



28 November 2007

Landscape Maintenance Schedule Brunswick Stages 1, 2, 3, 4 & 5

Location: Cnr Terrigal Drive & Brunswick Road Terrigal

Scope: Lawn areas, Gardens Beds, Terrigal creek, Street Tree Plantings, Pool area, Garden Irrigation, Garden Lighting, Roadways/ Drainage Pits & Building Gutters.

Introduction: Terrigal Projects objective is to have a well maintained landscape to enhance the integrity of the buildings. This landscape maintenance schedule is compiled as our guide line for the landscape maintenance of the above project.

This schedule includes identification of areas to service and recommendations for our maintenance requirements.
A maintenance log book is to be maintained with copies of works carried out and hours on site per visit.

Note: Consult Terrigal Projects prior to any digging / excavations for location of irrigation, electric cables, water, gas etc
All maintenance work to be undertaken between the hours of 8.00 am to 4.00 pm Monday to Friday only.

Generally:

1. **Bin Area:** sweep/blow any debris, dirt & pick up papers, remove unwanted newspaper delivery left on ground
2. **Letterbox:** Remove unwanted newspapers/junk mail.
3. **Entry Stone Walls:** Remove cobwebs & pressure clean stonework as required.
4. **Entry Gates:** Remove cobwebs ensure pushbutton control panels are clean & free of cigarette butts etc.
5. **Fire Hydrants:** Ensure clear access to main at front gates. Also located at visitor car park area in front of unit 64, and the front of villa 51unit.
6. **Electrical Substances:** Sweep/blow any debris, dirt & cobwebs

1. LAWN AREAS:

Location: Area comprising nature strip / footpath frontage from Terrigal Drive along Brunswick Road.
Grass and or lawn areas adjacent to Terrigal creek will be included under the heading Terrigal Creek

Turf species used: *Kikuyu:*
Terrigal Drive along Brunswick Road & rear villas 21 through to 25
Sir Walter Buffalo:
To rear of all other villas

Requirements: 1.Regular care being weekly and or as required. Grass cutting, edges cut, footway sweep or blown, roadway gutter sweep or blown and any rubbish removed.
A neat spade edge is to be maintained between lawn and gardens where applicable.
Watering during periods of dry spells and in accordance with council restrictions.
Replacement of any dead & diseased lawn areas if required.



Note: Grass catcher to be used when mowing, average cutting height to be approx 25-50 mm to encourage drought resistance and a healthy sward

2. Periodic scheduled maintenance. Constant monitoring for weed, insect and or fungal disease and the use of Selective Herbicides, Insecticide, Fungicide as and if required.

A fertilizer program is to be implemented being to fertilize lawns four times per year at the start of each season by use of a complete fertilizer. Annual scarification by hand operated grooving machine to alleviate thatch build up if required.

2. GARDEN AREAS:

- Location:** All gardens located on nature strip from Terrigal Drive along Brunswick Road, Estate entry, All common areas being villa frontages, car parks / electrical stations.
- Mulch used:** Being 10-15 mm Pine bark as supplied from Forester Sand & Soil Wauchope pebble as supplied by Kincumber Sand & Soil, to gardens at the front and side of villa # 28, pool entry. **Note:** Weed matt has been installed prior to placement of pebbles.
- Plant species:** Species location and pruning treatment nominated as below.
- Requirements:** Pruning, Weed control, Insecticide, Fungicide & Fertilizer program. Scope to include plant replacement as required.
All garden areas are to be kept free of any papers / rubbish.
Notes: Ensure a minimum of 75 mm mulch cover to all pebble and pine bark areas.
All pruning practices are to conform to the following pruning specification.
At a minimum of every three months a pH is to be carried out on garden beds to monitor plant nutrient needs (current readings are at approx 6.5)
Apply a slow release granular fertilizer twice per year (it is recommended that the fertilizer be low in phosphorous due to sections of the gardens containing Australian native plants. Osmocote three to six month release or similar is recommended.

3. TERRIGAL CREEK:

- Location:** This area refers to the creek way extending from our boundary of Terrigal Drive to include lagoon and easement referred to as the North West channel.
- Terrigal Projects have been maintaining the riparian re-vegetation zone passing through the development. Extensive works have been carried out by our sub contractors, T.E.N.T.A.C.L.E. Bush Regenerators, contact Christy Bryson, ph: 02 4397 2731 or 0407 923 908, and our onsite horticulturist with quarterly scheduled repeat visits to protect existing plants and trees, re-vegetated creek embankments, the alignment of access fire trail and the maintenance of the nominated plants used in the stabilization of the creek surrounds. The ongoing works comply with the Rehabilitation Plan, have been carried out, and need to be maintained as follows;
- Requirements:**
- 1. Sediment control** has only been removed from sections of construction works completed, having been re-planted and the placement of mulch and vegetation for stabilization.
Placement of turf areas has been carried out at the base of rock drain spillovers to control sediment runoff and avoid erosion in period of heavy rain.



Where construction works have not been completed sediment control fencing is in place, these fences are checked on a weekly basis to ensure compliance with the environmental control of runoff.

2. Removal of all major weed infestations. Ongoing hand weeding and bagging of weeds with the removal from site. The application of Bio active Round up herbicide is to be used to continue the control of unwanted weed species.

3. Unwanted trees and shrubs such as Privet, Lantana and Camphor Laurel are controlled with the use of Bioactive Round up using the cut and paint method. The treated plants are monitored and the dead material is cut off and removed from site. Tree stumps are retained in situ to retain soil stability and are checked and monitored for re-growth. Any re-growth is then retreated with cut and paint method until re-growth has been eliminated

4. Rubbish / Litter. Ongoing monitoring of rubbish, litter that has been washed or blown into or around the waterway and creek embankments is carried out on a weekly basis by our staff. This is carried out by walking the creek boundary and bagging rubbish / litter and removing from site.

5 & 6. Replanting Mulch Tree Surrounds. Extensive planting has been carried out over the past 2 years to re-vegetate creek embankments. In 2005 alignment of access trails have been installed to both sides of the creek. The now nominated fire trails need to be maintained by ensuring a minimum of 3 m wide pathway. Additional planting and mulching has been carried out to ensure stabilization of embankments to encourage natural re-growth. All tube stock plants are watered in, have cane marker stakes to identify location and are dressed with a mulch surround 75 mm thick in accordance with proper Horticultural practices. Terrigal Projects has planted more than the 3000 plants.

7. Signage. "Access Restricted" signage identifying plant regeneration areas are to be kept in place.

8. Tree / Shrub Maintenance. The planted seedlings have been maintained for the past 18 months and need to be continued to be maintained.

9. Grass cutting. Periodic mowing is required to enhance the integrity of the creek landscape. Care is to be taken to protect new revegetative growth of native plants. **Note:** Tree and shrub stems / trunks are not to be damaged by brush cutters etc. The plant surrounds are to be as per item 5 & 6.

10. Rehabilitation of the Riparian Vegetation (Creek)

Rehabilitation, weed management, monitoring of these areas is required. For the purpose of ensuring the ecological integrity of the Terrigal Lagoon, State Environmental Planning Policy No. 14 Wetland, Endangered Ecological Community and the riparian vegetation, a progress report is to be submitted to Council's Environmental Planning Directorate on a half yearly basis (2 report/year) for two (2) years after the rehabilitation and landscaping works are completed. After the initial two (2) years, an annual report shall be submitted to Council's Environmental Planning Directorate for the next two (2) years.

These progress reports shall provide detail as to the effectiveness of weed control and the progress of rehabilitation works within the creek and other areas. Any potential degrading affects recognized within the reports or by Council's Environmental Planning Directorate will require appropriate mitigative action to be undertaken within time frames specified by Council.



Monitoring and maintenance progress reports are to be submitted to Council's Environmental Planning Directorate in regards to the effectiveness of the stormwater, sediment and nutrient controls installed in the creek and on the subject site.

NORTHERN CHANNEL location from Brunswick Rd Boundary to rear villa 46 to join up around with the creek management works.

Requirements: Treatment is the same as the creek works.
The access trail from estate log wall to channel edge is to be kept mown & clear of any seedling growth to act as a fire buffer zone.
The channel is to be kept maintained.
The northern side of the channel is to be kept trimmed for 2 meters wide from the channel edge
All unwanted trees/shrubs are to be treated previously stated in Unwanted trees and shrubs item 3.3.

4. STREET TREES:

Location: This entails trees located on the nature strip of Brunswick Road between footway and the road.

Tree sp: Lophostemon confertus. 25 ltr

Tree surrounds: Gold decomposed granite as supplied by Kincumber Sand & Soil,
50 x 50 x 2.4 hardwood tree stakes with 50 mm jute webbing
900 mm Hessian surrounds to 4 x hardwood tree stakes

Requirements: The street trees are to have a bi annual fertilizer feed of a slow release tree tablet. This is to be carried out by placement of three crow bar holes into tree root zone per each tree, placement of tree tablets and backfill hole.
The decomposed granite surround is to be kept at a 75mm depth and weed free
Hessian tree surrounds are to be checked and maintained for neat appearance

5. ESTATE POOL:

Location: Adjacent to villa # 29 & 30

Pool: The pool water and pump are maintained by Kincumber Pool Care.

Requirements: All gardens to be maintained as previously stated with in estate garden areas.
Pavement is to be kept weed free and clean of rubbish, papers etc.
Any loose pavers are to be adjusted if required.
Community toilet, sink and tiled floor requires to be cleaned at a minimum of once per week ensuring adequate toilet paper is available.

6. IRRIGATION:

Location: All gardens located on nature strip from Terrigal Drive along Brunswick Road, Estate entry, All common areas being car parks / electrical stations.

Irrigation type: The common areas are supplied by mains water. See drawing for locations marked A.
A low density 19 mm poly main line with 13 mm drip eze lines has been used in all areas.



Manual 2 hour timers are located at main water feed to control irrigation to common areas, location marked A. on the attached plan.
Individual villas have a 5000 ltr rain water tank connected to Onga electric pump installed under the dwellings. The system is operated by a push button time switch located within their garage.

- Requirements:** Irrigation located at villa frontages is the responsibility of the individual occupants.
However if a leak is detected that is detrimental to the stability of the garden and or plants, repair by the Landscape maintenance contractor is required.
All inline filters are to be checked and cleaned on a quarterly basis.
- All residents are to be informed on a six monthly basis that the maintenance of their poly irrigation system is required. This entails the removal of mesh water inlet screens and cleaning, checking and cleaning of inline filters located on electric Onga pump.
Carry out any repairs as required if a leak and or fault is detected.

7. GARDEN LIGHTING

- Location:** Signage and garden up-lights are located within estate entry gardens and the community pool area.
- Requirements:** The garden lighting is required to be checked to be all working and the principle to be informed if lighting globe replacement is required.
Plant foliage is to be kept clear of light beams at all times and light lenses are to be kept clean and clear of build up of plant growth / rubbish.

8. ROADWAYS /DRAINAGE PITS

- Location:** Being all roads / roadway pits and drainage causeways within the estate.
- Requirements:** All are to be kept clean by use of mechanical blower / sucker. Located within the drainage pits are socked filters. These require regular removal and cleaning with a mechanical pressure cleaner as required. The pits are to be kept free of all rubbish so as not to contaminate waterway.
- Stormwater:** Monitoring and maintenance progress reports are to be submitted to Council's Environmental Planning Directorate in regards to the effectiveness of the stormwater, sediment and nutrient controls installed in the creek and on the subject site.
Progress reports are to be submitted to Council's Environmental Planning Directorate on a half yearly basis (2 reports/year) for the first two (2) years after the stormwater, sediment and nutrient controls are initially installed.
After the initial two (2) years an annual report shall be submitted to Council's Environmental Planning Directorate for the next two (2) years for the purpose of ensuring the ecological integrity of the Terrigal Lagoon, State Environmental Planning Policy No. 14 Wetland, Endangered Ecological Community and riparian vegetation. A log shall be compiled and submitted with the reports to ensure regular monitoring of sediment and nutrient controls. Any mitigative measures recognized within the reports or by Council's Environmental Planning Directorate shall be undertaken within the time frames specified by Council.

9. COMMON AREA GUTTERS

- Location:** Within the common pool area being toilet / pump house and gazebo.

Requirements: Gutters are to be kept free of leaves / debris. These should be checked and cleared every six months.

10. BUILDING GUTTERS

Location: All villas.

Requirements: All villas require Body Corporate to have gutters cleaned at least once every six months.
Ensure leaf guards located on down pipes are not blocked, causing erosion to garden mulch / soil.

11. PRUNING SPECIFICATIONS

As previously stated the landscaped gardens are to be well maintained to enhance the integrity of the buildings.

A/ NATURE STRIP.

Requirements: Viburnum odoratissimum: trim to achieve max 1.5 m height x 0.600 width being box hedging.

Phormium tenax Purpurea: keep within garden bed.

B/ Front Entry.

Requirements: The desire is to have a three terrace effect.
Buxus sempervirens: Max of 0.300 – 0.400 mm height keep width compact being box hedging.

Cordyline Rubra : Max of 1.1 m in height.

Ravenea rivularis Majestic Palms: Remove dead fronds, ensure palm fronds are clear of palm lighting.

Washingtonia robusta: Remove dead fronds.

C/ Intercom Entry Garden.

Requirements: The desire is to have a two terrace effect.
Buxus sempervirens: Max of 0.300 – 0.400 mm height keep width compact being box hedging.
Duranta Sheenas Gold: Max of 0.400 – 0.500 height keep compact so as not to spread into Buxus hedge being box hedging.

D/ Circular Entry Garden.

Requirements: The desire is to have a two terrace effect.
Buxus sempervirens: Max of 0.300 – 0.400 mm height keep width compact being box hedging.

Duranta Sheenas Gold: Max of 0.400 – 0.500 height keep compact so as not to spread into Buxus hedge being box hedging.

Phoenix palm: Remove dead fronds as required.

E/ Front Entry Inside Gates.



Requirements: The desire is to have a three terrace effect.
Murraya paniculata: Max of 0.500 – 0.600 mm height keep width compact to 0.400 mm (cut top level adjust height to allow for the rake in driveway level)
Being box hedging.
Cordylina Rubra : Max of 1.1 m in height.

Ravenea Rivularis Majestic Palms: Remove dead fronds; ensure palm fronds are clear of palm lighting.

Washingtonia Robusta: Remove dead fronds.

F/ Villa # 28 Frontage.

Requirements: Buxus sempervirens: Max of 0.400 mm height keep width compact being box hedging.
Murraya paniculata: Max of 0.500 – 0.600 mm height keep width compact to 0.400 mm being box hedging.
Syzigium leuhmannii: Max of 1.4 m in high being veranda height keep width compact to 0.600 mm.

Phoenix roebelinii: Remove dead fronds.

Cordylina Red Sensations: Remove dead leaves.

G/ Side Villa # 28 & Villa # 29 Frontage.

Requirements: Murraya paniculata: Max of 0.500 – 0.600 mm height keep width compact to 0.400 mm being box hedging.

Syzigium leuhmannii : Max of 1.8 m in high being Timber fence height keep width compact to 0.600 mm.

H/ Front Villas 21 – 25 / 26 – 27 & 29 -30.

Requirements: Duranta Sheenas Gold: Max of 0.400 – 0.500 height keep compact width to be 0.400 so as not to spread into other plantings being box hedging.

Syzigium leuhmannii : Max of 1.4 m in high being veranda height keep width compact to 0.600 mm.

Palms: Remove dead fronds as required.

All other plants keep tidy avoid growing into each other.

I/ Pool area outside fence.

Requirements: Duranta Sheenas Gold: Max of 0.400 – 0.500 height keep compact width to be 0.400 so as not to spread into other plantings being box hedging.

Murraya paniculata: Max of 0.900 mm height keep width compact to 0.300 mm being box hedging.

Altenanthera dentate: keep compact max of 0.300 high.

J/ Inside Pool area fence.

Requirements: Syzigium leuhmannii : Max of 2.0 m in high to act as a screen to gazebo area width to be compact to 0.600 mm.



Trachelospermum jasminoides: Keep 0.200 high allow to spread to act as a ground cover. Avoid plants growing onto pool fence.

Palms: Remove dead fronds as required.

All other plants keep tidy avoid growing into each other.

K/ Electrical Switchboard area adjacent Pool.

Requirements: Duranta Sheenas Gold: Max of 0.400 – 0.500 height keep compact width to be 0.400 so as not to spread into other plantings being box hedging.

Trachelospermum Jasinoïdes: Train climbers to espalier onto wire cables
Avoid plants growing into others.

Washingtonia Robusta: Remove dead fronds as required.

Agave attenuate: remove dead or damaged leaves.

L/ Creek Frontage opposite Villas 36-39.

Requirements: Duranta Sheenas Gold: Max of 0.400 – 0.500 height keep compact width to be 0.400 so as not to spread into other plantings being box hedging.
Duranta at base of Robinia Frisia keep circular effect 0.400 high by 0.400 wide.

Robinia Frisia: Keep mop top / standard appearance.

Trachelospermum Jasinoïdes: Keep 0.200 high allow to spread to act as a ground cover. Avoid plants growing onto creek fence.

M/ Front Villa # 39.

Requirements: Buxus sempervirens: Max of 0.300 – 0.400 mm height keep width compact being box hedging.
Duranta Sheenas Gold: Max of 0.400 – 0.500 height keep compact so as not to spread into Buxus hedge being box hedging.

Palm: Remove dead fronds as required.

N/ Front Villas 34- 38.

Requirements: Duranta Sheenas Gold: Max of 0.400 – 0.500 height keep compact width to be 0.400 so as not to spread into other plantings being box hedging.

Syzigium leuhmannii: Max of 1.4 m in high being veranda height keep width compact to 0.600 mm.

Palms: Remove dead fronds as required.

All other plants keep tidy avoid growing into each other.

O/ Side Villas 34 - 45.

Requirements: Murraya paniculata: Max of 0.500 – 0.600 mm height keep width compact to 0.400 mm being box hedging.

Syzigium leuhmannii: Max of 1.8 m high / timber fence height keep width compact to 0.600 mm.

P/ Front Villas 40 -45.

Requirements: *Duranta Sheenas Gold*: Max of 0.400 – 0.500 height keep compact, width to be 0.400 so as not to spread into other plantings being box hedging.

Syzigium leuhmannii: Max of 1.8 m high / timber fence height, keep width compact to 0.600 mm.

Gardenia Augusta: prune to circular balls 0.400 – 0.500 high.

Palms: Remove dead fronds as required.

All other plants keep tidy avoid growing into each other.

Q/Visitors car park adjacent to villa 40

Requirements: *Duranta Sheenas Gold*: - max of 0.400 – 0.500 height keep compact. Width to be 0.400 so as not to spread into other plantings, being box hedge style.

Trachelospermum Jasinioides: keep 0.200 high to allow to spread. To act as a ground cover. Avoid plants growing onto creek fence and prune away from *Doryanthes excelsa* palms

Livistone Australia (Palms): Remove dead fronds as required. Supply & install hormone treatment such as formula 20 or equipment at 3-4 week intervals for 12 months. Palms installed August 2007

Trachelospermum Jasinioides: plants at base of electrical substation are to be trained as climbers to espalier onto wire cables.

R/Front Villa 46

Requirements: Palm, Washington Robusta: Remove dead fronds & ensure clear access of villa stairs.
Duranta Sheenas Gold: max of 0.400 – 0.500 height keep compact width to be 0.400 so as not to spread into other plantings being box style.
All other plants keep tidy avoid growing into each other.

NOTE: Villa 46 Wauchope pebble as supplied by Kincumber sand & Soil has been installed to garden beds. Weed matt has been placed under pebbles prior to installation.

S/Front Villa 47-50

Requirements: *Duranta Sheenas Gold*: Max of 0.400 – 0.800 height. Keep compact width to be 0.400 so as not to spread into other plantings being box hedge style.

Palms: *Ravenea Rivularis* "Majestic Palms: Remove dead fronds, ensure palm fronds are clear of stairways

Syzigium Leuhmannii: Max height not to exceed window views being 1.8m in height keep width compact to 0.400m being box hedge style.

Gardenia Augusta: Prune to circular balls 0.400-0.500 high.



All other plants keep tidy avoid growing into each other.

T/ Front Villa 51-52 (area to include side passage extending to timber gates)

Requirements:

Duranta Sheenas Gold: Max of 0.400-0.800 height. Keep compact width to be 0.400 so as not to spread into plantings, being box hedge style.

Palms: Ravenea Rivularis "Majestic Palms: Remove dead fronds, ensure palm fronds are clear of stairways.

Mature Palms: Archontophoenix Alexandrae, remove dead fronds with pole pruner, as required. Supply and install hormone treatment such as formula 20 or equivalent at 3-4 week intervals for 12 months

Gardenia Augusta: prune to circular balls 0.400 – 0.500 high

Syzigium Leuhmannii: Max height not to exceed window views being 1.8m in height keep width compact to 0.400mm being box hedge style.

Trachelospermum Jasinioides: plants at base of 3m tall screen wall front villa 51. are to be trained as climbers to espalier onto wire cables.

All other plants keep tidy avoid growing into each other.

L/ Front villa 53 & 54

Requirements:

Duranta Sheenas Gold: Max of 0.400 – 0.500 height. Keep compact. Width to be 0.400 so as not to spread into other plantings, being box hedge style.

Palms: Ravenea Rivularis "Majestic Palms: Remove dead fronds ensure palm fronds are clear of stairways.

Syzigium Leuhmannii: Max height not to exceed window views being 1.8m height, keep width compact to 0.400mm being box hedge style.

All other plants keep tidy avoid growing into each other.

Note: Stage 5 to follow.











