



New Unit Development

6 – 8 GRANITE STREET, PICNIC BAY QLD 4819

FLOOD IMPACT ASSESSMENT

STEVE BRADDICK C/- BNC PLANNING

STP25-0526

DOCUMENT STATUS

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A	For Approval	Manuel Flores	Matt Whittering RPEQ 30796	<i>M Whittering</i>	18 November 2025

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1. Introduction

1.1 Overview

This Site Flood Report has been compiled based on the proposal plans supplied by the developer and information derived from Townsville City Council in response to the Request for Information issued 3rd September 2025 for application MCU25/0012. The following items have been included in the report.

1.2 Limitations

This report provides a desktop stormwater and hydrology investigation from the information obtained from the following sources.

- Site Plan prepared by GVD Building Design
- LiDAR data obtained from Department of Natural Resources and Mines (via ELVIS – Elevation Foundation Spatial Data).
- Townsville City Council Infrastructure Mapping Information.
- Townsville City Council Flood Map Overlays.

1.3 Site Data

The site is situated at 6 – 8 Granite Street, Picnic Bay Queensland 4819 and encompasses a single lot specifically identified as Lot 1 on RP717421, with a total land area of 936m² (hereafter described as “the site”). The site falls within the Mixed Use zone under the authority of Townsville City Council local government area.

At present the site is vacant with multiple tall trees along the northern boundary line, and loose rocks on the site. There are no easements or encumbrances of the allotment.



Figure 1.1 - Cadastral Boundaries and Easements (Qld Globe)

2. Stormwater Management

2.1 Flood Studies

According to the information obtained from Townsville City Council Flood Mapping, the site is situated just outside the 1% AEP (Annual Exceedance Probability) flood overlay. Figure 2.1 depicts the extent of inundation in the area surrounding the site. Picnic Street conveys and detains runoff, from an open channel located on the north, as it makes its way through dual 1200 RCP pipes before continuing downstream and eventually into the ocean.

The site is affected by the coastal hazard overlay and is within the erosion prone area. The site is within 100m of the coastline.

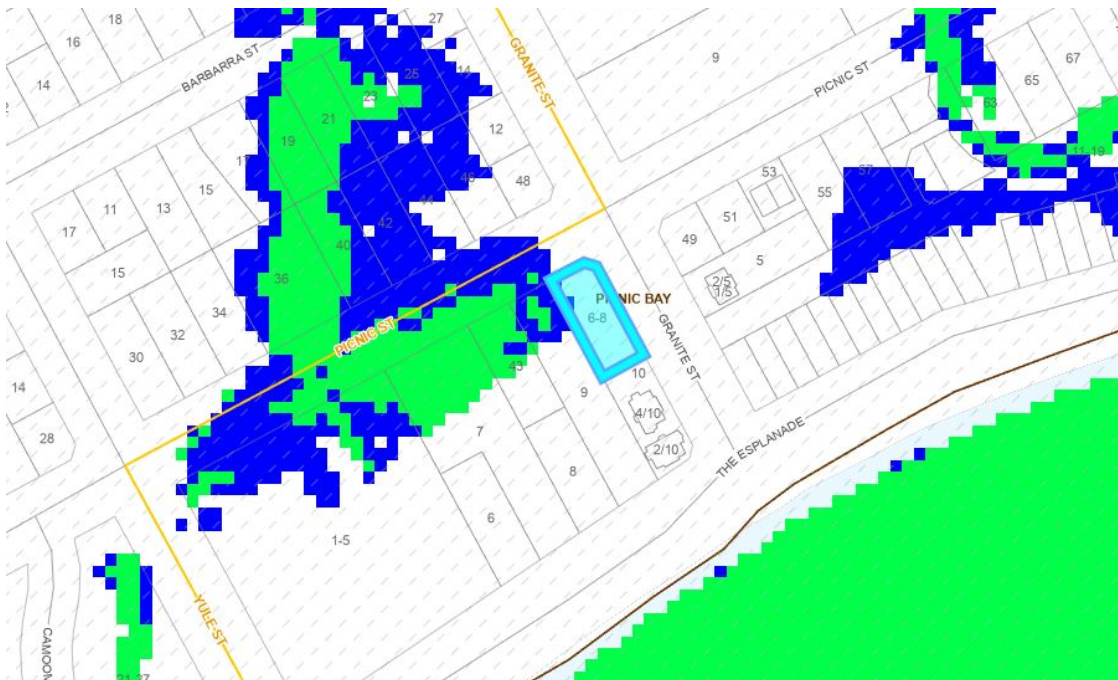


Figure 2.1 - 1% AEP Flood Map Extract (TCC Mapping)

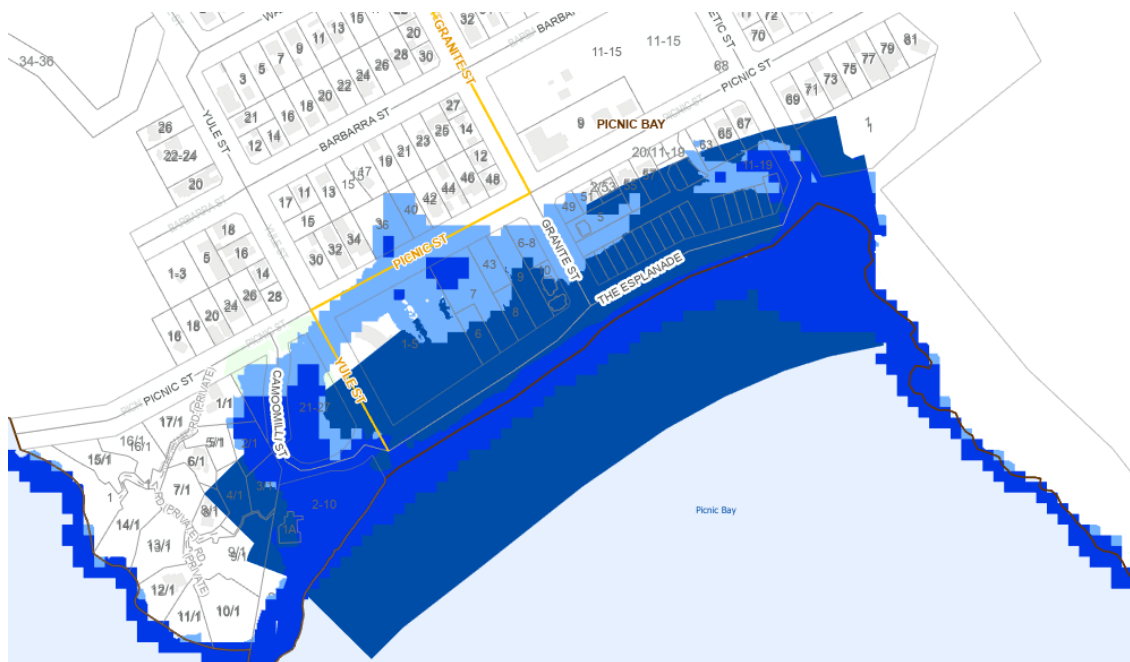


Figure 2.2 - Coastal Hazard and Erosion Areas from Sea Level Rise Overlay (TCC Mapping)

2.2 Site Topography

Townsville City Council has incorporated contours at 0.25m increments from LiDAR into their mapping system. Based on the contours shown below, the ground surface fall from the high point of RL4m AHD, at the south-eastern corner of the site, towards the road frontages of Picnic St and Granite St to RL3.5m AHD. The site contains an overall fall of approximately 2.0%.

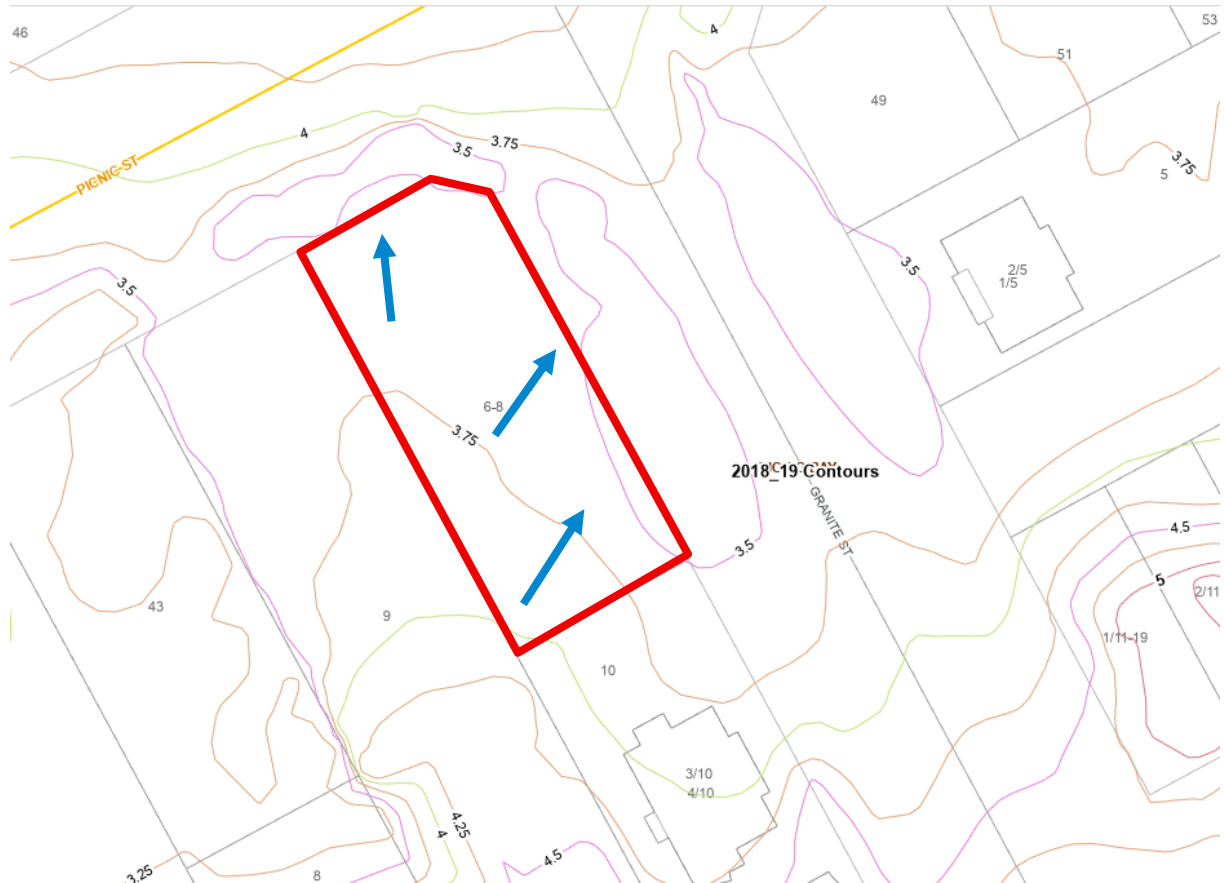


Figure 2.3 - Site Contours (TCC Mapping)

2.3 Lawful Point of Discharge and Existing Infrastructure

The lawful point of Discharge for the site is the swale on Picnic Street frontage.

There is no existing underground drainage in front of the site, and the nearest pipe is located 85m towards the west along Picnic St. An existing swale drain runs east to west on Picnic Street, and the swale has a partial return along Granite Street for the first 10m. Picnic St and the first 10m of Granite St don't contain a formalised kerb and all runoff eventually makes it way into the swale. The rest of Granite St heading south contains a formalise kerb and channel that direct runoff towards the swale in the north.

2.4 Proposed Floor Levels

In accordance with the storm tide hazard overlay, all habitable floor levels must be set at a minimum height of RL4.5m AHD for all buildings located within 100m of the coastline.

2.5 Site Runoff and Detention

The site is currently zoned as Mixed Use under the TCC Planning Scheme with a permissible impervious cover of 90%. The proposed development has an impervious site cover of 75% which is less than the current allowable and therefore no detention will be required. The proposed site Plan is included in Appendix A.

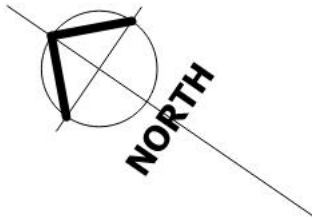
3. Conclusion

As demonstrated, the development can be constructed as proposed.

- Site not affected by the 1% AEP design storm.
- The site is located within the Storm Tide Hazard Overlay and the Erosion Prone Overlay.
- Habitable Floor Levels are at RL4.5m AHD.
- Site Discharge into the swale on Picnic Street.
- No detention is required for the site as the discharge will be less than zoned for.

Appendix A: Site Plan

NORTH POINT



PROPERTY DESCRIPTION

ZONING - MIXED USE -
SUB PRECINCT - MAGNETIC ISLAND VILLAGES -PB

LOT No: 1 on PLAN No: RP717421
PARISH : MAGNETIC COUNTY : ELPINSTONE
SITE AREA : 938m²
SITE COVER : 38%

1% AEP FLOOD ASSESSMENT

FLOOR LEVELS IN ACCORDANCE WITH TCC CITY PLAN
PART 8.2.6 FLOOD HAZARD OVERLAY. WHERE
DEVELOPMENT IS LOCATED WITHIN A HAZARD AREA
SHOWN ON OVERLAY MAP OM-06.1:

- a) FLOOR LEVELS OF ALL HABITABLE ROOMS ARE A MIN
OF 300mm ABOVE THE DEFINED FLOOD LEVEL;
b) FLOOD LEVELS OF ALL NON-HABITABLE ROOMS
(OTHER THAN CLASS 10 BUILDINGS) ARE ABOVE THE
DEFINED FLOOD EVENT.

FLOOD HAZARD ASSESSMENT: LOW (EXEMPT) / MEDIUM

STORM SURGE ASSESSMENT

FLOOR LEVELS IN ACCORDANCE WITH TCC CITY PLAN
PART 8.2.3 COASTAL PROTECTION OVERLAY.
WHERE DEVELOPMENT IS LOCATED WITHIN A HAZARD
AREA SHOWN ON OVERLAY MAP OM-03.3:

- a) HIGH RISK STORM TIDE INUNDATION AREA
FLOOR LEVEL MUST BE MIN. 4.5m AHD
b) MEDIUM RISK STORM TIDE INUNDATION AREA
FLOOR LEVEL MUST BE MIN. 3.9m AHD

STORM TIDE INUNDATION AREA : HIGH
MIN FLOOR LEVEL : 4.5m AHD

DRIVEWAYS / CROSSOVERS

DRIVEWAYS AND CROSSOVERS WITHIN THE ROAD
VERGE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY
STANDARD SPECIFICATIONS AND DRAWINGS.
REFER TO LOCAL AUTHORITY FOR REQUIREMENTS.

BUILDING DESIGN
MEDIUM RISE
QBCC LIC. No. 15212191
NOTE: DRAWINGS IN
PDF FORMAT MAY NOT
BE TO CORRECT SCALE



448 BAYSWATER ROAD
MT LOUISA
PO Box 7645 GARBUTT 4814
PH: 07 47743314
admin@gvdbuildingdesign.com.au

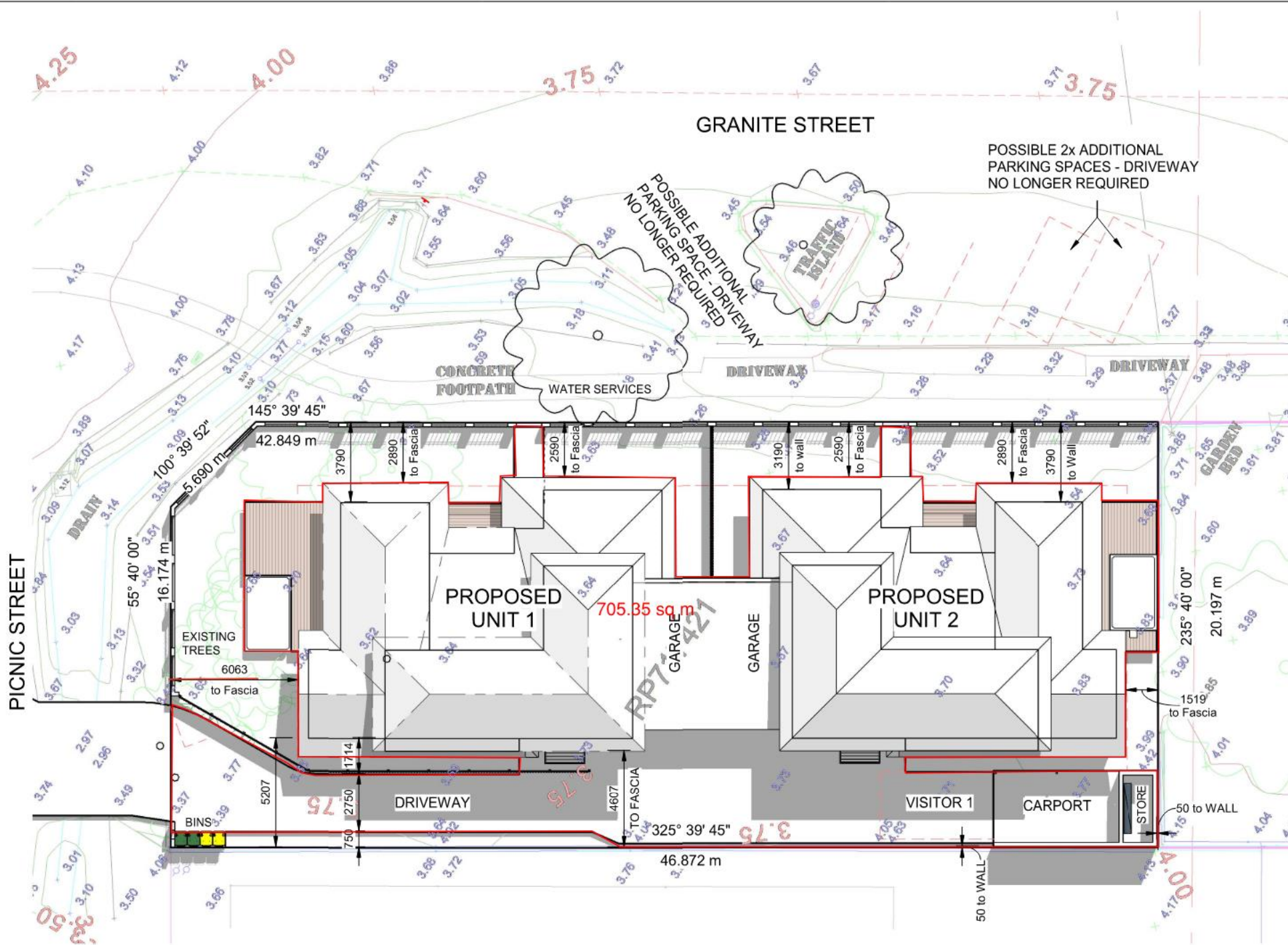
AMENDMENTS:	No.	Description	Date	Issued
D	NEW 2 UNIT DESIGN	22.5.25	GVD	
E	NEW 2 UNIT DESIGN - REV	26.25	GVD	
F	NEW UNIT LAYOUT	8.7.25	GVD	
G	Reduced size. Changed roof	23.7.25	GVD	

BUILDER:

CLIENT: S. & J. BRADDICK
ADDRESS:
LOT 1 / 6-8 GRANITE ST
PICNIC BAY

DRN: GVD
ISSUE: G
SH No: DA2
DATE: 23.7.25
SCALE: As indicated
JOB No: 17069BR

PHASE: DA
GVD
BUILDING
DESIGN



SITE PLAN

1 : 200

Appendix B: Planning Scheme Compliance – Coastal Environment Overlay Code

Table 8.2.3.3(a) -Accepted development subject to requirements and assessable development (Part)

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements	
Development in coastal hazard areas	
P01 Development is designed and located to minimise susceptibility to, and the potential impacts of, storm tide inundation and erosion. Editor's note —Applicants must be aware that in some areas flood hazard areas will also co-exist with storm tide hazard areas. In these instances, the floor levels and other design responses will need to be sufficient to comply with both this code and the Building Regulation 2006 .	AO1.1 Floor levels of all habitable rooms are above the defined storm tide event level. Editor's note —For Townsville the defined storm tide event level can be taken as RL 4.5m AHD, within 100m of the coastline or RL 3.9m AHD in other areas.
	AO1.2 Underground parking is designed to prevent the intrusion of storm tide waters by the incorporation of a bund above the defined storm tide event level.
	AO1.3 Buildings have open ground floors that allow for the flow through of storm tide water and buildings are not designed as slab on ground.
	AO1.4 Buildings are located outside the erosion prone area or where this would be impractical, do not extend any further seaward than existing immediately adjacent buildings.

BRISBANE

Level 3, 451 St Pauls Terrace
Fortitude Valley QLD 4006
P. 07 3539 8300
E. trevor@stpconsultants.com.au

TOWNSVILLE

Level 3, 382 Sturt Street
Townsville QLD 4810
PO Box 1777
Townsville QLD 4810
P. 07 3539 8350
E. anthony@stpconsultants.com.au

CAIRNS

Suite 2, 111 Spence Street
Cairns City QLD 4870
P. 07 3539 8380
E. adrien@stpconsultants.com.au

MACKAY

Suite 2, 25 River Street
Mackay QLD 4740
P. 07 3539 8390
E. brian@stpconsultants.com.au

ROCKHAMPTON

Level 3, 36 East Street
Rockhampton QLD 4700
P. 07 3539 8344
E. brian@stpconsultants.com.au

WHITSUNDAYS

230 Shute Harbour Road
Cannonvale QLD 4802
P. 07 3539 8399
E. brian@stpconsultants.com.au

