

LAKE MACQUARIE CITY COUNCIL
CHARLESTOWN LEISURE CENTRE REDEVELOPMENT

JULY 2016

DESIGN STATEMENT

The existing Charlestown leisure centre is proposed to be upgraded works to provide a new multipurpose community centre with upgraded amenities and associated landscape setting.

1.0 THE SITE

Generally:

The site is located at the corner of Dickinson Street and Mulbinga Street Charlestown, approximately 1.0km and a 15-minute walk to the main shopping centre. It is bounded by Milson Street to the east, Mulbinga Street to the south, Dickinson Street to the west, and Frederick Street to the north.

Environmental Partnership NSW Pty Ltd has been commissioned as landscape consultants to the project team, and has prepared this landscape Design Statement and associated Landscape Plans.

Character:

The site area incorporates three broad landscape zones, the existing informal carpark area adjoining Dickinson Street to the west, the outdoor swimming pools area and the parkland area to the east and the south. The parkland area is predominantly grassed with mixed tree canopies. The site is typified by native tree species with some exotic tree plantings.

Vegetation:

The open space area and the existing carpark area is typified by a mix of eucalypt species such as Swamp Mahogany (*Eucalyptus robusta*), Southern Mahogany (*Eucalyptus botryoides*), Sydney Peppermint (*Eucalyptus piperita*), Stringybark (*Eucalyptus agglomerate*), Iron Bark (*Eucalyptus paniculata*), Forest Red Gum (*Eucalyptus tereticomis*), Grey Gum (*Eucalyptus punctata*), Sydney Blue Gum (*Eucalyptus saligna*), Tallowwood (*Eucalyptus microcorys*), and Scribbly Gum (*Eucalyptus haemastoma*). Other native species also present on the site include Weeping Bottlebrush (*Callistemon viminalis*), White Bottlebrush (*Callistemon salignus*), Smooth-barked Apple (*Angophora costata*), Lemon-scented Gum (*Corymbia citriodora*), Brush Box (*Lophostemon confertus*), Willow Peppermint (*Agonis flexuosa*) and River Oak (*Casuarina cunninghamiana*). Exotic species include cocos Palm (*Syagrus romanzoffianum*) and Chinese Weeping Willow (*Salix babylonica*).

A tree assessment report was prepared by arborists (Joseph Pidutti, consulting arborist, which provides information including tree condition in addition to recommendations for the retention / removal of trees and post construction management (Refer the Tree Assessment Report appended to the DA).

2.0 ISSUES REVIEW

Review of background information and examination of the site identified the following key contextual issues:

- **Existing carpark:** The existing carpark is informal and inefficient and generally contributes to a poor visual presentation of the Dickinson Street frontage and the main entry of the existing building. A reconfigured and formalised carpark with adequate parking spaces and shade amenity is desirable;
- **Maximisation of tree retention for enhanced amenity and habitat** – the site has diversity of native tree specimens, some of which are native to the area - tree retention has been considered as part of the brief for the aquatic centre re development. The proposal provides a functional compromise that allows the major and the majority of good quality trees to be maintained. In addition further tree planting will occur through the new carpark and upgraded street frontages along with the north and eastern grassed parkland.

- **Landscape Character** whilst contributing to a general “green character” of the site the existing plantings do not provide a unique planting theme or landscape character to the streetscape edge. New plantings as proposed on the Landscape Plan aim to reinforce a stronger planting palette with denser, more unified layout. Planting will also build upon existing tree canopy through additional plantings
- **Effective overland flow paths** – overland flow paths are required as part of the flood study– they generally lead to a water detention area at the southern end of car park/Mulbinga Street which will be planted with biofiltration species.
- **Provide safe movement from carpark and street frontage to facility** – defined path access at key locations will be provided and type of new tree planting, lighting, and clear line of site will maximise safety in terms of movement from car park and street frontage to the entry of the facility.
- **Provide shade amenity to car parking areas** – tree planting zones have been provided in the car park to both enhance the natural environment and provide shade to car park zones.
- **Provide an effective and attractive street address** the main entry is emphasised providing an inviting presence, building form providing a modern and contemporary façade. Street tree planting has been increased “greening” the frontage of the new building.
- **Provide enhancement of boundaries to adjoining uses** – the boundaries of this facility are partly adjacent roads or adjoining park owned by council. Backyards of premises lie beyond the adjoining open space –with enhanced tree planting to the domestic boundaries of the aquatic centre – an enhancement of the amenity of adjoining residences and users will be provided.
- **Amenity of surrounding residents.** – due to the proposed building incorporating new pool facilities– with the indoor pools providing for the leisure and learn to swim patrons – it is expected that overall noise from the centre will be greatly controlled and lessened to what is presently experienced by surrounding properties.

3.0 TREE MANAGEMENT

The Arborists Assessment by Joseph Pidutti, Consulting Arborist assessed existing trees on the site including trees proposed to be removed to enable constriction of the facility, in addition to trees recommended to be removed due to poor condition. This tree removal is balanced by new plantings in the proposed landscape scheme with a further 87 additional trees to existing to be provided. In summary there are a total of 55 existing trees to be removed, while the proposed landscape scheme provides a total of 142 new trees as per the table below:

LOCATION	EXISTING TREE PLANTINGS TO BE REMOVED	NEW TREE PLANTINGS
Street frontage	5	39
Carpark	20	49
Building footprint	16	0
Internal open space	14	54
TOTAL	55	142

The new tree planting selection has been based on local native plants that achieve the desired landscape objectives. It has taken into account environmental sustainability and benefits local habitat whilst enhancing the attractiveness and amenity to the site. From a visual perspective it is noted that tree canopy to the more critically viewed areas adjoining the public domain has been increased (Street frontage +34), (Carpark area +29). To the internal open space areas which provide the buffer zone to adjoining residences and shade canopies for picnic area, tree canopy has been increased by +40.

4.0 THE LANDSCAPE DESIGN PROPOSAL

The landscape design proposal has been developed to provide a simple and robust landscape setting for the new car parking area and street frontages that compliments relevant landscape themes of the adjoining surroundings and streetscapes, compensates for the loss of tree canopy with additional trees to street frontages and through the existing landscaped area. The redevelopment will incorporate a bio-retention basin to improve existing drainage and water quality and provide a more efficient green buffer to streetscape edge and adjoining residential properties. It is expected that overall noise from the centre will be enhanced providing an overall improved amenity.

The main aspects of the landscape proposal are listed below:

i. New carpark

A new carpark is to be constructed adjacent to Mulbinga Street to the south. It is proposed that existing trees within the footprint of the new carpark area be removed. Sections of kerb and gutter along Mulbinga Street and Dickinson Street are proposed to be demolished as required to facilitate the new carpark access. Asphalt pavement to new carpark surfacing will be provided. Clear line marking and provision of pedestrian footpath access will maximise safety in terms of movement from carpark to the facility.

It is proposed to provide additional native shade tree, shrub, groundcover plantings and turfed area to the carpark boundary. Additional native shade tree and groundcover plantings to carpark islands is also proposed. Planting selection also considers visual impact to the proposed building facades and compliments relevant landscape themes to adjoining landscape with a unified layout. Also Native nodal tree plantings are provided adjacent to the access to emphasise the main entry to the carpark.

ii. Street frontages

Dickinson Street frontage: Native tree plantings are proposed along the turfed verge and with the street frontage with native grasses and groundcovers to provide an effective and attractive street address and emphasise the main entry to the facility and an inviting presence.

A broad concrete entry forecourt is proposed with at grade access from new carpark area with feature planting beds. Cycle rack facilities are provided to next to the main entry of the proposed building.

Mulbinga Street frontage: Native street tree planting is provided along the streetscape edge to reinforce street amenity and consolidate a streetscape character. This is also reinforced by a second line of native trees planted at the top of the bio-retention swale.

iii. Bio-retention basin and swale

It is proposed to provide a bio-retention basin with grassed swale to the South of the new carpark adjacent to Mulbinga Street for water sensitive urban design to capture stormwater runoff and provided with native grasses / sedge plantings of *Juncus usitatus*, *Carex appressa*, *Isolepis nodosa* etc. for water filtration. A turfed swale is also proposed to the east of the new facility building integrating with levels around existing trees.

iv. Adjoining open space

Provide selected additional native tree and shrub plantings through the area building on existing canopy. This includes to the boundaries adjoining residential properties to provide a better amenity and enhancement to surrounding residents and to the picnic area to provide shade canopies for outdoor recreation activities.

5.0 MATERIALS TREATMENTS

i. Pavement

Building frontage courtyard and pedestrian footpath (carpark area) pavement material is proposed to be insitu concrete pavement with expressed joining pattern.

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ii. Furniture

Cycle rack facilities are provided in the forecourt area. Eg Street Furniture Australia “Semi” bike stand – Stainless steel surface mounted

iii. Planting

Plant selection has been based on local native plants that achieve the desired landscape objectives. Feature and display tree plantings are also proposed for the entries to the site, and focal areas.

6.0 PROPOSED PLANTING LIST

Plant species proposed for the site are listed below:

Botanical Name	Common Name
Trees	
Brachychiton populneus x acerifolius 'Bella Donna'	Bella Donna
Brachychiton acerifolia x populneus 'Griffith Pink'	Griffith Pink
Backhousia myrtifolia	Grey Myrtle
Cupaniopsis anacardioides	Tuckeroo
Callistemon salignus	Willow Bottlebrush
Elaeocarpus reticulatus	Blueberry Ash
Eucalyptus leucoxylon 'Euky Dwarf TM '	Euky Dwarf
Livistona australis	Cabbage Tree Palm
Lophostemon confertus	Brisbane Box
Tristania laurina	Water Gum
Waterhousea floribunda 'Green Avenue'	Green Avenue

* (B) = shrub and groundcover species are proposed for use in Bioretention basin

Shrubs

Calytrix tetragona (B)	Common Fringe-myrtle
Dodonaea triquetra	Common Hop Bush
Doryanthus excelsa	Gymea Lily
Grevillea Sericea	Pink Spider Flower
Melaleuca erubescens (B)	Pink Honey Myrtle

Groundcovers & Native grasses

Brachycome multifida	Break O Day
Carex appressa (B)	Tall Sedge
Goodenia hederacea	Forest Goodenia
Hardenbergia violacea (B)	Purple Coral Pea
Isolepis nodosa (B)	Knobby Club-rush
Juncus usitatus (B)	Common Rush
Liriope muscari 'Evergreen Giant'	Giant Lily Turf
Lomandra longifolia (B)	Spiny-headed Mat-Rush
Lomandra longifolia "Tanika"	Tanika
Myoporum parvifolium	Carpet Spreading Myoporum
Poa labillardieri	Tussock Grass
Phormium tenax 'Flamin'	New Zealand Flax
Themeda australis (B)	Kangaroo Grass
Viola hederacea	Native Violet