



landscape design report

morisset park subdivision

project no: 7620.5

nov. 2008

rev. D



date: 19/11/2008
 project no: 7620.5
 site: Morisset Park, Corner Morisset Rd, Chifley St, NSW
 council: Lake Macquarie City Council
 proposal: Subdivision of 62 residential lots

landscape design report

morisset park subdivision

table of contents

1	general description.....	2
2	the site.....	2
3	the soils.....	3
4	vegetation	3
5	existing landscape character	3
6	proposed development.....	4
7	proposed landscape works	4
7.1	street trees	4
7.2	entry feature	4
7.3	asset protection zone.....	5
7.4	stormwater detention area.....	5
8	conclusion	5
9	references.....	5
10	appendices.....	6
10.5	site anylisis & photos	7
10.6	landscape concept plan & details	8

principals:
 phillip williams
 steve rushworth
 associate:
 adrian hill
 ABN:
 67 129 348 842
 phone:
 +61 2 4929 4926
 Fax:
 +61 2 4926 3069
 address:
 412 king st, newcastle,
 nsw 2300
 www.terras.com.au

1 general description

The following landscape design report has been prepared in accordance with the requirements of Development Control Plan No. 1 (including associated guidelines), having regard to a Category 3 development being a subdivision in excess of 62 residential lots.

2 the site

Morisset Park is a small suburb located on the western side of Lake Macquarie, east of the Newcastle-Sydney Highway, access via the Morisset exit.



Fig. 01:
Site Context Map

The site is located at the corner of Morisset Park Road and Chifley Road. Most of the development within Morisset Park is located along or near to the shoreline of Lake Macquarie, north and east of the proposed subdivision site. The western site boundary adjoins to bushland extending further west and north. The southern boundary runs along Morisset Park Road with the Lake Macquarie State Conservation area on the other side.

East the side is bordered by Chifley Road and existing residences. The northern boundary adjoins to residences of Frederick Street.

The area is zoned 2(1) residential.

Currently the site is an open area of cleared open woodland with a modified understorey comprised mainly of pasture and native grasses. The site accommodates one empty dwelling and one residence with a number of sheds.

The exiting dwellings will be demolished with the development of the new subdivision. The site is gently undulating towards the north east and Lake Petite.



3 the soils

The native soils of the area have been classified as 'do' (Doyalson) with 'wy' (Wyong) soils occurring along the more major drainage lines. Doyalson soils tend to have a topsoil layer that is either sandy or loamy sand with lower horizons being comprised of sandy clay loams and medium clays.

Generally the Doyalson soils have a low to very low fertility with erodibility between low to high. There is also a tendency for some water-logging in localised areas. Generally the pH ranges from strongly acid (pH 4.5) to slightly acid (pH 6.0).

The Swansea Acid Sulphate Soil Risk map prepared by the Department of Land and Water Conservation indicates that there is no known occurrence of acid sulphate conditions within the site.

It is proposed that site topsoil would be stripped and stockpiled for later testing, amelioration and reuse. From the above description, it would seem that site topsoils would mainly need some adjustment to pH which should assist in improving fertility.

4 vegetation

The original site vegetation was dominated by a Eucalypt Woodland community which is still apparent, however, with little native understorey remaining due to clearance and former grazing activities. The low understorey contains mainly native grasses and herbs, and exotic pasture species.

The remnant trees occurring on site include: *Eucalyptus haemastoma* (Scribbly Gum), and *Angophora costata* (Smooth-barked Apple). Understorey species likely to have occurred on site would have included: *Banksia spinulosa var spinulosa* (Hill Banksia), *B. integrifolia* (Coast Banksia) and *Lambertia formosa* (Mountain Devil). The above species suggest that the site is subject to coastal influences and generally poor soils.

5 existing landscape character

There is a strong influence of native vegetation defining the landscape character of the area due to the presence of large areas of retained bushland such as the conservation area south of the site and along drainage lines. In areas where development has occurred such as north of the site, with the exception of the retirement village, and further towards Bonnells Bay, the native theme is maintained, however, there is also an increased use of exotic trees and shrubs. Newer developments tend to occupy greater portions of the site and therefore the retention or planting of native trees has been reduced.

It is proposed that native species will be used predominantly within the subdivision to complement the existing landscape character of the area.



6 proposed development

The development proposal is for a residential subdivision with a total number of 62 residential lots and one lot being a detention area. The majority of the lots are to be sized between 570 to 1040m².

It is proposed to have two access roads to the site, Chifley Road being the main access with a proposed entry feature, and Morisset Road being the secondary entry point.

Lots fronting the southern boundary (lots 26-33) will be accessed from Morisset Park Road; lots fronting the eastern boundary (lots 20-25) from Chifley Road, with all other lots being accessed internal to the subdivision.

7 proposed landscape works

The masterplan for the proposed landscape design takes existing site characteristics into consideration and uses predominantly native plant species.

Key design elements are as follows:

7.1 street trees

The proposed streets to the subdivision will be lined by native street trees such as *Harpullia pendula* (Tulipwood), *Flindersia australis* (Crow's Ash), *Lophostemon confertus* (Brushbox), and *Corymbia* 'Summer Red'. Although these trees are not indigenous to the site, they have been chosen as they perform well as street trees without the potential for high public risk and/or nuisance commonly associated with the larger Eucalypts and Angophoras. These trees are also better suited to be used within clear zones associated with streets as the tree trunks do not reach proportions that are likely to cause significant damage should they be involved in a vehicular accident.

7.2 entry feature

The main entry to the site is via Chifley Road with an entry feature and signage that will be readily visible to arriving residents and visitors. Materials used for the entry feature will include sandstone and timber which reflects a rural character and maintains the bushland quality that is present within the surrounding area.

Whilst all other street trees are evergreen the feature trees along the entry are deciduous, *Pyrus calleryana* 'Chanticleer' (Ornamental Pear), and will highlight the entry with seasonal aspects. Although exotic, it is considered to be complementary to the other proposed street trees.

The corners of the entry feature wall sections to each side with stainless steel lettering, with accent planting of grasses like *Pennisetum alopecuroides* (Fountain Grass) and *Poa poiformis* 'Kingsdale' (Blue Tussock Grass) to the front.

The secondary entry off Morisset Park Road does not include any feature elements.



7.3 asset protection zone

The asset protection zone to the western boundary has a total width of 20m consisting of OPZ (Outer Protection Zone) and IPZ (Inner Protection zone) to the regulations outline in the Bushfire Threat Assessment.

Within the lot boundaries possible fuel needs to be cleared from the site and existing trees and under scrub need to be selectively pruned or removed to allow for a discontinuing canopy.

Future residents have to ensure the ongoing fuel removal within the APZ.

7.4 stormwater detention area

The stormwater detention area for the site is located at the low point at the north-eastern corner of the site.

The detention basin is constructed as a dry basin, which will allow the basin to be an open turfed area with opportunities for play and recreation for future residents.

Planting around the basin consists of screening trees to the outside (*Melaleuca styphelioides*, Prickly Paperbark, and *Allocasuarin littoralis*, Black She-Oak) and larger high trunk trees of Eucalyptus haemostom (Scribbly Gum) which is native and well represented on the existing site.

The basin will be maintained by regular mowing.

8 conclusion

The proposed subdivision will provide additional housing in the burgeoning area of Morisset whilst making use of existing infrastructure and services.

Although development will result in the removal of trees throughout the site, the proposed landscaping of the scheme has sought to minimise the impact and to preserve the existing landscape character of the area. This will mainly be achieved through the use of native trees. Where suitable, these plants will be selected from those species that are growing locally.

Attention has been given to incorporating the recommended mitigation measures made in the visual impact assessment prepared by Terras Landscape Architects so that the visual quality of the area is minimised by the proposed subdivision, including the retention of visually significant trees and other trees not affected by development works.

9 references

Murphy, L.E. (1992), Soil Landscapes of the Gosford-Lake Macquarie 1:100 000 Sheet, 1992.

Lake Macquarie City Council, DCP No.1, as amended, 2008.

Harper Somers O'Sullivan, Bushfire Threat Assessment, Job ref. 24818, January 2008



10 appendices



10.5 site anylisis & photos



10.6 landscape concept plan & details