

Landscape Design Report for Proposed Residential Apartment Development, 27 Pacific Drive, Port Macquarie, NSW 2444

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As Amended on 28th May 2010.

1) Location & Setting.

The Site is contained on a single existing lot on the northern corner of Hill Street and Pacific Drive, Port Macquarie. The most prominent attribute of the site is that it is one of the most elevated locations, immediately behind Rocky Beach and the ocean; and with relatively low vegetation on the foreshore escarpment opposite. This results in one of the most spectacular & prized 'ocean view' positions in Port Macquarie.

The Site is some two kilometres from the Town Centre with Pacific Drive and/or the ocean walkway providing access to all the beaches between Town and Miners with popular Flynn's Beach being closest & most accessible.

Other facilities close by include: East Port High School, Flynn's beach shops and restaurants, the expanding business area of Lord Street, Council offices, East Port bowling, cricket and tennis facilities, the swimming-pool, Library, various Parks and Reserves, cafés, restaurants and Maritime museum.



The Site is bounded by an existing older-style residence to the north, which is well set back from the road; Pacific Drive and foreshore escarpment to the east; Hill Street to the south and an approved, but not yet constructed, residential flat building to the west. The Site is approximately 40 x 20 metres and falls some 5 metres from the north east corner to the south west.

An existing two storey brick residence with some landscaping generally currently occupies the site. Some mature and 'crowned' Cypress are located well within the proposed building footprint and a Bangalow palm is located near the north east corner of the existing residence. Adjacent the north boundary on the next door property a mature Coast Banksia (*Banksia integrifolia*) and Mango are approximately 3.5 and 0.5 metres, respectively from the north boundary. It is considered unlikely they will be impacted upon by the development as the existing walls are similar distance from them as the proposed, however AS 4970/2009 guidelines will be considered at detail design & Construction. A mature Norfolk Island Pine is located on the footpath of Pacific Drive on the northern boundary of the lot to the north of the Site. From a streetscape perspective, this tree and others in the locale, tend to balance the scale of built form of residential flats/apartments which are slowly replacing the older style houses in the area.

2) General Site Planning.

Site planning, proposes a single split-level three and four storey building above a basement car park, with vehicle access from Hill Street and wide deep-soil zone areas to the west and north west. The overall scale and style of the development is 'in-keeping' with the recent flat/apartment developments in the area.

The built form uses the western aspect slope to gain easy vehicle access to the basement garage from Hill St. while the ground floor of the eastern facing units, 1 and 2, enter at ground level from the Pacific Drive footpath. The western facing units are separated from the others by a foyer, access stairs and lift, are set down 1.5 metres from the respective eastern floor levels and have one less level. This assists the built form to reflect the natural level change of the landform, follow required height limits of the DCP and maximise the number of units with expansive ocean views and sea breeze access.

Being a corner block, significant ocean views are also afforded from the Hill street frontage in a south easterly direction over Flynns Beach. As shown in the Architectural plans, all east facing units all have living & dining kitchen areas with expansive glass windows & doors facing toward the east and ocean and even the western units, afford views to the south east and ocean though only from close to the southern side of the units.

The western side and some 13 metres of the western end of the north boundary are allocated as a deep soil zone for tall tree planting. Reduce the western heat gain should the adjacent approved residential flat building not proceed or contribute to separation and privacy should the building proceed.

3) Landscape Analysis & Design Principles.

Some landscape Analysis notes are provided on Sheet 1 of 2 of the Landscape Principles Plan which accompanies this report & Development Application. Issues identified for address on the Plan and within this report include:

Pedestrian and vehicle movement.

Vehicle movement is along both street frontages and the entry/exit to the basement level garage, via a generous 1 in 8 ramp, at the south west corner of the building.

A moderately strong pedestrian desire-line links along the Pacific Drive frontage between Flynns Beach and the CBD direction, though this is diminished due to Council's foreshore walking path on the opposite side of Pacific Drive. Minor movements are anticipated along Hill Street frontage. These movements are proposed to be catered for by a 1.5 M minimum width concrete path, with brush finish to match Council's footpath on the opposite side of Pacific Drive.

Internal site movements include;

- § A disabled grade and standard ramp to the main foyer/entry to the ground floor level units from the Hill St frontage;
- § Stairs from the north east corner basement garage to the northern end of Pacific Drive frontage;
- § Individual and minor entries to all three ground level units from street frontages; and
- § A low use gravel with concrete stepping stone inlay pathway linking the rear/northern (emergency) access to the building stairwells with the garage entry area, also providing maintenance access to the deep soil zone area.

Open Space and Recreation:

Public open space is well catered for in the general precinct (refer 'Location & setting' above).

The Site is directly linked to Town Beach, foreshore open space and walkways, and more distant Roto House & Wrights Creek offering an array of more passive and semi-active recreation opportunities. The moderately close Bowling Club, tennis courts and Oxley Oval offer more active, organised and social recreation opportunities as well as the Library, swimming pool etc.

Private open space is provided within the development in the form of terrace balconies with outlook toward the ocean for seven of the ten units; and dual north-south terrace & balconies for the three western units. All terrace balconies have sufficient space to comfortably accommodate table and chairs and general sitting; refer architect's plan 0401_DA 02 for deck areas of each unit.

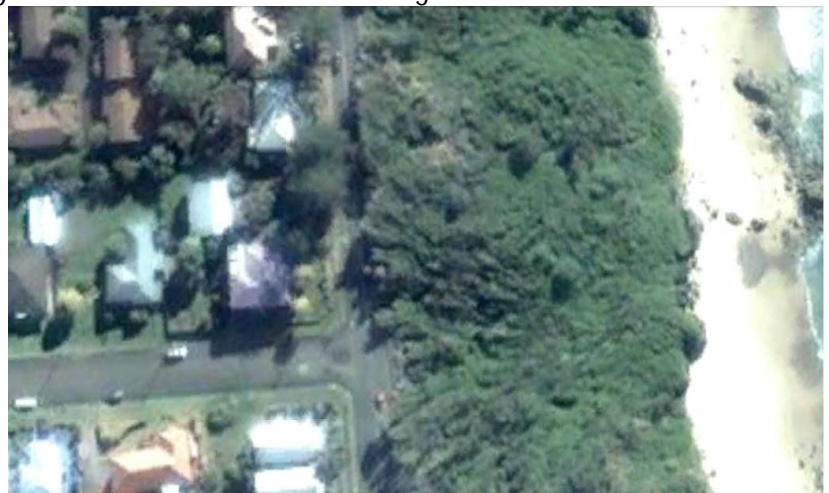
The deep-soil zone to the west and north-west of the building is separated from unit 3's northern balcony by a 1.0 M minimum and 1.8 M max change of level as well as being at a relatively steep grade. It is now proposed to accommodate private table & chairs on a small retained level area as a result of the DRP request even though this slightly diminishes the extent of deep-soil zone.

Visual influences & Climate Control:

As previously noted, the ocean views are spectacular from this elevated position immediately above the foreshore escarpment where the vegetation across Pacific Drive is relatively sparse and low. The ocean views have predominantly determined the planning and design of the building and landscaping; along with other functional aspects.

Views of the building are predominantly from the south & both street frontages.

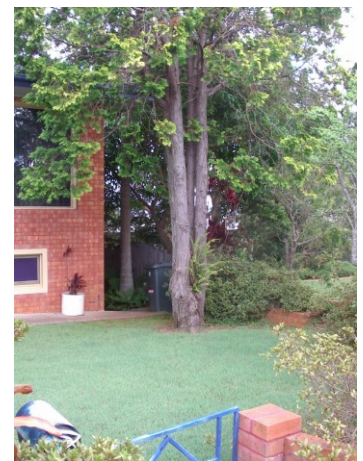
Climatic influences on the site include direct access to cooling summer north east sea breezes, and to a lesser extent cold winter south-west winds. Solar access is partially restricted by tree planting at the north east corner of the existing residence, but this will be removed and replaced with appropriately located plantings. Other than that there is good solar access, until and if a multi storey building is placed on the adjacent lot to the north.



Above: Google earth image showing escarpment and low vegetation for views.



Left: Views from ground level at site across Pacific Dr to Ocean.



Right & Below: Existing Pacific Drive frontage and plantings.



Landscape Treatments & Planting:

All existing trees on the Site are proposed to be removed. Protection of trees on the adjacent property a mature Coast Banksia (*Banksia integrifolia*) and Mango are approximately 3.5 and 0.5 metres, respectively from the north boundary. It is considered unlikely they will be impacted upon by the development as the existing walls are similar distance from them as the proposed, however AS 4970/2009 guidelines will be considered at detail design & Construction.

The Site is extremely subject to high salt winds which will be a major determinant to plant selection. Other influences on plant selection will be the impact of the development on the specific area to be planted. For example; shade, wind tunnelling, and root disturbance in spaces constrained by buildings, basements and structures will determine plant selection at the detail design stage.

There are essentially four landscape areas with their own landscape Principles and planting requirements.

Landscape Design Principles outlined above divide the landscape into three distinct components:

1. Pacific Drive and Hill Street frontages; where planting (and hard-works) continues themes generally established by existing Unit buildings and streetscapes. For example brush finish concrete paths, mass planted frontages with low shrubs and taller plantings for separation & privacy to bed rooms using low root disturbance Bangalow and Kentia palm species for height in confined spaces.
2. Deep soil zone to the west and northwest has sufficient space for significant sized tree planting, in accord with the DCP and RF Code to balance the mass of built form. Informal plantings of littoral rainforest character, shade tolerance, promotion of 'ecology', backdrop and screen functions; the latter was reduced in the west boundary DSZ due to DRP request.. Some deep soil is provided in very constrained space adjacent the eastern 2/3rds of the north boundary and tall plantings with low root disturbance such as palm species are selected for these areas.
3. Three podium-level 'Contained Planters' are located one above the main entry ramp, another north of unit 1 and the other west of the lift well. The former 2 have surface levels of about 41.4 RL, the latter 40.75 and both a depth of about 0.6 M.

Planting will be selected for aspect, climate view & spatial constraints from the following Pallet of Species noted for this component at Detail (CC) Design stage.

The following Pallet of species identifies plant material suitable for use in each of the three component areas, provides their 'mature height' under 'normal circumstances' (which will vary with site/location specific conditions) and provides a summary comment about the plant. The Pallet does not define what plants will be used, it merely indicates the pallet from which the species are likely to be selected, and indicates the Planting Principles adopted within the design, to be refined at detail design stage.



Registered Landscape Architect

Pallet of Species: Page 5...

Pallet of Species:

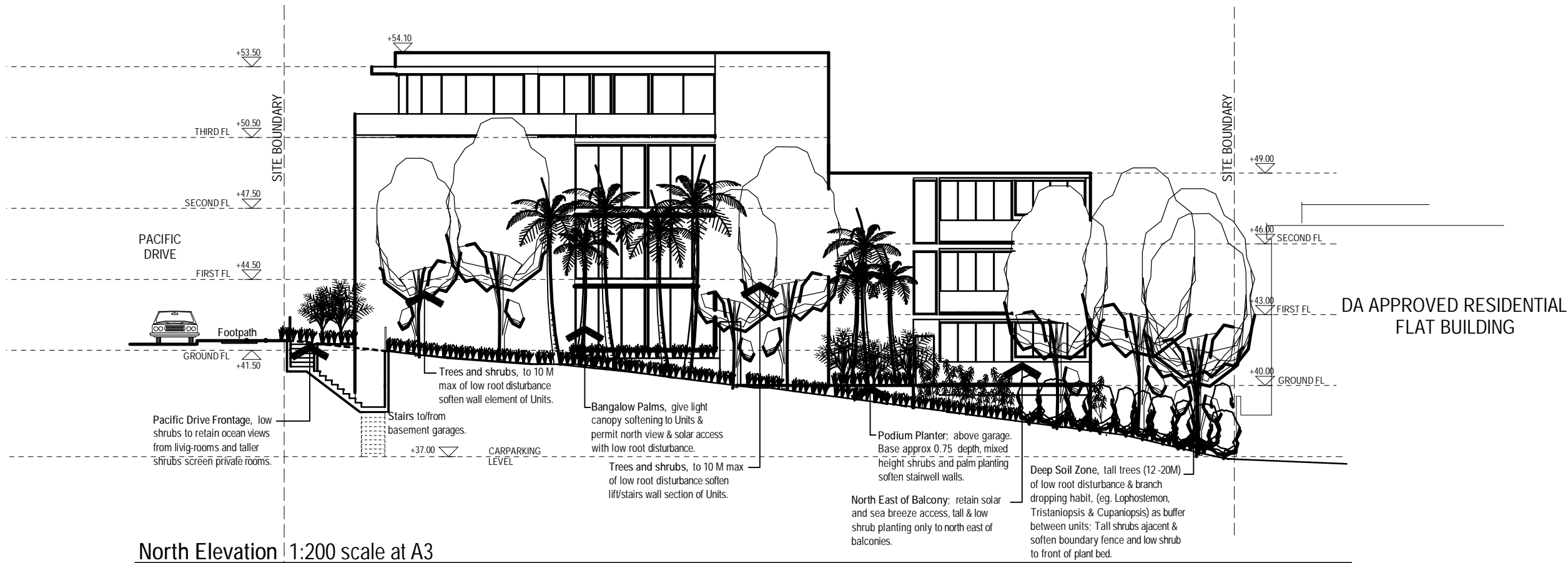
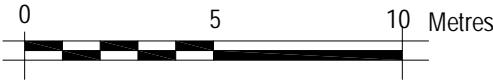
Note: Species to be selected from this list.

		Area	1	2	3	
			Street frontages, semi formal native & exotic palm & low shrub	Deep soil area; informal mostly native tall trees, med & low shrubs	Podium, over roof in planter tubs hardy, low maint. mass planting.	
Trees		Approx Mature Height M				
Species	Common Name					Comments
<i>Acmena smithii</i>	<i>Lilly Pilly</i>	10		b		Large space, corner, >4m Wat.
<i>Archontophoenix cunninghamiana</i>	<i>Bangalow Palm</i>	9	b	b		Small spaces – tropical foliage.
<i>Banksia integrifolia</i>	<i>Coast Banksia</i>	6		b		West area scraggly.
<i>Chrysalidocarpus lutescens</i>	<i>Golden Cane Palm</i>	5	b	b	b	Small – screen tropical foliage
<i>Cupaniopsis anacardioides</i>	<i>Tuckeroo</i>	8	b	b		Med. Lush green, clear trunk.
<i>Davidsonia puriens</i>	<i>Davidson's Plum</i>	8		b		Small, decid. colour & aroma.
<i>Elaeocarpus reticularis</i>	<i>Blue Quandong</i>	8		b		Full-length canopy screen tree.
<i>Flindersia australis</i>	<i>Cugerie</i>	15		b		Subtropic lush, <med salt locn.
<i>Hymenosporum flavum</i>	<i>Native Fragipanni</i>	10	b	b		Subtropic lush, <med salt locn.
<i>Howea forsteriana</i>	<i>Kentia Palm</i>	6	b	b	b	Full-length canopy screen tree.
<i>Livistona australis</i>	<i>Cabbage Palm</i>	12				Med. spaces – tropical foliage
<i>Lophostemon confertus</i>	<i>Brush Box</i>	20		b		Mod. to large spaces >4m Wat.
<i>Melaleuca quinquenervia</i>	<i>Broadleaf Paperbark</i>	10		b		West area scraggly
<i>Mango mannifera</i>	<i>Maango</i>	5	b		b	Small, decid. flower
<i>Plumaria alba & rubra</i>	<i>Frangipanni</i>	6	b		b	Small, decid. colour & aroma.
<i>Syzygium australe</i>	<i>Lillypilly</i>	4	b	b		Small tree screen/hedges.
Tall Shrubs						
<i>Banksia robur</i>	<i>Swamp Banksia</i>	2	b	b		Shaded & creek/wet areas.
<i>Callistemon wildfire</i>	<i>Red Bottlebrush</i>	2	b	b		Native hedge sp. red flower.
<i>Cordyline australis & stricta</i>	<i>Narrow Leaf Palm Lily</i>	2	b	b	b	Sculptural form, narrow spaces.
<i>Cordyline petiolaris & hybrids</i>	<i>Broad Leaf Palm Lily</i>	2	b	b	b	Sculptural form, narrow spaces.
<i>Metrosideros Fuji Fire</i>	<i>Hybrid NZ Xmas Bush</i>	2	b	b	b	Hardy, colourful, salt tol. hedge
<i>Murraya paniculata</i>	<i>Orange Jessamine</i>	3	b	b	b	Dense, rapid lush green screen.
<i>Plumbago ariculata</i>	<i>Plumbago</i>	1.5	b			Lush green, blue flower, shelter.
Rounded Low Shrubs						
<i>Alternanthera denta</i>	<i>Copper Alternanthera</i>	0.6	b	b	b	Hardy, red foliage feature.
<i>Gardenia augusta florida</i>	<i>Gardenia</i>	1.2	b	b	b	Hardy lush-green white flower.
<i>Westringia fruticosa</i>	<i>Coast Rosemary</i>	1.5	b			Hardy, dense gray foliage.
Strap-leaf Low Shrubs						
<i>Agapanthus orientalis blue</i>	<i>African Lilly</i>	0.4	b	b	b	Hardy lush green, flowering.
<i>Clivia miniata</i>	<i>Kaffir Lilly</i>	0.4	b	b	b	Hardy lush grn. Dense shade.
<i>Crinum pedunculatum</i>	<i>River Lilly</i>	1	b	b	b	Hardy, lush green, white lily.
<i>Cycas revoluta 'Sago'</i>	<i>Sago Cycad</i>	1	b	b	b	Sculptural form, shade+shelter.
<i>Dieties bicolour</i>	<i>Wild Iris Green Brown</i>	0.8	b	b	b	Hardy lush-green tufting.
<i>Liriope gigantum</i>	<i>Turf Lilly</i>	0.5	b	b	b	Hardy lush-green tufting.
<i>Phyllodendron 'Xanadu'</i>	<i>Dwarf Phyllodendron</i>	0.8	b		b	Sculptural form, shade+shelter.
Groundcovers						
<i>Gardenia jasminoides radicans</i>	<i>Groundcover Gardenia</i>	0.1	b	b	b	Lush green, white flower.
<i>Hibbertia scandens</i>	<i>Guinea Flower</i>	0.4	b	b	b	Semi-climber, lush in shade.
<i>Myoporum parvifolium</i>	<i>Creeping Boobialla</i>	0.2	b	b	b	Hardy, spreads, soft fine foliage.
<i>Ophiopogon japonicus</i>	<i>Mondo Grass</i>	0.2	b	b	b	Small dense tufting, soft grass.

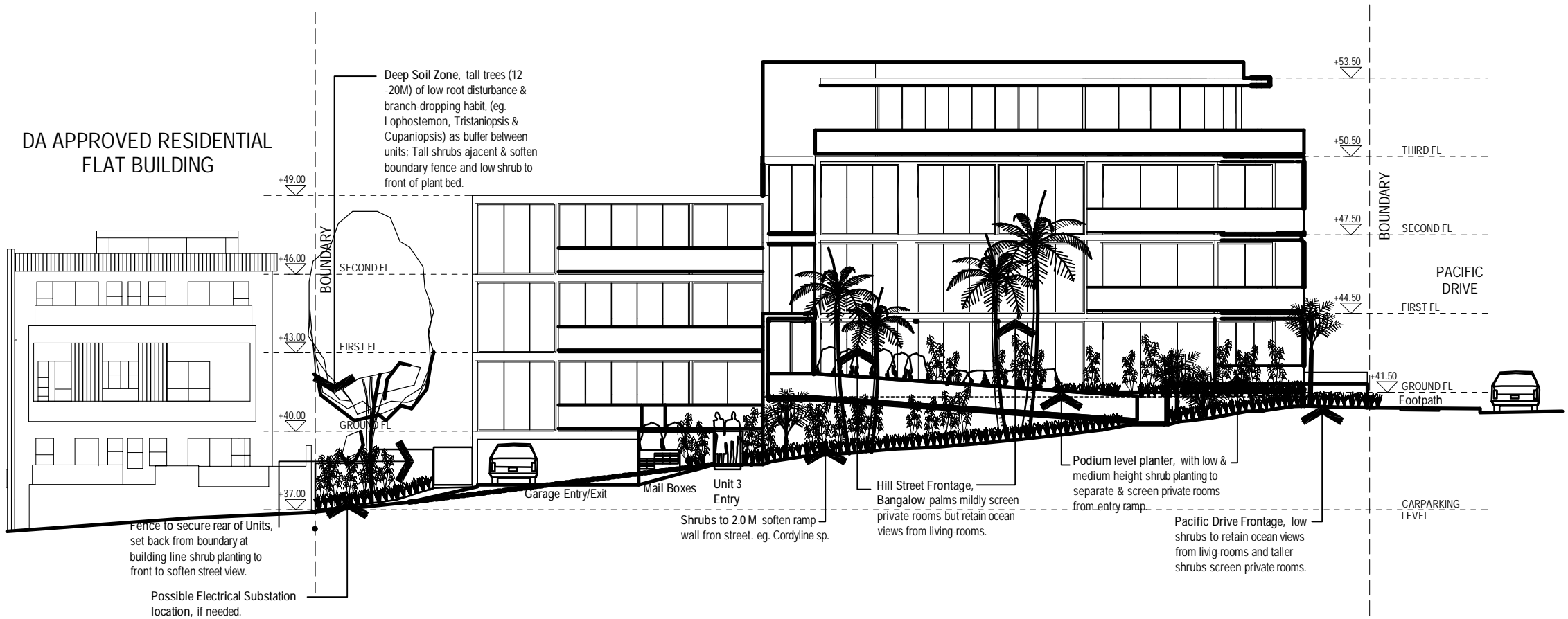
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Verify all dimensions and levels on site and report discrepancies before carrying out works.

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North Elevation 1:200 scale at A3



South / Hill Street Elevation 1:200 scale at A3

Amendments		
Date	Amendment	Issue
28 May 2010	Incorporation of DRP comments re lawn terrace Unit 3; conc. stepping stones in gravel paths; delete path on western footpath reserve and substitute west deep root zone trees to Melaleuca & Banksia sp.	1003 A1

Project:
**Proposed Residential Units,
27 Pacific Drive, Port Macquarie**

Landscape Principles Elevations

For:
M & G Abdallah

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Scale: 1 : 200 @ A3 Date: 28/5/2010 File No: 1003
Designed; RMH Drawn; RMH Drawing No: 1003-2A

LEGEND:

Landscape Hard-Works:

Paving: footpaths, walkways and patio areas, adjunct to Facilities indicated thus. Paths generally 1.5M wide
Patio/Terrace paving variable dimensions.

Brushed Finish: standard concrete indicated thus to be detailed at CC Stage.

Gravel Paving: with concrete stepping stones inset, to be detailed at CC Stage.

Finished Landscape surface level Contours indicated thus (Approx Only).

Landscape Soft-Works:

TREES: indicated thus. All trees selected for appropriate root disturbance and other criteria at CC Detail Design stage.
Informal Trees: Generally 12 to 25 M mature height (as space permits), native endemic & evergreen, of clear trunk to a lighter shade canopy, informal form & character, with interesting trunk and/or foliage and likely to encourage wild-life as appropriate.
Small Informal Trees: Generally 6 to 12 M mature height, mixture of native & exotic, clear trunked for shade & columnar for screening, selected for interesting colour, foliage, trunk and/or flower as appropriate at CC Stage.
Palms: confined to small space areas of deep-soil and podium planters to provide soft verticality where tropical character and low root disturbance desired.

SHRUBS: indicated thus: all planted in edged irrigated mulched planting beds.
Medium to tall (1.0 to 2.4M) mass shrub planing areas, generally for perimeter screen & privacy, windbreak and tall wall softening functions.
Low Shrub & Groundcover plantings: of rounded and strap leaved habit, generally for low maintenance wide barriers to fences, colour and interest in private courtyard areas, mowing maintenance reduction and general setting enhancement.

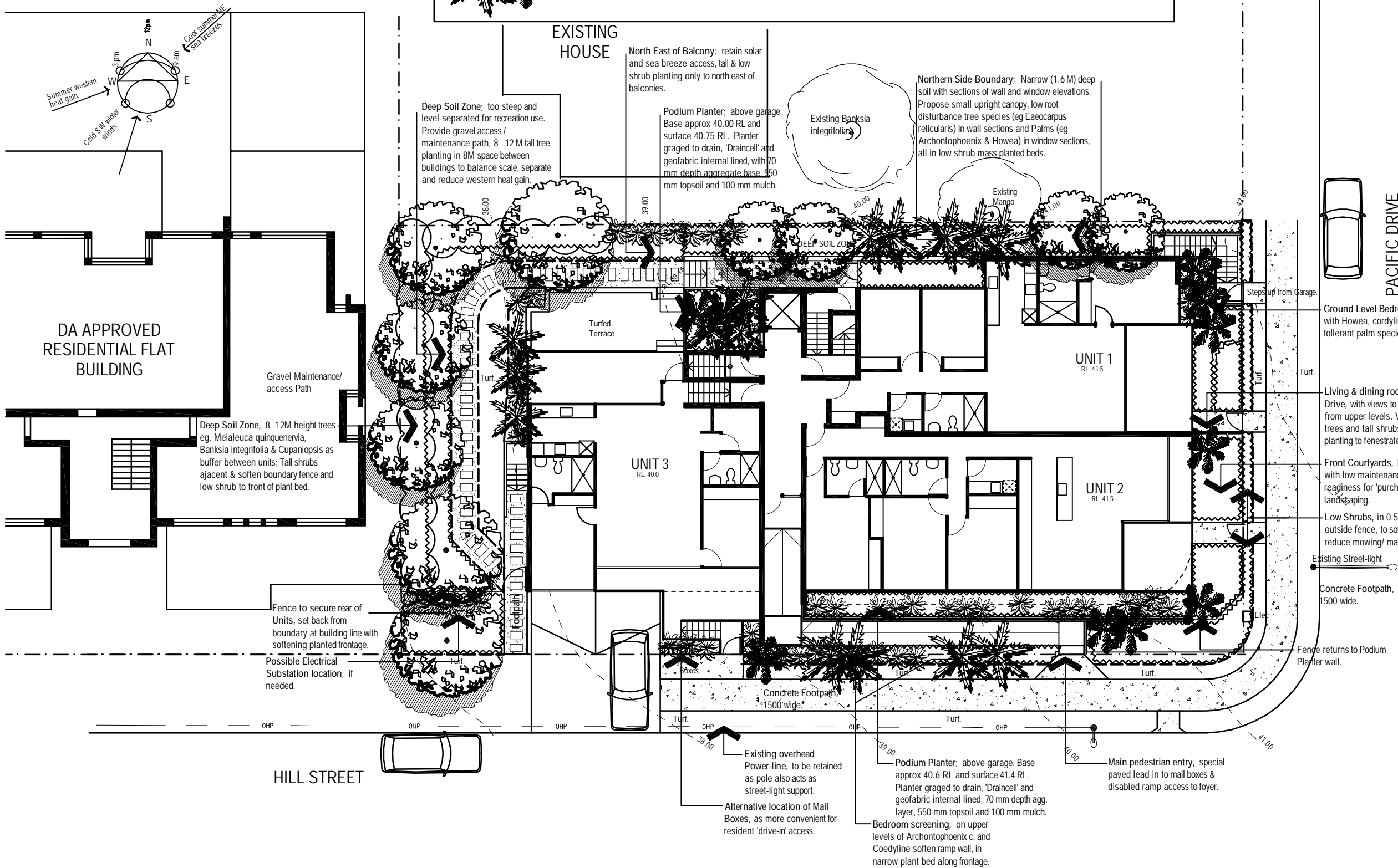
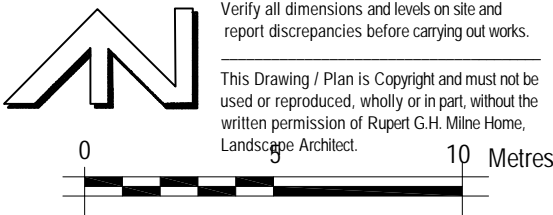
Edging: indicated thus, between all mass planted and lawn/grass areas. 100 x 20 mm durable timber staked secure.

Turf/Lawn, indicated thus: Shade tolerant lush lawn eg 'Sir Walter' PVR Buffalo or equal.

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Landscape Principles Plan

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