Waste Reduction and Recycling Act 2011 (2011)*, Brisbane.
5.    State of Queensland, *Waste Reduction and Recycling Regulation 2023 (2023)*, Brisbane.

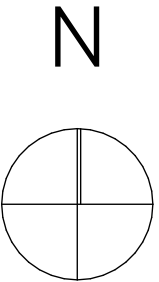
## Appendix A Plans of development



Floor Areas (Internal Townhouse 1-4)

Floor Areas (Internal Townhouse 5)

|                       | Area (sqM) |                       | Area (sqM) |
|-----------------------|------------|-----------------------|------------|
| Ground Floor          | 46.57      | Ground Floor          | 46.57      |
| Level 2               | 69.78      | Level 2               | 69.91      |
| Level 2 Balcony       | 8.13       | Level 2 Balcony       | 9.38       |
| Level 3               | 72.10      | Level 3               | 72.10      |
| Level 4               | 36.86      | Level 4               | 45.18      |
| Lvl 4 Terrace         | 28.80      | Lvl 4 Terrace         | 20.87      |
| 262.24 m <sup>2</sup> |            | 264.01 m <sup>2</sup> |            |



Site Plan  
1:200, 1:1 @ A3





## Appendix B      Development code responses

# City Plan code template

This code template supports the preparation of a development application against either the acceptable outcome(s) or performance outcome(s) contained in the code. Development assessment rules are outlined in **Section 5.3.3** of the City Plan.

**Please note:**

For assessment against the overall outcomes, refer to the appropriate code.

**Note:** The whole of the planning scheme is identified as the assessment benchmark for impact assessable development. This specifically includes assessment of impact assessable development against this strategic framework. The strategic framework may contain intentions and requirements that are additional to and not necessarily repeated in zone, overlay or other codes. In particular, the performance outcomes in zone codes address only a limited number of aspects, predominantly related to built form. Development that is impact assessable must also be assessed against the overall outcomes of the code as well as the strategic framework.

## 9.4.12 Solid waste management code

### 9.4.12.1 Application

This code applies to assessing material change of use for development requiring waste management where indicated within **Part 5 Tables of assessment**, unless the use is Caretaker's accommodation, Car wash, Community residence, Dwelling house, Dual occupancy, Environmental facility, Home based business, Landing, Major electrical infrastructure, Park, Parking station, Permanent plantation, Roadside stall, Sales office, Substation or Telecommunications facility.

When using this code, reference should be made to **Section 5.3.2** and, where applicable, **Section 5.3.3**, in **Part 5**.

### 9.4.12.2 Purpose

- (1) The purpose of the Solid waste management code is to ensure development provides appropriate solid waste and recycling storage and servicing facilities.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) Development provides waste and recycling storage and servicing points that are safe, convenient, efficient, appropriately sized, and minimise disruption to traffic.
  - (b) Waste and recycling storage and servicing facilities minimise risk to public health and the environment.
  - (c) The location and design of waste and recycling storage and waste servicing points protect the amenity of occupants and adjoining properties.
  - (d) Development provides suitable waste management measures in non-serviced areas.

### 9.4.12.3 Specific benchmarks for assessment

## PART B – ASSESSABLE DEVELOPMENT BENCHMARKS

Table 9.4.12-1: Solid waste management code – for assessable development

| Performance outcomes                                                                                                                                                                          | Acceptable outcomes                                                                                                                                                                                                    | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                                                                                                                                                                                                                                                               | Internal use |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Waste and recycling storage and bin wash-down facilities</b>                                                                                                                               |                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |
| <b>PO1</b><br>Development provides waste and recycling storage and servicing facilities that are safe, convenient, efficient, appropriately sized for the type and volume of waste generated. | <b>AO1.1</b><br>Development includes waste storage points of sufficient size to accommodate the required number of waste and recyclable bins consistent with <b>SC6.16 City Plan policy – Solid waste management</b> . | <b>COMPLIES WITH AO1.1.</b><br>The proposed development includes a waste storage room of sufficient size to accommodate the required bins / containers. The development will require the provision of two 360L wheelie bins to manage general waste and two 360L wheelie bins to manage recycling waste. The waste storage room has been designed to achieve a minimum 1m <sup>2</sup> area for each container.<br>For further details refer to <b>Section 3.5</b> of Geleon Waste Management Plan Report <b>51080-RP02-A</b> . |              |
|                                                                                                                                                                                               | <b>AO1.2</b><br>Waste and recycling storage points are located, designed and sized consistent with <b>SC6.16 City Plan policy – Solid waste management</b> .                                                           | <b>COMPLIES WITH AO1.2.</b><br>Maintaining a storage area of 1m <sup>2</sup> for each wheelie bin, the dimensions of the proposed waste storage room comprise an internal length of 4.0m and a width of 1.0m.<br>For further details in relation to the waste storage room, refer to <b>Section 3.0</b> of Geleon Waste Management Plan Report <b>51055-RP02-A</b> .                                                                                                                                                            |              |
|                                                                                                                                                                                               | <b>AO1.3</b><br>Development with a dwelling above the third storey include appropriate waste removal systems which incorporate:                                                                                        | Not applicable – All dwellings contain a ground floor component.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |



| Performance outcomes                                                                                                                                                                                                                                  | Acceptable outcomes                                                                                                                                                                                                   | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                                                                                                                   | Internal use |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                                                                                                                                                                                                                                                       | (a) waste chutes;<br>(b) hoppers; and<br>(c) separate waste storage rooms.<br><b>Note: Waste removal system design is to be consistent with SC6.16 City Plan policy – Solid waste management.</b>                     |                                                                                                                                                                                                                                                                                                                                                                                     |              |
|                                                                                                                                                                                                                                                       | <b>AO1.4</b><br>Development that includes a commercial kitchen or generates clinical or related waste incorporate additional waste facilities consistent with <b>SC6.16 City Plan policy –Solid waste management.</b> | Not applicable – The development consists of a multiple dwelling land use only.                                                                                                                                                                                                                                                                                                     |              |
| <b>PO2</b><br>Development provides a bin wash-down facility that maintains appropriate environmental health and amenity standards.                                                                                                                    | <b>AO2</b><br>Development includes appropriately sized and located bin wash-down facilities consistent with <b>SC6.16 City Plan policy –Solid waste management.</b>                                                   | <b>COMPLIES WITH AO2</b><br>A suitable area for bin wash down will be provided that is fitted with a hose cock and drained to the sewer. This will be confirmed at the detailed design stage.                                                                                                                                                                                       |              |
| <b>Amenity</b>                                                                                                                                                                                                                                        |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                     |              |
| <b>PO3</b><br>Waste and recycling storage and servicing points are appropriately located and designed for convenient and safe access by all users and to minimise the potential for nuisance to occupants of the development or adjoining properties. | <b>AO3.1</b><br>Direct unobstructed paths exist between waste and recycling storage and servicing points and road frontages.                                                                                          | <b>COMPLIES WITH AO3.1.</b><br>The refuse bins will be transferred from the waste storage room to the kerbside collection point by the site manager / members of the body corporate committee / residents.<br>For further details in relation to the proposed refuse collection procedure, refer to <b>Section 4.0</b> of Geleon Waste Management Plan Report <b>51080-RP02-A</b> . |              |
|                                                                                                                                                                                                                                                       | <b>AO3.2</b>                                                                                                                                                                                                          | <b>COMPLIES WITH AO3.2.</b><br>The proposed storage point is appropriately screened.                                                                                                                                                                                                                                                                                                |              |

| Performance outcomes                                                                                                                                                                                                                                                                                                                                               | Acceptable outcomes                                                                                                                                                                                                                                                                                                                                               | Does the proposal meet the acceptable outcome?<br>If not, justify how the proposal meets <u>either</u> the performance outcome or overall outcome                                                                                                                                                                                                                                                   | Internal use |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                                                                                                                                                                                                                                                                                                                                                                    | Waste and recycling storage points are screened by solid fencing or vegetation to ensure they are not visible from a public place or sensitive land use.                                                                                                                                                                                                          | For further details in relation to the proposed waste storage room, refer to <b>Section 3.5</b> and <b>4.2</b> of Geleon Waste Management Plan Report <b>51080-RP02-A</b> .                                                                                                                                                                                                                         |              |
| <b>Waste servicing</b>                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| <b>PO4</b><br>Waste and recycling servicing points are appropriately located and designed to facilitate safe, unobstructed and efficient servicing of waste containers.                                                                                                                                                                                            | <b>AO4</b><br>Waste and recycling servicing points are located, designed and sufficiently sized consistent with <b>SC6.16 City Plan policy –Solid waste management</b> .<br><b>Note:</b> Regulation of the access, stopping and manoeuvring of refuse collection vehicles are subject to meeting, Part 9.4.13 Transport code and associated City Plan guidelines. | <b>COMPLIES WITH AO4.</b><br>The waste storage room and waste servicing point has been located, designed and sized in accordance with requirements stipulated in <i>SC6.16 City Plan policy – Solid waste management</i> .<br>For further details in relation to the proposed refuse collection procedure, refer to <b>Section 4.0</b> of Geleon Waste Management Plan Report <b>51080-RP02-A</b> . |              |
| <b>Non-serviced areas</b>                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| <b>PO5</b><br>Developments in non-serviced areas have appropriate solid waste management measures to adequately service the development.<br><b>Note:</b> For Commercial developments a Waste management plan, prepared in accordance with <b>SC6.16 City Plan policy – Solid waste management</b> , is Council's preferred method of addressing the above outcome. | <b>AO5</b><br>No acceptable outcome provided.                                                                                                                                                                                                                                                                                                                     | Not applicable.                                                                                                                                                                                                                                                                                                                                                                                     |              |

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