

CLIFTON GARDENS RESERVE, MOSMAN

MANAGEMENT FRAMEWORK



Mosman Municipal Council

Pittendrigh Shinkfield Bruce Pty Limited

Planning & Landscape Architecture

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CLIFTON GARDENS RESERVE, MOSMAN

Management Framework Contents

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1.1 BACKGROUND

Clifton Gardens Reserve is a public resource in the care, control and management of Mosman Municipal Council.

The purpose of this Management Framework is to draw together the relevant statutory controls and guiding policy that apply to the land, and to provide a consistent approach and future direction to the management of the whole of Clifton Gardens Reserve.

Central to the Management Framework for Clifton Gardens Reserve are its core natural, historical and recreation values. These core values have been identified by the consultant team in consultation with Mosman Council and the community and have been used to derive a Statement of Significance for the Reserve and a series of principles for its future management. In turn, a Landscape Masterplan and Implementation Plan have been prepared to set the directions for the Reserve over the next five years.

This document has been prepared by the consultants according to the process set out below, with the assistance and professional input of Mosman Municipal Council's Project Management Team. Council's Environment and Planning Department led the Project Management Team, which was comprised of Council Officers, and a representative of the Department of Land and Water Conservation.

1.2 OBJECTIVES AND PROCESS

The objectives of this Management Framework are:

- to provide an overarching basis for the management of Clifton Garden's Reserve;
- to bring together the land management requirements for all of the parcels of land that make up the Reserve; and
- to set the direction for the future management of the Reserve.

This Management Framework has been prepared according to the following process:

- **Review** of existing Council records, plans, photographs, previous studies, relevant legislation, all relevant heritage data bases and historic reference material;
- **Site analysis** including land use and spatial distribution, pedestrian circulation and access, internal traffic assessment and roads/parking area assessment, views and visual quality, landform and slope, vegetation and heritage values and curtilage;
- **Facilitation** of community feedback about the future management of the site, via resident questionnaires, site user surveys and a community briefing and a public exhibition;
- **Interpretation and evaluation** of information gathered from the community, to shape the framework for future management;

- **Consolidation** of management strategies that may be implemented and funded within a specified time frame;
- **Review** of the Management Framework by the community and the Council, to ensure that it meets statutory, strategic, financial and user requirements.

2.1 LAND TO WHICH THIS MANAGEMENT FRAMEWORK APPLIES

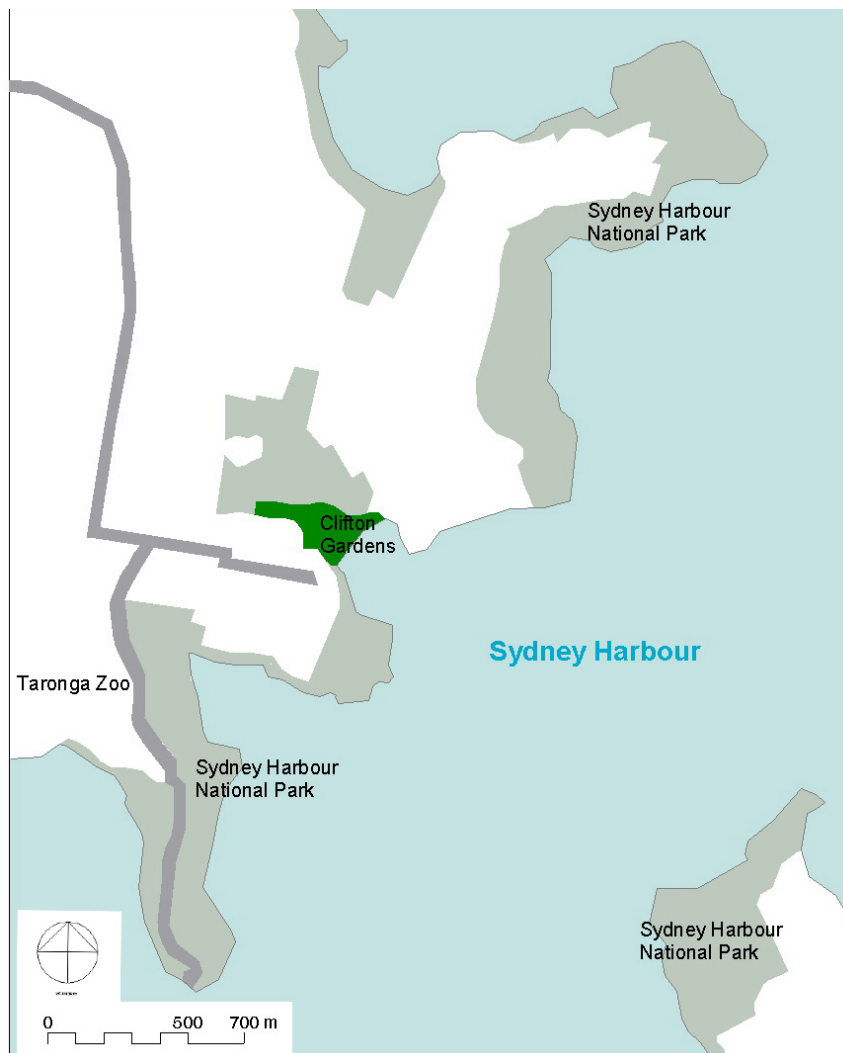
This Management Framework applies to land known as Clifton Gardens Reserve, Morella Road, Mosman (refer to Figure 1). The area of the Reserve is 5.158 hectares.

Clifton Gardens Reserve comprises 17 parcels of land, variously owned by Mosman Municipal Council, the Department of Land and Water Conservation and PlanningNSW (refer to Figure 2 and Table 1). The Reserve's bathing enclosure and wharf are owned by

NSW Waterways and leased to Mosman Council (NSW Waterways owns the bed of Sydney Harbour up to the mean high water mark) (T. Fitzgerald, *pers. comm.* 15.08.2002). Council has a lease agreement with NSW Waterways to occupy the land on which the bathing enclosure and wharf are situated (*ibid.*).

The only other current lease agreement that applies to the land is between Mosman Municipal Council and a mobile food vendor.

Figure 1: Regional Context of Clifton Gardens Reserve



2. MANAGEMENT CONTEXT

The land owned by PlanningNSW was placed in Council's care, control and management in May 1986, subject to the following conditions:

- that Council shall use the land as a reserve or public recreation area for passive recreation purposes; and
- that Council shall not erect or permit to be erected on the land any building or structure without the prior consent of the Minister.

The land owned by the Department of Land and Water Conservation was reserved for public recreation on 7 April 1933 (Reserve 63865). The Crown reserve trust that has been appointed to manage the reserve is the "Clifton Gardens (R63865) Reserve Trust." Mosman Municipal Council controls this Trust (J. Filocamo, *pers. comm.* 22.07.2002).

More recently, Council has accepted an offer by PlanningNSW to transfer its land to Mosman Municipal Council. This land transfer is in progress.

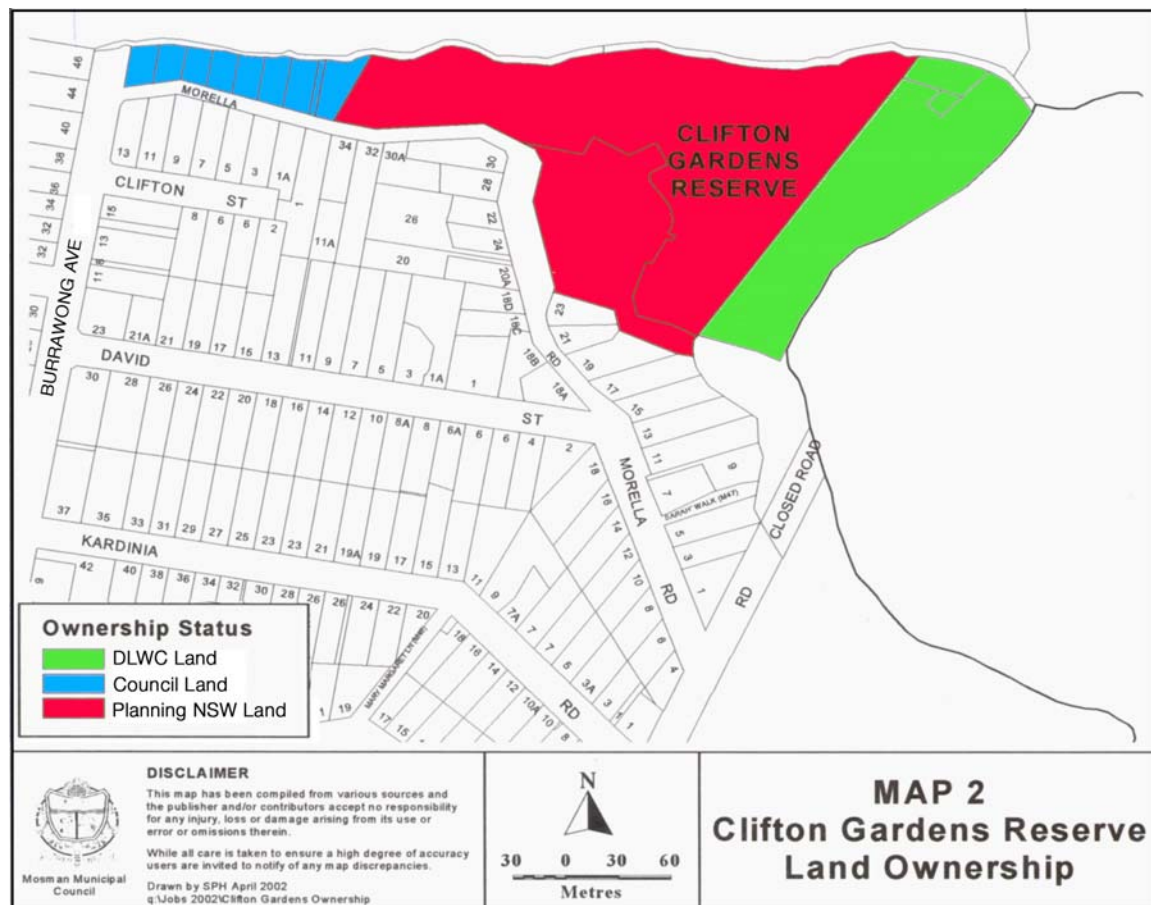


Figure 2: Land Ownership in Clifton Gardens Reserve

2. MANAGEMENT CONTEXT

The ownership status of the land is summarised as follows:

PlanningNSW	3.183 ha
Department of Land and Water Conservation	1.544 ha
Council	0.431 ha
TOTAL	5.158 ha

Most of the land in the Reserve is “community land” according to the definition in Chapter 6, Part 2 of the *Local Government Act 1993*. The land classified as community land does not include Crown land. The community land has been categorised as either Park or Natural Areas (Bushland) for the purposes of section 36 of the Act, as follows:

Park	2.680 ha
Not applicable (Crown land)	1.544 ha
Bushland	0.934 ha
TOTAL	5.158 ha

2. MANAGEMENT CONTEXT

Table 1

	Deposited Plan Nos.	Area (ha)	Community Land Category	Applicable Plans of Management (POM)	Ownership
1	Unmade Burrawong Ave	0.055 ha	Unmade Burrawong Ave	Not Applicable	Mosman Municipal Council
2	Lot 1 DP 456197	0.041 ha	Natural Area (Bushland)	POM Natural Areas (Bushland)	Mosman Municipal Council
3	Lot 2 DP 456197	0.039 ha	Natural Area (Bushland)	POM Natural Areas (Bushland)	Mosman Municipal Council
4	Lot 3 DP 456197	0.034 ha	Natural Area (Bushland)	POM Natural Areas (Bushland)	Mosman Municipal Council
5	Lot 4 DP 456197	0.039 ha	Natural Area (Bushland)	POM Natural Areas (Bushland)	Mosman Municipal Council
6	Lot 5 DP 456197	0.040 ha	Natural Area (Bushland)	POM Natural Areas (Bushland)	Mosman Municipal Council
7	Lot 6 DP 456197	0.047 ha	Natural Area (Bushland)	POM Natural Areas (Bushland)	Mosman Municipal Council
8	Lot 7 DP 660931	0.052 ha	Natural Area (Bushland)	POM Natural Areas (Bushland)	Mosman Municipal Council
9	Lot 1 DP 520539	0.014 ha	Natural Area (Bushland)	POM Natural Areas (Bushland)	Mosman Municipal Council
10	Lot A DP 390884	0.070 ha	Natural Area (Bushland)	POM Natural Areas (Bushland)	Mosman Municipal Council
11	Drainage Channel*	0.0865 ha	Park	POM Parks	PlanningNSW
11	Drainage Channel	0.065 ha	Crown Land Unreserved	Not Applicable	DLWC
12	Part Lot 1 DP 308403	0.503 ha	Natural Area (Bushland)	POM Natural Areas (Bushland)	PlanningNSW
12	Part Lot 1 DP 308403	1.865 ha	Park	POM Parks	PlanningNSW
13	Lot 1 DP 231596	0.728 ha	Park	POM Parks	PlanningNSW
14	Lot 800 DP 752067	0.092 ha	Crown Land (Public Recreation)	Not Applicable	DLWC, on behalf of the Crown
15	Lot 845 DP 752067	0.017 ha	Crown Land (Public Recreation)	Not Applicable	DLWC, on behalf of the Crown
16	Lot 846 DP 752067	1.285 ha	Crown Land (Public Recreation)	Not Applicable	DLWC, on behalf of the Crown
17	Reclaimed Land	0.0852 ha	Crown Land Unreserved	Not Applicable	DLWC

5.158 ha

*Creek Bed, to the middle thread of the creek

2.2 DESCRIPTION OF THE LAND AND SURROUNDING AREA

A site analysis of the existing conditions at Clifton Gardens Reserve was carried out as part of this Management Framework. The results of the site analysis and a physical description of the elements that form part of the Reserve appears below.

General Setting, Landuse

(refer to Drawing No. L01)

Clifton Gardens Reserve is situated on Morella Road, Mosman. The Reserve is nestled between two steep ridges, on the foreshore of Sydney Harbour.

The topography of the local area provides the Reserve with a sense of seclusion, which is enhanced by the canopy of native forest species on the ridges. The vegetation of the ridges provides a scenically significant green backdrop to Clifton Gardens Reserve. The history of the Reserve traces back to the days of the popular 'pleasure grounds', and is significant locally for its aesthetic and historic value, and regionally for its social value.



View of the water's edge from the foreshore path to Clifton Gardens Reserve

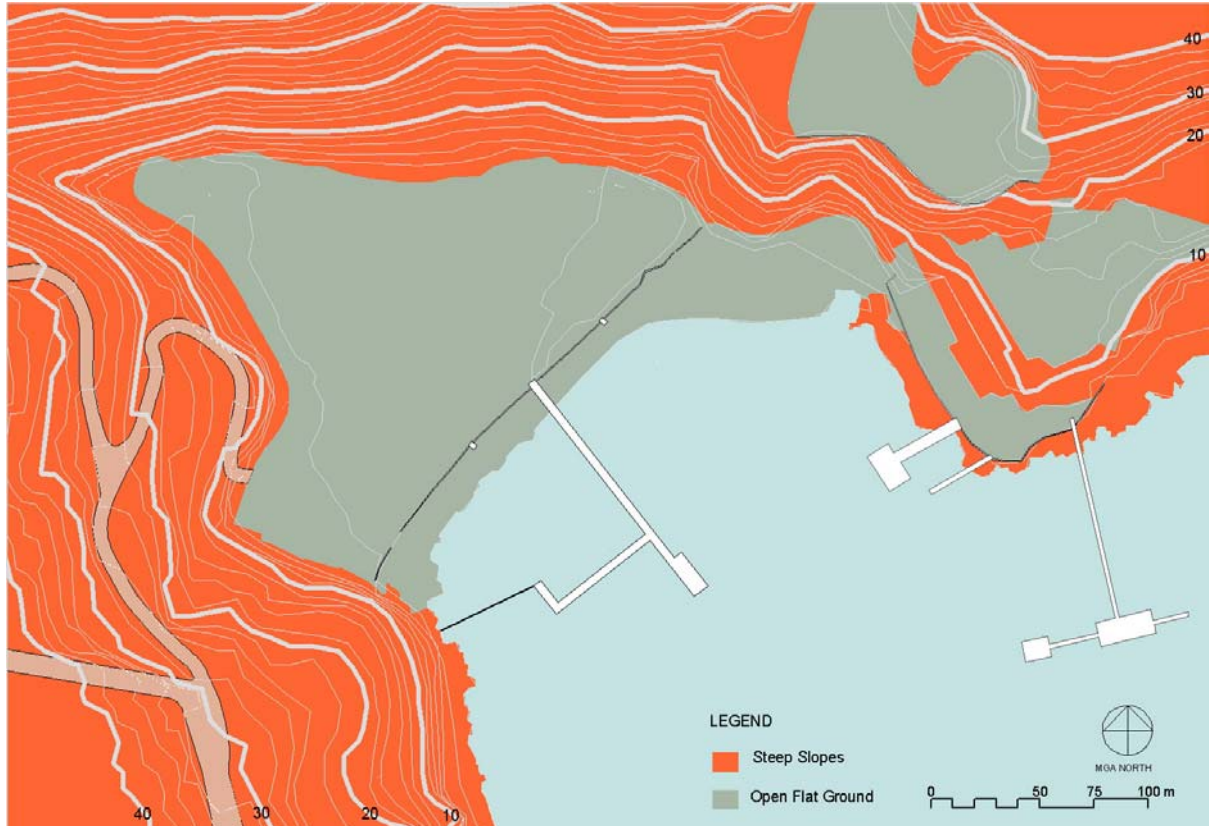


Bushland in the western sector of the Reserve



Harbour foreshore setting

2. MANAGEMENT CONTEXT



Slope Analysis for Clifton Gardens Reserve

Clifton Gardens Reserve is bounded by its foreshore frontage to Chowder Bay to the east. The edge of Burrawong Avenue forms the western boundary of the site. Sydney Harbour National Park abuts Clifton Gardens Reserve to the north, and the boundary between the National Park and the Reserve is defined by a creek. The southern boundary of the Reserve is defined in part by Morella Road. Residential allotments and the Sydney Harbour National Park define the remainder of the southern boundary.

Two distinct landscape characters exist in Clifton Gardens Reserve. The majority of the site is open, with expanses of lawn in fair to good condition interspersed with mature to

over mature exotic trees. This part of the site is distinctly coastal, and has a direct orientation towards the Harbour. The west and south west area of Clifton Gardens Reserve is steep and comprises native bushland. The bushland area is approximately 20% of the site, and is affected by weed infestation, poor drainage and die back. The bushland in the Clifton Gardens Reserve forms part of a larger remnant of native vegetation with the National Park to the north.

The Sydney Harbour National Park is managed by National Parks and Wildlife Service, according to an adopted Plan of Management (National Parks and Wildlife

Service 1998). Weed infestation in the bushland, dieback and the improvement of habitat opportunities for flora and fauna species are key cross-boundary issues that Council and the National Parks and Wildlife Service are continuing to work together on.

The key issues arising from General Setting, Landuse are:

- the level of the turf undulates somewhat, and would benefit from releveling and replacement
- the exotic trees in the Reserve, with the exception of the Canary Island Date Palms, require arboricultural assessment to determine whether they are past their safe useable life expectancy
- the bushland will require an on-going program of bush restoration and regeneration, to increase the proportion of native species to weed species
- an opportunity exists for Council and the National Parks and Wildlife Service to work together to support community bushland volunteer programs
- stormwater drainage through the bushland is a source of weed propagules and nutrients



Broad areas of lawn enhance the open character of the Reserve

2. MANAGEMENT CONTEXT

Circulation and Access

(refer to Drawing No. L02)

Most visitors to Clifton Gardens Reserve come by car, and park in the car park. Other modes of arrival are by foot, by public transport during the week, and by water craft.

Parking in the car park is regulated by a ticket system. The surface of the car park was paved in 1985 with the assistance of a grant under the 'Community Employment Programme' (The Council of the Municipality of Mosman 1985, p. 17). The car park provides 118 spaces including one disabled space. The car park is in good condition, with the exception of some edges to the adjoining landscaped areas, which could be improved to prevent damage to the planted areas.



The Clifton Gardens Wharf provides deep water access to the Reserve

There has been some impact on the bushland on the perimeter of the Reserve that adjoins Morella Road from cars encroaching from the road verge into the bushland.

Public transport to Clifton Gardens Reserve is provided by bus during the week, but this service does not extend to the weekends.

The buses are not able to access the car park of the Reserve because the road is narrow at the entry to the car park, and the diameter of the turning circle at the northern end of the car park is too small for buses to use.

Traditionally, public ferry access has been available to Clifton Gardens Reserve. At the turn of the century, Sydney Ferries Ltd operated Clifton Gardens Reserve as a 'pleasure ground', and provided inexpensive water transport to the site on the weekends. Water access to the Reserve is still provided to this day by a public wharf. Although public ferries no longer service Clifton Gardens Reserve, the wharf is used by private ferries and other craft for access to the site.



Ticketed car parking

2. MANAGEMENT CONTEXT

Pedestrian access to the site is principally provided by Sarah's Walk, and the regional foreshore walk between Bradleys Head and Middle Head. Clifton Gardens Reserve offers a picturesque setting along the regional foreshore walk. A significant opportunity exists to improve the current pedestrian access within the Reserve to these two pedestrian destinations.

The key issues arising from Circulation and Access are:

- improved car park delineation, to prevent cars from damaging the adjoining planted areas
- improved connections within the Reserve between the regional foreshore walking trail
- improved protection of the bushland on Morella Road from cars
- review of the provision of public transport to the Reserve



Steps to the Reserve from Morella Road



View down the entry road to the Reserve, off Morella Road

Views and Visual Quality

(refer to Drawing No. L03)

The visual quality of Clifton Gardens Reserve is established by its bushland backdrop, its seclusion as a consequence of topography, the openness of the site and its generous views across the harbour. Just as Clifton Gardens Reserve is influenced by these elements, the future use of the Reserve has the potential to impact on the character and qualities of the adjoining lands. The views to Clifton Gardens Reserve from the harbour are also important. As no recognised walking tracks occur in the sector of the Sydney Harbour National Park that adjoins the Reserve, views from the National Park to and across Clifton Gardens Reserve are not of particular significance.

The existing trees, and the topography of the site screen views from the residential allotments to the open section of the site. Views from the residential area to the harbour are significant, and should not be compromised by new tree plantings in the Reserve.

Clifton Gardens Reserve and the Chowder Bay Barracks, have important views to each



View from Chowder Bay Barracks towards Clifton Gardens Reserve

other. The Sydney Harbour Federation Trust (the 'Harbour Trust') now manages the Chowder Bay Barracks, and are in the process of preparing plans for the future of their lands.

Within the Reserve, views across the open expanse of turf, interspersed with trees, are important. An opportunity exists to provide visitors with improved views from the current location of the bus stop across the Reserve to the north.



Open quality of views within the Reserve

2. MANAGEMENT CONTEXT

Key issues arising with regard to Views and Visual Quality are:

- preservation of the existing scenic quality of the Reserve, and the significant views to and from the site

Existing Recreational Elements

(refer to Drawing No. L04)

The main facilities in Clifton Gardens Reserve are a bathing enclosure and wharf, an amenities block situated towards the northern boundary of the site, a playground near the amenities block, a hard court with a basketball hoop, and picnic tables towards the centre of the Reserve.

The amenities block, playground and hard court require improvement. The bathing enclosure is in good condition, but requires the routine removal of litter and other trapped debris. There is demand for additional shaded picnic facilities. Other facilities in Clifton Gardens Reserve include benches (concrete and timber), water taps, litter bins, and combined doggy bag dispenser and disposal units. These remaining facilities are functional, but lack continuity of presentation.

The Reserve functions as a 'dogs off leash area' on weekdays. Some visitors to the Reserve cited the ability to exercise their dogs as an important value. Conversely, no particular opposition to the function of the Reserve as a dog off leash area was raised in the community consultation.

A sandstone sea wall serves to provide a clear edge between the turf of the Reserve and the sandy foreshore. The sea wall is the subject of an assets maintenance program, which includes the repair and replacement of existing elements, where necessary.



Bathing enclosure and wharf



The sandstone seawall at the beach edge



Existing play equipment within the Reserve is well used but is not distinctive

2. MANAGEMENT CONTEXT

Sydney Water provided the funding for the paved pathway between the car park and Sewer Pumping Station No. 54, to allow the necessary maintenance access.

This pathway also provides access to the picnic area and amenities block. This pathway is in good condition but there is an opportunity to improve its location.

The key issues arising from Existing Recreation Elements are:

- replacement of older facilities, such as the amenities block and play equipment
- provision of a greater quantity of shaded picnic facilities
- the lack of consistency in theme in the built elements of the Reserve
- improvement of views across the Reserve from the current bus stop location
- improvement of the existing seawall and adjacent pathway
- provision of an appropriate activities zone



The existing amenities block



Picnic facilities in the central part of the Reserve

Heritage Values and Elements of Cultural Interest

(refer to Drawing No. L05)

Clifton Gardens Reserve has a rich history of recreation use commencing in the mid 1800's, and there is evidence of Aboriginal occupation prior to European settlement.

Extensive recreation facilities were built in Clifton Gardens Reserve commencing circa 1863, and the Reserve was the site of the Clifton Hotel, which was built in 1871 and was demolished in 1967. Limited evidence remains of the former buildings and weatherboard pavilions that occupied much of the site. The Reserve is significant locally for its aesthetic and historic value.

Before the motor car era, pedestrian walking paths provided residents with access to popular destinations in the locality. The steps to Clifton Gardens Reserve on Morella Road are evidence of earlier lines of movement, and are significant locally for their aesthetic and historic value.

The wharf and bathing enclosure in the Reserve are locally significant for their aesthetic and social value.



Historic steps to Clifton Gardens Reserve, indicating earlier pedestrian movement patterns

Sewage Pumping Station No. 54, a Sydney Water asset, is located adjacent to Clifton Gardens Reserve in the vicinity of the amenities block. The pumping station is considered to be an 'industrial relic' and is of historic significance locally. The pumping station is positioned adjacent to the Reserve in an unobtrusive location, and offers a point of architectural interest.

The key issues arising from Heritage Values and Elements of Cultural Interest are:

- the opportunity to interpret the cultural history of the site
- conservation of sites of local significance, and known and potential Aboriginal relics in the Reserve

2.3 SITE USAGE AND CONTEXT

Clifton Gardens Reserve is one of the oldest pleasure grounds in continuous operation on Sydney Harbour. Today, the Reserve provides a scenic, peaceful setting for informal recreation and social activities.

Visitation to Clifton Gardens Reserve is highest on weekends, and the Reserve draws people from all over metropolitan Sydney and beyond. During the week, local residents enjoy the serenity of Clifton

Gardens Reserve, and pursue a range of activities, such as swimming in the bathing enclosure or walking their dogs.

Clifton Gardens Reserve forms part of a regionally significant walk from Bradleys Head to Middle Head, through the Sydney Harbour National Park and the former military land at Georges Heights.

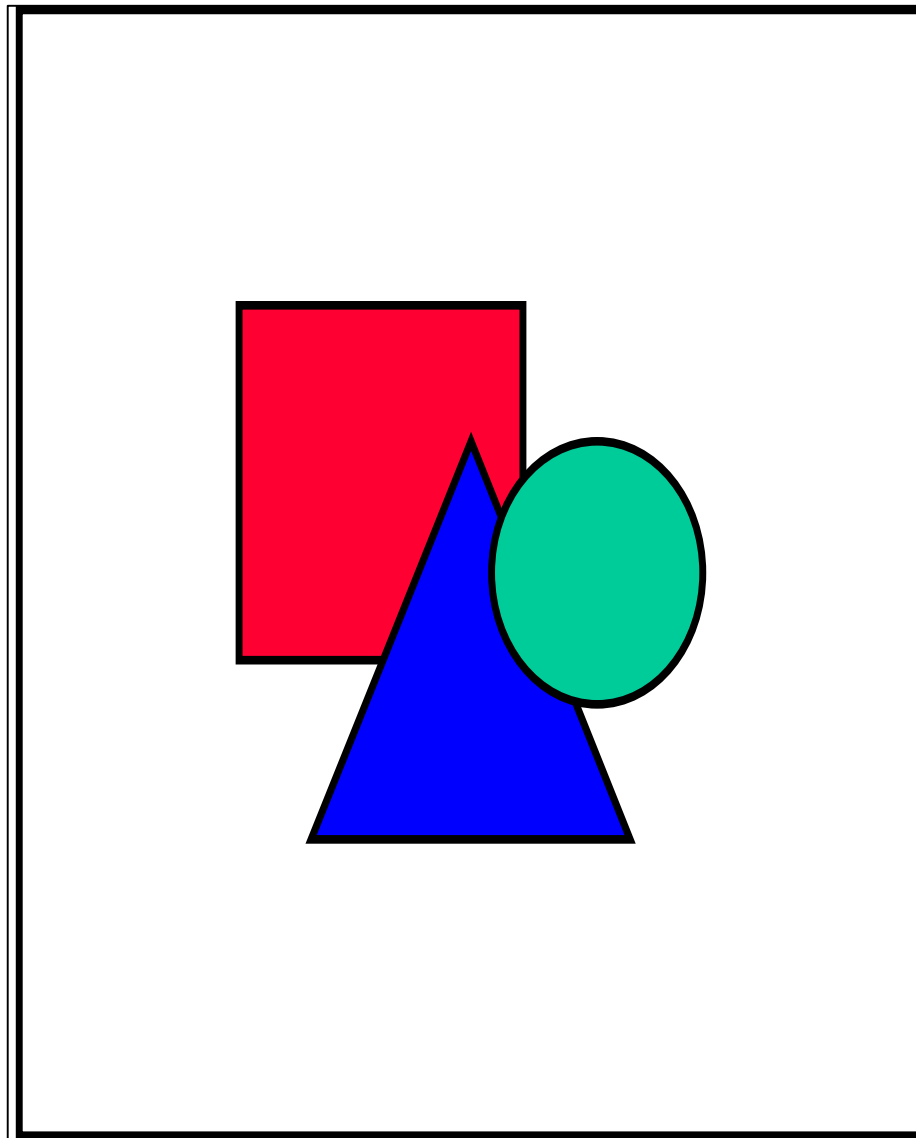


Figure 3: Clifton Gardens Reserve Zoning Extract

2.4 STATUTORY PLANNING BACKGROUND

Council is required to comply with all relevant legislation that applies to the use and management of Clifton Gardens Reserve.

This means that this Management Framework is required to be consistent with the planning and assessment provisions of the *Environmental Planning and Assessment Act 1979* and the relevant sections of the following NSW Acts:

- *Threatened Species Conservation Act 1995*
- *Fisheries Management Act 1994*
- *Rivers and Foreshores Improvement Act 1948*
- *Local Government Act 1993*

Mosman LEP 1998

The Mosman Local Environmental Plan 1998 ("the Mosman LEP") is the umbrella planning instrument for the Mosman local government area. The Mosman LEP 1998 (as amended) indicates the permissibility of development, requirements for development consent and development standards for each zone.

Within Clifton Gardens Reserve, the open section has been zoned 6 (a) Public Recreation and the bushland to the west of the Reserve has been zoned 7 (a) Environmental Protection (Bushland) (refer to Figure 3). The use of Clifton Gardens Reserve is required to meet the objectives of the zones.

The objectives of the 6 (a) Public Recreation zone under the Mosman LEP are to:

- *"Provide a viable open space system which supports a diversity of leisure and educational opportunities.*
- *Maintain and provide open space links to a diversity of public and private*

spaces and facilities as an integral part of the open space system.

- *Ensure that open space is managed on a sustainable basis including the maintenance of ecological processes, genetic diversity and geo-diversity.*
- *Ensure conservation and proper management of cultural values within the open space system.*
- *Ensure that open space contributes to the aesthetic quality, experience and impact of the community".*

The objectives of the 7 (a) Environment Protection (Bushland) zone under the Mosman LEP are:

- *Retain and manage bushland areas for their scenic and environmental values.*
- *Conserve native plant and animal species through the maintenance of suitable habitats.*
- *Contribute to the scenic quality of Mosman and the harbour.*

The Reserve is affected acid sulfate soils, as identified on the Foreshore Protection Map to the Mosman LEP 1998. As a result, soil testing may be carried out prior to any excavation works below ground level, to determine whether acid sulfate soils are present. If the soil testing determines that acid sulfate soils are present, an Acid Sulfate Soils Management Plan is required to be prepared, in accordance with the 'Acid Sulfate Soils Assessment Guidelines'.

The Reserve is also identified as land prone to bushfire. Future development applications with regard to works on the Reserve would be required to be assessed against relevant legislation and policy including the *Rural Fires Act 1997* and *Rural Fires and Environmental Assessment Legislation Amendment Act*

2002. Development of the Reserve is to comply with the NSW Rural Fire Service document entitled 'Planning for Bushfire Protection – A Guide for Councils, Planners, Fire Authorities, Developers and Home Owners 2001', in accordance with the Acts.

Crown Lands Act 1989

The foreshore of the Clifton Gardens Reserve is Crown land and is subject to the *Crown Lands Act 1989*. The Management of the Reserve is required to be consistent with the principles of Crown land management provided by section 11 of the *Crown Lands Act 1989*. As such, the foreshore of Clifton Gardens Reserve must provide some benefit to the public. Additionally, its uses, activities, developments and agreements must be broadly defined by the purposes of the reservation. There are 26 purposes for reserving Crown land under the *Crown Lands Act 1989*. It is permissible to reserve Crown land for one or a number of purposes within the list. The foreshore of Clifton Gardens Reserve has been reserved for Public Recreation.

The public purposes broadly define the uses and activities permissible on Crown lands. The zoning of the land under any Local Environmental Plan further defines permissible uses. Specific land uses can also be assigned under a Plan of Management prepared under section 112 of the *Crown Lands Act 1989*, contractual agreement (leases or licences), or a combination of both.

In addition, the use of Crown land is influenced by case law judgements. With respect to land reserved for Public Recreation, the case law directs that any use

must be **supportive** or **ancillary** to the public purposes.

Section 11 of the *Crown Lands Act 1989* includes a series of statutory principles under which Crown Lands are required to be managed. These are:

- a) *that environmental protection principles be observed in relation to the management and administration of Crown land,*
- b) *that the natural resources of Crown land (including water, soil, flora, fauna and scenic quality) be conserved wherever possible,*
- c) *that public use and enjoyment of appropriate Crown land be encouraged,*
- d) *that, where appropriate, multiple use of Crown land be encouraged,*
- e) *that, where appropriate, Crown land should be used and managed in such a way that both the land and its resources are sustained in perpetuity, and*
- f) *that Crown land be occupied, used, sold, leased, licensed or otherwise dealt with in the best interests of the State consistent with the above principles.*

At the time of preparation of this document, no leases or licences approved by the Minister for Land and Water Conservation applied to the foreshore of Clifton Gardens Reserve.

Local Government Act 1993

Most of Clifton Gardens Reserve is classified as “community land” under the *Local Government Act 1993* (‘the Act’).

Specific requirements of the *Local Government Act 1993* for community land are that:

- It must be kept for the use of the general community, and must not be sold.
- Its use and management is regulated by a Plan of Management. Until a Plan of Management is adopted, the nature and use of the land must not change.

The *Local Government (General) Regulation 1999* introduced a number of controls that affect the use and classification of community land. The use and development of community land has been further regulated, and a number of core objectives that relate to the different categories of community land now apply. Wider community consultation by Council is also required in the decision making process.

Generic Plans of Management

The legislative requirements of the *Local Government Act 1993* and the *Crown Lands Act 1989* with regard to preparation of a Plan of Management for Clifton Gardens Reserve are satisfied by the two generic Plans of Management (Parks and Natural Areas) that apply to the Reserve. A specific Plan of Management is thus not required for the land. This Management Framework has been prepared to consolidate the management requirements of the entire Reserve. It is intended to form a supplementary document to the two relevant generic Plans of Management.

With the exception of the foreshore, all of the land in Clifton Gardens Reserve is subject to generic Plans of Management adopted in October 2001 by Mosman Municipal Council, to satisfy the provisions of the *Local Government Act 1993*.

The ‘Plan of Management: Parks’ applies to the land zoned 6 (a) Public Recreation, and the ‘Plan of Management Natural Areas (Bushland)’ applies to the land zoned 7 (a) Environment Protection (Bushland). The objectives, performance targets, means of achievement, and performance monitoring established by these Plans of Management apply to the relevant parcels of land in the Reserve.

The specific actions for Clifton Gardens Reserve in the ‘Plan of Management: Parks’ are:

- “Consult with users and provide Council staff to design and let contracts to establish and/or upgrade play equipment in Clifton Gardens Reserve;
- Provide staff to investigate the status of various Council land holdings at Clifton Gardens Reserve ... with a view to consolidating them by December 2003; and
- Provide staff to prepare landscape masterplans by December 2003.”

The Management Framework meets all of these objectives. Section 8 of this document provides a landscape masterplan, and identifies suitable locations for play equipment in the Reserve. The consolidation of the land holdings is in progress, and is discussed in Section 2.1.

There are no specific actions in the ‘Plan of Management Natural Areas (Bushland)’ that

apply to Clifton Gardens Reserve. The Management Framework satisfies the following generic objectives of the Plan:

- *"Maintain the land ... in its natural state and setting;*
- *protect existing landforms, such as natural drainage lines, watercourses and foreshores;*
- *restore degraded bushland; and*
- *provide for community use of and access to the land in such a manner as will minimise and mitigate any disturbance caused by human intrusion."*

NSW State Rivers and Estuaries Policy (1992)

The 'NSW State Rivers and Estuaries Policy', was adopted by the Government in 1992. The policy provides a framework for the sustainable use, conservation and management of the State's rivers and estuaries.

The objective of the 'State Rivers and Estuaries Policy' is to manage the rivers and estuaries of NSW to:

- *"slow, halt or reverse the overall rate of degradation in these systems;*
- *ensure the long-term sustainability of their essential biophysical functions; and*
- *maintain the beneficial use of these resources (DLWC 1997)."*

These objectives are supported by a series of principles, which seek to:

- address the rehabilitation of degraded ecosystems;
- protect of significant environments; and
- encourage sustainable uses and the adoption of sustainable management practices by government and the wider community

To achieve these objectives, detailed water management policies covering resource use activities are being developed.

Draft Sydney Harbour Catchment Management Blueprint (2002)

The Department of Land and Water Conservation is currently preparing plans to guide the long term management of natural resources in New South Wales. Twenty one integrated catchment management plans or "catchment blueprints" are being drafted across the state.

The purpose of the Sydney Harbour Catchment Blueprint (Draft) is to provide a succinct and clear direction for activity and investment in natural resource management in the Sydney Harbour Catchment area over the next ten years.

The Blueprint was prepared by the Sydney Harbour Catchment Management Board, and the Board has adopted the following vision for the catchment:

"To provide for and enhance the ecologically sustainable cooperative management of the natural and cultural resources of the Sydney Harbour Catchment Management Board area (DLWC 2002)."

Sydney Regional Environmental Plan No. 56 - Sydney Harbour Foreshores and Tributaries (SEPP No. 56)

SEPP No. 56 applies to Clifton Gardens Reserve in so far as the Reserve contains harbour foreshore. This Management Framework is required to be consistent with the policy's Guiding Principles. The requirements of Parts 3, 4 and 5 for sites of State or strategic significance do not apply to Clifton Gardens Reserve, as the Reserve does not form part of an area listed in Schedule One or Two of the policy. However, Clifton Gardens Reserve is adjacent to the area defined as 'Middle Head' by the policy, which is a State significant site.

The Guiding Principles provided by the policy are:

- "(a) increasing public access to, and use of, land on the foreshore;*
- (b) the fundamental importance of the need for land made available for public access, or use, on the foreshore to be in public ownership wherever possible, particularly land that is within the foreshore area as defined in the Sydney Harbour Foreshore Authority Act 1998;*
- (b1) if public ownership of foreshore land is not possible, the use of appropriate tenure mechanisms to safeguard public access to, and public use of, that land and to ensure the rights of public authorities to determine the design of, use of, and amenities on, the land over time;*
- (c) the retention and enhancement of public access links between existing foreshore open space areas;*
- (d) the conservation of significant bushland and other natural features along the*

- foreshore, where consistent with conservation principles, and their availability for public use and enjoyment;*
- (e) the suitability of the site or part of the site for significant open space that will enhance the open space network existing along the harbour foreshores;*
- (f) the protection of significant natural and cultural heritage values, including marine ecological values;*
- (g) the protection and improvement of unique visual qualities of the Harbour, its foreshores and tributaries;*
- (h) the relationship between use of the water and foreshore activities;*
- (i) the conservation of items of heritage significance identified in an environmental planning instrument or subject to an order under the Heritage Act 1977;*
- (j) the scale and character of any development, derived from an analysis of the context of the site;*
- (k) the character of any development as viewed from the water and its compatibility and sympathy with the character of the surrounding foreshores;*
- (l) the application of ecologically sustainable development principles;*
- (m) the maintenance of a working-harbour character and functions by the retention of key waterfront industrial sites or, at a minimum, the integration of facilities for maritime activities into development and, wherever possible, the provision of public access through these sites to the foreshore;*
- (n) the feasibility and compatibility of uses and, if necessary, appropriate measures to ensure coexistence of different land uses; and*

(o) *increasing opportunities for water-based public transport."*

**Sydney Environmental Plan No. 19 -
Bushland in Urban Areas
(SEPP No. 19)**

SEPP No. 19 aims to protect and preserve bushland within certain urban areas. The policy is designed to protect bushland in public open space zones and reservations, and to ensure that bush preservation is given a high priority when local environmental plans for urban development are prepared. With respect to bushland within the boundaries of Clifton Gardens Reserve, it is considered that the objectives of the 7 (a) Environment Protection (Bushland) zone satisfy the aims of SEPP No. 19.

**Regional Environmental Plan No. 23 -
Sydney and Middle Harbours
(REP No. 23)**

REP No. 23 coordinates the planning, development and management of the harbour and its foreshores. The plan zones waterways in Sydney to guide their usage and to separate conflicting uses. Under REP No. 23, certain areas of water up to the shoreline are zoned as 'Environment Protection (W3)'. This zone applies to the foreshore of Mosman, from Taronga Zoo north to Middle Head, including the foreshore of Clifton Gardens Reserve.

Areas zoned W3 have significant natural or cultural conservation value and development that is likely to have an adverse impact on these values is prohibited. Within W3, a number of uses are prohibited, including:

- *"boat lifts, boat sheds and boating industry facilities;*
- *charter and tourism boating facilities, commercial port facilities, houseboats, ;*

water based restaurants and entertainment facilities; and

- *marinas, reclamation and swimming pools".*

Section 18 of REP No. 23 requires Council to consider the following, amongst other things, when determining a development application:

- the appearance of the development from the waterway and foreshores;
- whether the development will have an adverse impact on wetlands, flora or fauna habitats; and
- the effect on any conservation area or on any building, work, relic, tree or place that is a heritage item of significance in the locality and the effect on its site and in its vicinity.

Section 13a(5) of REP No. 23 requires that a copy of a plan of management is to be referred to the Foreshores and Waterways Planning and Development Advisory Committee constituted under REP No. 23 before it is adopted by Council. Any representations made by the Committee in respect of the plan during the public exhibition period are to be considered by Council.

**Sydney Harbour and Parramatta River
Development Control Plan
(the 'DCP')**

The DCP was prepared to provide performance-based criteria and guidelines to help achieve the objectives of REP No. 23.

The DCP categorises the area that it applies to into landscape characters and ecological communities.

Clifton Gardens Reserve has been classified as 'Landscape Character Type 2' by the DCP, and the specific guidelines in the DCP

for this landscape type apply to the Reserve. In addition, the DCP provides design guidelines, which apply to all land and water based developments within the scope of the DCP.

Draft Sydney Harbour Integrated Land and Water Access Plan

The draft Plan, recently released by Planning NSW, proposed a catchment-wide network of accessways to link metropolitan parkways and urban waterfronts, and connect to water access points on Sydney Harbour.

Measures proposed specifically to the locality of Clifton Gardens Reserve include:

- Improvements to the Chowder Bay Wharf;
- An on/off road cycle path across the Reserve and along the foreshore to link to the foreshore walkway at the northern end of the Reserve.

2.5 OTHER RELEVANT POLICIES AND CONTROLS

Rosherville Reserve, Clifton Gardens and Sirius Cove Development Control Plan Guidelines (1993)

Clifton Gardens Reserve falls within the Clifton Gardens precinct described by the Development Control Plan Guidelines. The purpose of the Development Control Plan Guidelines was to review, analyse and identify the preferred development control procedures to retain the environmental character of the Rosherville Reserve, Clifton Gardens and Sirius Cove precincts. The Guidelines identify planning objectives for the three precincts. Most of the objectives apply to the development of residential allotments, and the following apply to public land:

- *“To maintain a general dominance of landscape over buildings, particularly on harbour foreshores.*
- *To retain existing significant trees and natural features including sandstone outcrops, stands of Angophora, foreshore vegetation and introduced elements.*
- *To conserve listed heritage items and streetscape elements which contribute to the environmental and visual character of the Precincts.*
- *To retain significant views to the water and foreshore reserves from public areas and streets”.*

The specific guidelines for the Clifton Gardens Precinct provided by the Development Control Plan Guidelines are to:

- Develop a management plan for the Reserve, which reinforces the existing themes but strengthens the design theme and promotes increased enjoyment and utilisation of the Reserve.
- Conserve the more formal character, but renew historic plantings (1993, p. 39).

Mosman Open Space Strategy (1994)

The Mosman Open Space Strategy includes management strategies for all land classified as Community Land under the *Local Government Act 1993*. Table 24 of the Strategy identifies specific actions to improve the open space system in Mosman. The actions that pertain to Clifton Gardens Reserve are:

58. Develop a trail link between Clifton Gardens and the Defence (Army) site.
59. Consolidate all Council owned land connecting to Clifton Gardens Reserve to create one open space unit for management purposes.

60. Investigate a new link connecting Clifton Gardens to Middle Head Road.
61. Investigate new trail link between Rawson Park and Burrawong Avenue.
62. Seek the involvement and support of adjoining land owners in achieving complementary management outcomes for Clifton Gardens, eg. planting of tree species, weed control, drainage and access management.

Action Nos. 58 and 62 have been incorporated into the Implementation Plan of the Management Framework (see Management Action No. 5, and Landscape Masterplan Action Nos. 1 and 7). Action No. 59 is in progress, and is discussed in Section 2.1 of this document. Action Nos. 60 and 61 require works on lands beyond the Reserve. The Management Framework does not preclude their completion, and encourages the connection between the Reserve and adjoining areas.

Mosman Municipal Council Recreation Strategy Action Plans (2001)

Recreation Action Strategy Plans were prepared by Mosman Municipal Council in July 2001 to ensure implementation of the seven short-term priorities identified by the Mosman Recreation Needs Assessment Study (2000). The action plans relevant to the management of Clifton Gardens Reserve are:

- Playgrounds
- Informal Recreation Areas
- Disability Access

The specific tasks that apply to Clifton Gardens Reserve appear in Section 5.2 of this document.

Mosman Municipal Council Special Event Management Policy Statement and Operations Manual (updated February 2002a)

Mosman Municipal Council's Special Event Management Policy applies to Clifton Gardens Reserve. A 'Special Event' is defined by the Policy as:

"An organised gathering on public space within the Mosman Local Government area, or in an area outside Mosman but directly affecting the Mosman LGA, and involving at least 250 people (2002a, p. 3)."

The Policy set's out Council's key considerations in determining the merit and management response to special events, and identifies the conditions applying to special events in the Municipality.

Mosman Municipal Council Tree Policy (March 2002b)

The Mosman Municipal Council Tree Policy proposes eight 'attainable objectives' and associated actions to achieve Council's vision for trees in Mosman. The following objectives particularly apply to Clifton Gardens Reserve:

3. *"Mosman's renowned leafy foreshores and streetscapes will be maintained and extended as opportunities permit.*
4. *Exotic trees are an important element of Mosman's leafy character and will be maintained and strengthened where appropriate. A diverse range of native and exotic tree species will be maintained across Mosman.*
6. *Mosman's stock of mature trees will be maintained with the implementation of a strategic replacement program".*

NSW National Parks and Wildlife Service

Clifton Gardens Reserve borders the Sydney Harbour National Park to the north, and has a narrow common boundary with the National Park to the south. The NSW National Parks and Wildlife Service manages the Sydney Harbour National Park in accordance with their adopted Plan of Management for the National Park (NSW National Parks and Wildlife Service 1998) and the Draft Sydney Harbour and Botany Bay (La Perouse Precinct) Fire Management Plan (NSW National Parks and Wildlife Service 2002).

The general objectives for the management of national parks in NSW are:

- protection and preservation of scenic and natural features
- conservation of wildlife
- maintenance of natural processes as far as possible
- preservation of appropriate recreation opportunities to foster enjoyment and appreciation of national parks
- encouragement of scientific and educational inquiry into environmental features and processes, prehistoric and historic features and park use patterns (NSW National Parks and Wildlife Service 1998, p. 8)

The following specific objectives also apply to the management of Sydney Harbour National Park:

- *“management of the park as part of a system of lands which protect the natural and cultural heritage and scenic amenity of Sydney Harbour*
- *restoration and interpretation of the significant natural values of the park*
- *conservation of historic structures and their settings*

- *interpretation of a range of historic places which illustrate important aspects of Australia's history*
- *provision of outdoor recreation opportunities which are compatible with the protection of the natural and cultural values of the park and complement those available elsewhere in the centre of Sydney*
- *promotion of the park as an important, readily accessible recreational and educational resource for metropolitan Sydney (ibid.)”.*

The management of Clifton Garden's Reserve should not threaten or diminish the opportunity for the NSW National Parks and Wildlife Service to achieve the objectives for the Sydney Harbour National Park. Cooperative management between Council and the Service would eliminate the incidence of cross boundary issues.

2.6 PERMISSIBLE USES AND CONSENT REQUIREMENTS

The following tables indicate the permissibility and consent requirements for the development of land within Clifton Gardens Reserve under the Mosman LEP 1998.

6 (a) Public Recreation Zone

2 Development allowed without development consent	<p>Development for the purposes of park furniture (including seats, bins, picnic tables and similar items) and lighting (other than lighting to be used in connection with active recreation, such as sporting activities, or active recreation activities)</p> <p>Exempt development</p> <p>Works for the purpose of gardening, landscaping and bushfire hazard reduction.</p>
3 Development allowed with development consent	<p>Demolition</p> <p>Development for the purpose of:</p> <ul style="list-style-type: none"> Beach and foreshore protection works Buildings associated with landscaping Gardening or bushfire hazard reduction and vehicular access to those buildings Carparking ancillary to another permissible use Child care centres Drainage Kiosks Recreation areas Recreation facilities Recreation, sporting and cultural activities Roads Utility installations <p>Subdivision</p>
4 Development which is prohibited	<p>Development on reserved or dedicated Crown land that does not comply with the public purpose notified under the <i>Crown Lands Act 1989</i> or does not comply with acceptable uses identified in an adopted Plan of Management for the Reserve under the <i>Crown Lands Act 1989</i>.</p> <p>Other development not included in item 2 or 3</p>

2. MANAGEMENT CONTEXT

7 (a) Environment Protection (Bushland) Zone

2 Development allowed without development consent	<p>Development for the purpose of bushland regeneration or bushfire hazard reduction.</p> <p>Drainage works that are:</p> <ul style="list-style-type: none"> (a) Carried out by or on behalf of the Council and involve the maintenance of existing drainage lines, or (b) Carried out by or on behalf of the Council and involve the installation of pollution control devices on so much of the land within the zone as is coloured brown and diagonally hatched on the map marked "Mosman Local Environmental Plan 1998 (Amendment No. 8)"
3 Development allowed with development consent	<p>Drainage works (other than drainage works referred to in item 2)</p> <p>Works to enable pedestrian access to facilitate recreation use of the bushland</p>
4 Development which is prohibited	<p>Development not included in item 2 or 3</p>

3.1 CONSULTATIONS WITH THE COMMUNITY

The local residents and users of the Reserve were consulted during the preparation of this document using two survey methods. The purpose of the consultation was to provide an opportunity for community participation in the future management of the Reserve, by identifying community values, issues and aspirations for the site. The results of the surveys combined with the identified natural and cultural values of the site (refer to section 4 of this document) to provide the basis for a series of principles to guide the future management of the Reserve.

The first survey method sought to consult the residents in the vicinity of the Reserve via the distribution of questionnaires. The questionnaires were delivered by hand to the residents' mailboxes, and invited resident feedback on the future management of the Reserve via a proforma. The distribution of the questionnaires was advertised in the Mosman Daily on Thursday 11 July 2002 and 36 responses to the 350 questionnaires distributed were received (refer to Appendix 2).

The second survey method was a site User Survey, which was carried out on Sunday 14 July 2002. Responses from 31 site users were obtained via this method (refer to Appendix 1).

4.1 CULTURAL HERITAGE

Clifton Gardens Reserve and its environs have a rich history, which may not be well known to some members of the community. Numerous opportunities exist within the Reserve to reflect it's cultural history, and more broadly, the history of Sydney Harbour's late 19th and early 20th century Pleasure Gardens.

The history of Clifton Garden's Reserve is described below in terms of three central themes:

- Human Occupation and Settlement
- Pleasure Grounds
- Maritime Military Establishment

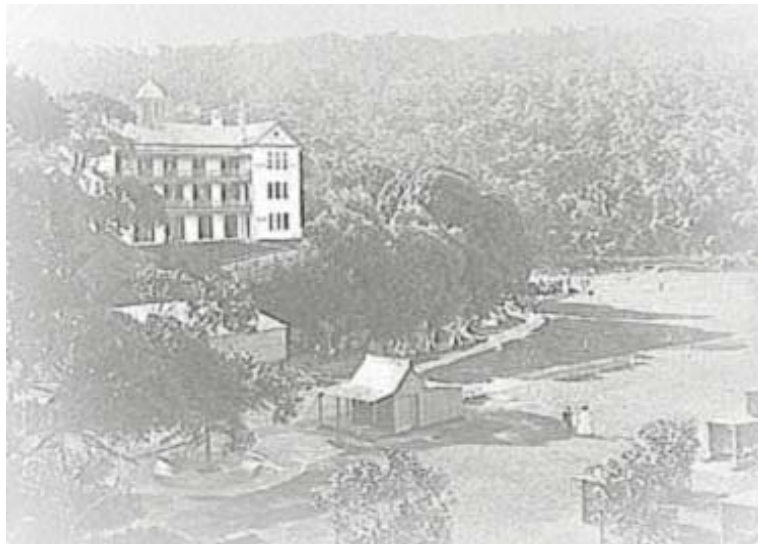
Human Occupation and Settlement

The Aboriginal inhabitants of the Mosman area were part of the Guringai language group and belonged to a local group known as the Cammeragal. Numerous sites and artefacts of Aboriginal occupation remain in Mosman (Mosman Municipal Council 2000, p. 14). Although limited physical evidence remains of Aboriginal people at Clifton Gardens Reserve, historical records indicate that Aboriginal people hunted and camped here. Shortly after arrival in Port Jackson, Lieutenant Bradley, assistant to Captain Hunter (Second-in-charge of the First Fleet, and later Governor of the Colony), recorded a meeting with Aborigines on 28 January 1788 in the bay known to its first inhabitants as 'Koree', and later as Chowder Bay (Souter 1994, p. 6).

Little was recorded of the Mosman area until 1829, when the Government Gazette stated: "*A fishery on a small scale has been established at Chowder Bay* (Sturrock 1982, p. 13)". In the mid 1800's, Mosman's permanent European residents probably only numbered several dozen, not counting the military.

Like a great portion of Mosman, Clifton Gardens was originally part of a large landholding purchased in the 1830's by James King, a Scotsman (Godden Mackay Logan 1999, p. 5). Another early settler in the area was Captain E. H. Cliffe, who in 1832 purchased a property facing across Chowder Bay. Cliffe built a house there, in the vicinity of the present Clifton Street. American whalers were known to anchor in Chowder Bay to re-fit and obtain fresh vegetables from Cliffe. Seafood "chowder", a favourite food of the whalers, is believed to have been the inspiration for the bay's name (Carroll 1981, p. 6). Other ships also used Chowder Bay as a shelter from bad weather (Souter 1994, p. 58).

When Cliffe died, Samuel Ashmore purchased his estate. Ashmore was an associate of Captain Cliffe and called the property "Cliffeton", from which the name Clifton Gardens was to evolve. After Ashton's death in 1858, a Sydney merchant named Joseph Westbrook purchased Cliffeton (Godden Mackay Logan 1999, p. 5).



Chowder Bay Marine Hotel, built as the Clifton Hotel in 1871. It was renamed the Clifton Gardens Hotel in 1906 and was demolished in 1967

(Source: Mosman Library 401\4012266)

A publican's licence was granted to Duncan Butters in 1872, who had built the Clifton Hotel the previous year, near the present day parking area off Morella Road. The Clifton licence was transferred to David Thompson in 1879, who then purchased the freehold of Westbrooks' Cliffeton (*ibid.*).

The Clifton Hotel gained a reputation for drunkenness, immorality and disorderly conduct. The hotel was closed and rebuilt by Thompson in 1885 as a three-storey establishment named the Chowder Bay Marine Hotel (Hughes 1995, p. 37). Thompson also developed the lands adjoining the Hotel as a pleasure ground.

Pleasure Grounds

In the mid 1800's, the advent of inexpensive weekend ferry services led to the development and enjoyment of the pleasure grounds of the north shore (Allan 1991, p. 117). Picnic grounds and pleasure resorts had existed for some time on the harbour foreshores, particularly on the eastern shore. These picnic grounds, refreshment rooms and dance halls were a feature of Sydney life until the opening of the Harbour Bridge in 1932, and for some time after that (*ibid.*). Popular picnic resorts at various times were found at Cremorne Point (Robertson's Point), Mosman Bay, Athol Gardens (Ashton Gardens, now known as Bradley's Head), Balmoral, Clifton Gardens (Chowder Bay), Rosherville Gardens (Chinaman's Beach), Pearl Bay, Clontarf, Bantry Bay, Seaforth, Killarney (Green Point), Folly Point and Manly.

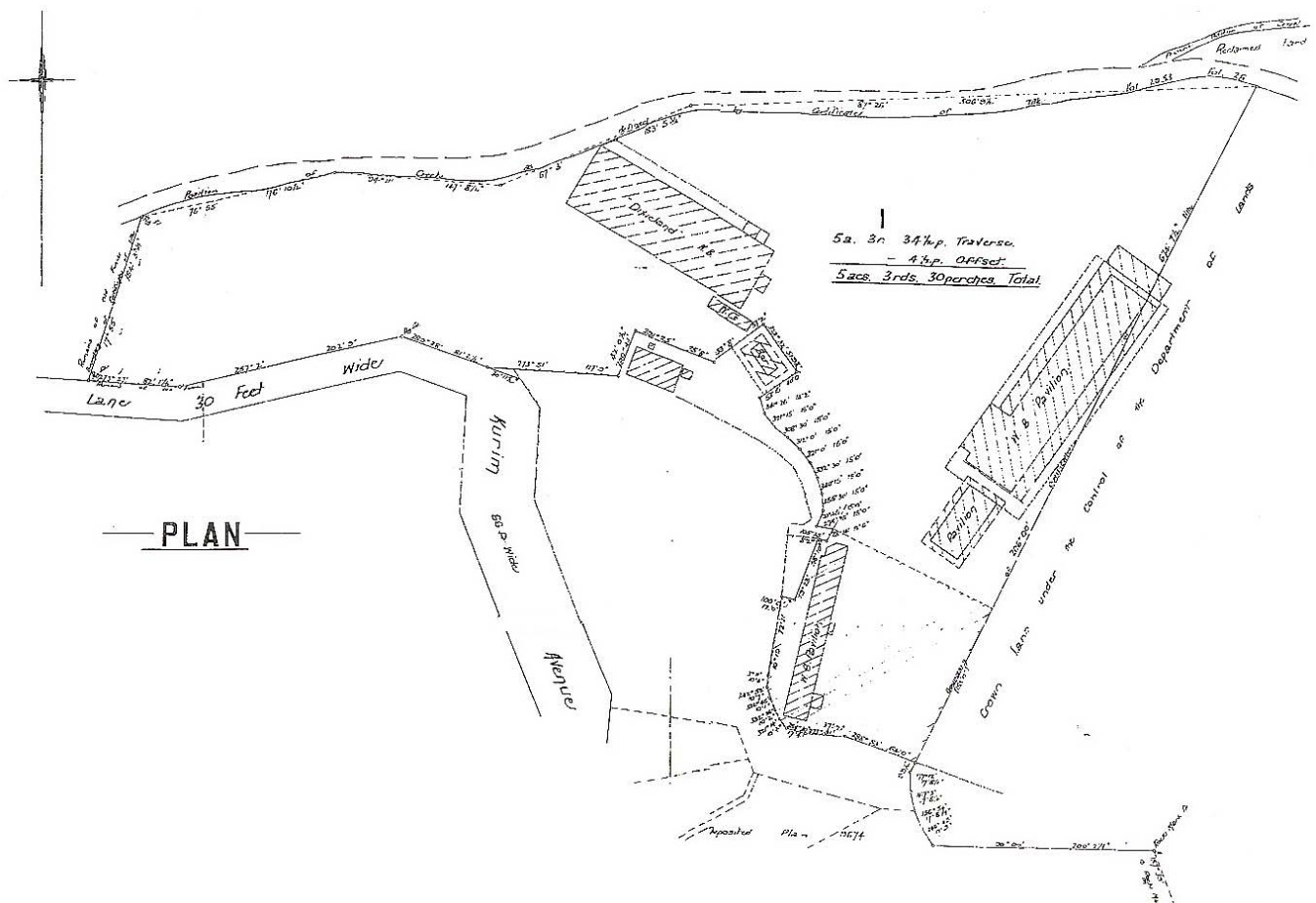
4. NATURAL & CULTURAL HERITAGE

In 1863 C. F. Hemmington, proprietor of a pleasure ground named Fairy Bower at Manly, opened a similar enterprise named Fairyland on part of Cliffeton. Fairyland received only limited patronage for several years, but became more popular during the 1870's when new fortifications were completed at Bradley's, Georges and Middle Heads, and were open for public inspection (Souter 1994, p. 65). On excursion days, the steamer 'Nautilus' served Clifton Gardens, from Circular Quay and Woolloomooloo (Godden Mackay Logan 1999, p. 5).

In February 1871, The *Illustrated Sydney News* stated this about Clifton Gardens Reserve:

"This sandy beach affords fine space for all kinds of active amusement, while its diversity of rock and woodland is acceptable to those whose enjoyment is of a less exuberant character (Allan 1991)."

As an adjunct to the hotel, Thompson developed a portion of his land as a pleasure ground, known as "Thompson's Port Jackson Pavilion and Pleasure Grounds" (Hughes 1995, p. 37).



Part survey of Clifton Gardens dated July 1923, illustrating the location of the weatherboard pavilions at that time

(Source: DP 0308403)

4. NATURAL & CULTURAL HERITAGE

Thompson built a wharf and dancing pavilion, and imported an English bathing machine, which lowered a shark proof frame into the water around the swimmer, allowing the swimmer to feel “as safe as a plunge bath in his own home (Allan 1991, p. 135)”. A skating rink was opened in 1888, and there were four cinder running tracks. The dancing pavilion remained a popular rendezvous up until the 1890’s (Carroll 1981, p. 6).

Great pains were taken to maintain the respectability of the pleasure resorts around Sydney Harbour. As early as 1887 the Sydney Morning Herald stated that ‘the pleasure grounds of Chowder Bay are under strict supervision as to respectability’ (Allan 1991, p. 136). However, the ‘larrikin element’ is often mentioned in descriptions of Sydney’s early pleasure grounds and beaches (Sturrock 1982, p.15).

In 1906, Sydney Ferries Ltd purchased the pleasure grounds at Clifton Gardens. Sydney Ferries Ltd built a large bathing enclosure, a boat shed and a tramway from the wharf to the hotel for the conveyance of

goods (Hughes 1995, p. 38). The hotel was renamed the Clifton Gardens Hotel (Souter, 1994, p. 66).

A 1913 ferry guide proclaimed that Clifton Gardens was the most extensive pleasure ground in Australia (*ibid.*). The *Daily Telegraph* of 1 November 1906 reported that:

“The baths now being erected for the Sydney Ferries Limited at Clifton Gardens...are quite different from those hitherto built in the metropolis. One of the principal improvements to be noted is the marine promenade which encircles the enclosure...Racing platforms, marble chutes and a diving tower of 50 feet high are among the accessories of the enclosure...Platforms for bathers will be on a lower level, while the dressing rooms will be situated in the pavilion at the back of the oval and above them will be an extensive refreshment gallery and grandstand (Allan 1991, p. 135)”.



Clifton Gardens bathing enclosure, circa 1947

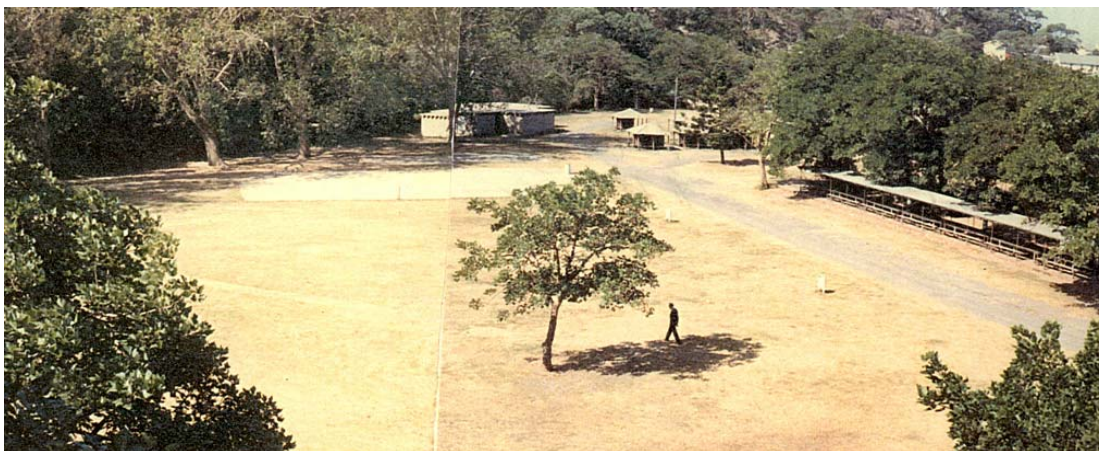
(Source: Mosman Library 400\4008881)

4. NATURAL & CULTURAL HERITAGE

The facilities at Clifton Gardens pleasure grounds gradually fell into decline. Clifton Gardens Hotel, formerly patronised by country visitors and honeymooners was no longer as grand a place as it appeared from the harbour. Since the 1930's, the residents of Clifton Gardens often had cause to complain about this establishment.

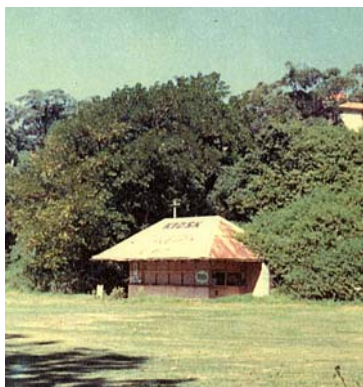
In 1953 Mosman Council and the Cumberland County Council jointly purchased the flat land behind Clifton Gardens beach in Chowder Bay from an owner who had been planning residential development there. The large wooden pavilion was destroyed by fire in 1956.

development, and demolished the old building. Council refused approval, the matter went to court, and in 1969 the land was purchased for incorporation into Clifton Gardens Reserve.



Clifton Gardens, 1968

(Source: Mosman Library, images 1411, 1412 & 1424)



The hotel was finally closed in 1966, and the owner prepared plans for residential

In 1969 the State Government announced its intention to create a Sydney Harbour National Park, and in 1970 the Commonwealth agreed to transfer certain lands for that purpose. Gradually, the pieces of discontinuous park were assembled on the southern side of Mosman, Balgowlah, at North and South Head and at Nielsen Park, Shark Island and Clark Island (Souter 1994, p. 288). In addition to these components of Sydney

Harbour National Park, Mosman's foreshores had been preserved since World War II by Council's acquisition of private land for development of public recreation areas at Chinaman's Beach, Pearl Bay and Clifton Gardens (Souter 1994, p. 289).



**Clifton Gardens Reserve
July 2002**

In the 1970's, Clifton Reserve was re-landscaped and virtually all of the old structures were removed (Godden Mackay Pty Ltd 1996). During this time, Mosman Council built a new jetty, relocated the bathing enclosure, and repaired the sea wall (Souter 1994, p. 291). Today, Clifton Gardens Reserve remains a significant area of open space, picturesquely located, but with many of the features that contributed to its former charm now gone. Disjointed plantings of Eastern Cottonwood (*Populus deltoides*), Coral tree (*Erythrina x sykesii*) and Canary Island Date Palm (*Phoenix canariensis*) provide some current day association with former years.



**Clifton Gardens Reserve, from Chowder Bay Military Site
July 2002**

Maritime Military Establishment

Chowder Bay and the headlands that define it were of strategic importance to the early defence of Sydney. Defence activity began in this area of Sydney Harbour in 1803 when a gun battery was installed on Georges Head. Major installations were constructed in the 1870's across the Middle Head – Georges Head area (Australian Heritage Commission 2002).

In the 1890's, a base was built at Chowder Bay for the Submarine Mining Corps. Mines (bombs) were attached to cables that went under the water from here to the other side of the harbour.

The mines were designed to be detonated if an enemy ship entered the harbour (Sydney Harbour Federation Trust undated).

Submarine mining was considered an essential part of Sydney Harbour's defence between 1870 and the 1920's until the development of the submarine and 20th century military technology rendered the corps redundant (McNamara Soder Associates 1987, p. 196).



Submariners at Chowder Bay, circa 1890. The submariners were disbanded in 1922 but the Chowder Bay military facilities continued to be used for the training of Army personnel.

(Source: Mosman Library 402\4022702)

Most of the buildings at Chowder Bay were built within a few years of one another, and possess a unity of design, detail and shared materials, which combine to provide an impression of harmony and strong visual impact (*ibid.*, p. 196). The Chowder Bay building group is sited away from the more expansive views of Sydney Harbour and overlooks the more intimate waters of Chowder Bay. As a result of the spacing of the buildings on the site, the group has something of the character of a small seaside community (*ibid.*, p. 194).

The George's Heights - Chowder Bay Military Establishments are of great national significance. They make a highly significant contribution to the heritage of Australian Military Establishments and the history of the defence of Port Jackson. The Chowder Bay group of buildings demonstrates clearly its original function as a depot for the highly specialised processes of the now defunct system of defence warfare, Submarine Mining (*ibid.*).

4.2 NATURAL HERITAGE

The western portion of Clifton Gardens Reserve is vegetated by bushland and incorporates a sandstone gully with a creek. The area of the bushland is approximately 0.934 ha. The bushland adjoins the Sydney Harbour National Park to the north, and is therefore part of a larger remnant of native vegetation. The bushland in the Reserve has significant natural values, and is important as a buffer to the National Park.

The vegetation in the bushland is classified as “Sydney Sandstone Gully Forest”, with sub-communities of Tall Open-forest to Open-forest and Closed-forest. These sub-communities are rare in Mosman, as few such areas with this vegetation type remain. The species richness of the bushland is high, and the bushland is an important refuge for rainforest species in the municipality.

The canopy of the Tall Open-forest to Open-forest sub-community is characterised by Sydney Red Gum (*Angophora costata*), Sydney Blue Gum (*Eucalyptus saligna*) and Sydney Peppermint (*Eucalyptus piperita*). The closed-forest is found along the gully, and is lower in height. The canopy of this sub-community is characterised by rainforest species such as Lillypilly (*Acmena smithii*), Port Jackson Fig (*Ficus rubiginosa*), Callicoma (*Callicoma serratifolia*), Cheese Tree (*Glochidion ferdinandi*) and New South Wales Christmas Bush (*Ceratopetalum gummiiferum*) (OCULUS 2001).

Weed infestation in the bushland is high, and the overall weed cover of the site is estimated at 60%. The dominant weeds are Lantana (*Lantana camara*), Glossy Privet (*Ligustrum lucidum*), Kahili Ginger (*Hedychium gardnerianum*), Morning Glory

(*Ipomea indica*) and Asparagus fern (*Proasparagus aethiopicus*) (*ibid.*).

The bushland provides useful habitat for a range of fauna, including bats, birds, reptiles, frogs and possums. The bushland has the potential to provide habitat for two vulnerable fauna species listed in Schedule 2 of the *Threatened Species Conservation Act 1995*. These species are the Red-crowned Toadlet and the Powerful Owl.

The bushland also has the potential to provide habitat for Sunshine Wattle (*Acacia terminalis* subsp. *Terminalis*), an endangered flora species listed in Schedule 1 of the *Threatened Species Conservation Act 1995*. Sunshine Wattle has been found in Sydney Harbour National Park, and may occur in the area, although this has not been confirmed by survey work (S. Wright, *pers. comm.* 09.08.2002).

The Mosman Flora and Fauna Survey (OCULUS 2001) makes the following recommendations about the future management of the bushland:

- control of stormwater overflow from the road and gardens upstream of the bushland area is required, to achieve long-term weed control
- measures to prevent the spread of weed seed and nutrification of the creek should be investigated
- dumping of garden waste should be prevented
- Road Reserve 72 should be incorporated in Clifton Gardens Reserve (the latter had already been carried out by Council at the time of preparing this document)

4.3 HERITAGE REGISTERS

There are several key heritage registers that list heritage items on a local, state and nation wide basis. Not all of the registers have statutory force. In NSW, protection of heritage items is vested in local councils and the NSW Heritage Office, through the *Environmental Planning and Assessment Act 1979* and the *Heritage Act 1977*. There are two statutory heritage lists or registers in NSW, these are: schedules to local or regional environmental plans; and, the State Heritage Register. Approval from the local council or the NSW Heritage Council is required before major changes are made to items on statutory lists (NSW Heritage Office 2002).

Aboriginal relics in NSW are protected by the *National Parks and Wildlife Act 1974*. The National Parks and Wildlife Service maintains a register of recorded Aboriginal sites. Two aboriginal sites in Clifton Gardens Reserve appear on the National Parks and Wildlife Service's Aboriginal Sites Register. Future development of the Reserve is required to be assessed in terms of the likely impact on these relics, according to the provisions of the *Environmental Planning and Assessment Act 1979*.

An Aboriginal Heritage Study is currently being undertaken in Mosman. The project is a cooperative initiative combining the resources of the National Parks and Wildlife Service, the Metropolitan Aboriginal Land Council, Mosman Council and the Sydney Harbour Federation Trust. The aim of the Study is to provide all parties with a greater understanding of the Aboriginal heritage of the Mosman area.

Community groups, professional bodies and some government bodies, compile non-statutory lists of heritage items. The non-statutory lists are important, because they assist in identifying the potential heritage value of a place. Non-statutory registers in NSW include:

- National Trust register
- Register of the National Estate

State Heritage Inventory (NSW Heritage Office)

The State Heritage Inventory is a database, which lists heritage items on statutory lists. The Inventory provides formal recognition by local councils or the State Government that a place has heritage significance.

There are two levels of statutory listing, local and state. Local listings are provided by heritage schedules to a local council's Local Environmental Plan (LEP). Local councils have the most up to date listing of items of local significance in their local government area. Items of state value (that is, items that have particular importance to the people of NSW) are listed on the State Heritage Register.

Clifton Gardens Reserve does not include any items of State significance. However, there are items of local significance within the Reserve and the adjoining lands. All of the items on the State Heritage Inventory accord with the items listed in the Mosman Local Environmental Plan 1998 (2002), and are listed below.

Mosman Local Environmental Plan 1998 (as amended)

The Mosman Local Environmental Plan 1998 (2002) lists Heritage Items, Heritage Conservation Areas and Archaeological

4. NATURAL & CULTURAL HERITAGE

Sites in the municipality. The inclusion of an item or area on these schedules imposes certain statutory controls on the use and development of the listed element and its setting. The listing of heritage items by Council may accord with non-statutory lists, but they may not always be the same.

The following items associated with Clifton Gardens Reserve are listed in Schedule 1 of the Mosman Local Environmental Plan 1998 (2002):

- Clifton Gardens Reserve, Mosman
- Steps to Clifton Gardens Reserve, Morella Road
- Wharf and Pool in Clifton Gardens
- Sewage Pumping Station No. 54 (adjacent to the Reserve)

Several items of heritage significance listed in the Local Environmental Plan occur in the lands adjoining the Reserve. The Army Maritime School at Chowder Bay (also known as the Chowder Bay Barracks), to the north of the Reserve, is listed for its local significance. In addition, two sets of steps outside of the Reserve are listed as evidence of earlier movement lines and the popularity of the pleasure ground in the pre motor car era. These are Sarah's Walk Steps and Morella Road (south) Steps to Clifton Gardens.

Clifton Gardens Reserve is not currently within a Conservation Area in the Mosman Local Environmental Plan 1998.

Register of the National Trust of Australia (NSW)

The National Trust of Australia (NSW) is a non-government, community organisation which promotes the conservation of both the built and natural heritage. The Register of

the National Trust of Australia (NSW) carries no legal requirements for land owners, but is a listing of those items that the Trust considers to have heritage significance and are worthy of conservation. The Trust's Register is intended to perform an advisory and educational role (National Trust of Australia 2002).

Clifton Gardens Reserve forms part of the "Mosman Urban Conservation Area", classified by the Register of the National Trust of Australia (W. Griffiths, *pers. comm.* 28.06.2002). The Mosman Urban Conservation Area includes Bradleys Head, Chowder Bay and Ashton Park. The Mosman Local Environmental Plan 1998 does not give statutory force to the Mosman Urban Conservation Area.

Register of the National Estate (Australian Heritage Commission)

The Register of the National Estate is a nation-wide heritage list for Australia that encompasses natural, Indigenous and historic places. Listing in the Register of the National Estate does not legally affect management of a place unless it is a property owned by the Commonwealth.

There are forty-four sites in Mosman that are listed on the Register of the National Estate, none of which are within the Clifton Gardens Reserve (Australian Heritage Commission 2002, File No. 1/13/026/0008). The Chowder Bay Barracks Group is listed on the Register as an historic item.

5.1 HERITAGE VALUES

Natural heritage

The bushland in the Reserve is significant for flora in the municipality, and has the potential to provide habitat for two vulnerable fauna species in NSW. In addition, the bushland serves as an important buffer between the Sydney Harbour National Park to the north of the Reserve and residential development. The Mosman Flora and Fauna Survey recommends that the bushland area be regenerated, with a particular emphasis on weed control (OCULUS Environmental Planning 2001, Vol 2).

Aboriginal heritage

The municipality of Mosman has a wide range of evidence of Aboriginal occupation such as middens in shelters and in the open and art in shelters and on expanses of sandstone. Aboriginal sites have been found in all parts of the landscape, including on the ridges and slopes, and along the foreshores (Koettig 1991b). It is highly likely that other types of evidence, such as grinding grooves or ceremonial sites, were present but did not survive development impact or were not recognised (Koettig 1991a, p. 6).

Clifton Gardens Reserve was inspected by Koettig (1991c) in the review of Aboriginal sites in Mosman Municipal Council. The bushland portion in the west of the site was not surveyed, because the vegetation at the time of the survey was impenetrable. As a result of the survey, one Aboriginal site was recorded in the Reserve. The site was the remains of a midden (oyster shell fragments). The midden was reported as being totally disturbed and destroyed (Koettig 1991c).

A second site in the Reserve is registered on the National Parks and Wildlife Service's Aboriginal Sites Register database, which is described as a rock engraving (National Parks and Wildlife Service 2002).

In the event that the unsurveyed portion of the site is proposed to be cleared in the future, the report recommends that this part of the Reserve be assessed by a qualified archaeologist to determine whether any Aboriginal sites are present (Koettig 1991c).

Based on the presence of Aboriginal sites in the Reserve and in the vicinity of the Reserve, it is likely that Aboriginal people camped on drier more elevated ground while collecting plants, hunting game and gathering shellfish from the foreshore areas.

European heritage

Clifton Gardens Reserve in its entirety is listed as an item of local heritage significance in Schedule 1 of the Mosman Local Environmental Plan 1998 (2002). A further three items within or adjacent to the Reserve are also listed as locally significant. These include:

- Steps to Clifton Gardens Reserve, Morella Road

- Wharf and Pool in Clifton Gardens
- Sewage Pumping Station No. 54

Each of these heritage items were documented in the Mosman Heritage Review (Godden Mackay Pty Ltd 1996), and a brief summary of their values is set out below.

Clifton Gardens Reserve is categorised as a “landscape” heritage item in the Mosman Heritage Review (*ibid.*). The Reserve is significant locally for its aesthetic and historic value, and regionally for its social value. The Statement of Significance for the Reserve is as follows:

“A prominent and picturesquely sited area of open space, well-used by both local residents and more distant visitors, whose history traces back to the days of the popular pleasure-grounds which then dotted the shores of Sydney Harbour (Godden Mackay Pty Ltd 1996, Reference No 114).”

Traces of the Reserve’s past are provided by the footprint of the dancehall (now used as a picnic area) and the mature exotic trees, such as the Cottonwoods (*Populus deltoides*) that are estimated to have been planted 70 plus years ago.

The **Steps to Clifton Gardens Reserve** are categorised as an “other” heritage item in the Mosman Heritage Review (*ibid.*). The Steps are significant locally for their aesthetic and historic value. The Statement of Significance for the Steps is as follows:

“Evidence of earlier lines of movement in the vicinity and indicative of the popularity of the Pleasure Ground. Generally a relic of the pre-motor car era (Godden Mackay Pty Ltd 1996, Reference No 275).”

The **wharf and pool in Clifton Gardens**

are categorised as an “other” heritage item in the Mosman Heritage Review (*ibid.*). The wharf and pool are significant locally for their aesthetic and social value, and are rare in terms of their historic and social value. The Statement of Significance for the wharf and pool is as follows:

“The wharf and pool within Clifton Gardens Reserve are important elements of one of the oldest continuously operating recreation reserves extent in Sydney Harbour. They typify the nature and role that an organised recreation venues [sic] played in the life of the community (Godden Mackay Pty Ltd 1996, Reference No 115).”

Sewage Pumping Station No. 54 is

categorised as an “industrial relic” heritage item in the Mosman Heritage Review (*ibid.*). Sewage Pumping Station No. 54 is significant locally for its aesthetic and historic value, and is rare in terms of these values. The Statement of Significance for Sewage Pumping Station No. 54 is as follows:

“One of the essential utilities of the vicinity and a relic of the development of urban infrastructure in the area. The only substantial above-ground structure of the local sewerage system and the only example of this typical Low-Level Pumping Station design in the Municipality. Part of collection of similar facilities located on the foreshores of Sydney Harbour (Godden Mackay Pty Ltd 1996, Reference No 116).”

5.2 RECREATION VALUES

Two major open space/recreation studies have been completed in Mosman Municipal Council:

- Mosman Open Space Strategy (Hepper Marriott Tasmania Pty Ltd *et al.* 1994)
- Mosman Recreation Needs Assessment Study (Suter & Associates 2000)

The Mosman Recreation Needs Assessment Study (2000) categorised the recreation facilities within the municipality, and Clifton Gardens Reserve was categorised as “informal recreation” (*ibid.*, p. 37). As a result of community consultation, the Recreation Needs Assessment Study identified that the following features of the informal recreation areas are of value to the community (*ibid.*, p. 25):

- the natural setting, including the beaches and bushland
- provision of facilities, including picnic areas, seating, benches, shelters, shade and play areas
- upgraded/more substantial playgrounds
- walking tracks
- recreational fishing, and the potential to provide designated fishing areas
- enhanced access to the harbour, including boating and sailing facilities and general community access to beaches and wharfs
- outdoor basketball courts
- provision of “garden plots” for the Gardening Club

With regard to informal recreation areas, the Mosman Recreation Needs Assessment Study (2000) found that there was particular potential to better meet the community’s recreation needs through:

- improved playgrounds (quality, features and size)
- provision of bike tracks in safe areas for young children
- provision of picnic areas that provide an appealing setting for family and social activity
- improved amenities (change rooms for parents with young children, better toilet facilities)
- improved disability access (including access to jetties)
- reinforcement of the linkages with the Sydney Harbour and within and beyond the municipality, through walking tracks and viewing platforms

In the longer term, the Recreation Needs Assessment Study emphasised that the development of foreshore and informal recreation areas should be minimised, and that Council should continue to “protect and enhance the natural values (2000, p. xii)”.

The Mosman Municipal Council Recreation Strategy Action Plans (2001) document was prepared based on the Mosman Recreation Needs Assessment Study. The Action Plans were developed to provide a clear direction for implementing the ‘Priority Actions’ arising from the Study.

The strategies and tasks that apply to Clifton Gardens Reserve are:

STRATEGY:

“Continue to upgrade and establish playgrounds.”

TASK:

- Incorporate unique features and materials (including art works and disability access) at Clifton Gardens Reserve.

STRATEGY:

“Continue to maintain and upgrade informal recreation areas.”

TASK:

- Prepare and implement Plans of Management and Landscape Master Plans for Clifton Gardens Reserve.
- Incorporate public art and heritage features in key informal open spaces, as part of Plans of Management and playground planning.
- Install park name signs that reflects the specific values of the site where required.

STRATEGY:

“Continue to address disability access.”

TASK:

- Increased access to the beaches.
- Playgrounds with integrated accessible equipment, where space allows.
- Low impact access paths through natural areas and along foreshore where landform and natural heritage values allow.

5.3 IDENTIFIED COMMUNITY VALUES

The values, issues and aspirations for the future management of the Reserve expressed by the community are ranked below, in order of frequency of mention in the two community surveys conducted by the consultant team as a component of this study.

Values

The key values of the Reserve are its function as a venue for a wide range of informal recreation and social activities, such as walking with friends and picnics, and its setting.

- recreation (walking, swimming, fishing, boating) (80)
- social venue (meet family friends, picnic venue) (43)
- peaceful/natural setting (38)
- beach/Sydney Harbour (17)
- open space (14)
- safe, clean and well managed (11)
- scenic/views (9)
- trees and gardens (8)
- not overcrowded (8)
- convenient (4)
- car parking (3)
- facilities (3)
- history (3)

Issues

Approximately 30% of the respondents indicated that they could not identify any issues for the Reserve. Routine maintenance of the assets in the Reserve and litter removal were the most frequently mentioned issues.

- rubbish/litter (15)
- maintenance/management (includes opening hours of toilets, asset maintenance, weed control) (14)
- signage (directional and regulatory) (3)
- pressure on marine ecology (boats, fishing) (3)
- anti-social behaviour (1)
- vandalism (of trees) (1)

Aspirations for the Future

Approximately 38% of the respondents indicated that they enjoyed the Reserve the way that it is currently, and that its current character and setting should be retained. Respondents in this category often qualified their responses by stating that commercial development in the Reserve was not appropriate. A small proportion of the respondents (6%) indicated that they would like a shop or restaurant in the Reserve. Of the respondents that cited improvements to the Reserve, most recommended the improvement or renewal of the existing range of facilities and the provision of more shade and shelter.

- retain the way it is (includes “no shops” and “no suggested improvements”) (24)
- new or improved facilities (toilets, hot showers, bike tracks, bins) (18)
- picnic tables and BBQ’s (9)
- shade/shelter (9)
- improved parking controls (6)
- shop or restaurant (4)
- restrict fishing on the jetty (4)
- increase the litter signage (3)
- improve links to adjoining areas (3)
- prohibit ball games (2)
- restrict organised functions (1)

5.4 STATEMENT OF SIGNIFICANCE

Clifton Gardens Reserve provides a scenic, peaceful setting for informal recreation and social activities. The Reserve forms part of a regionally significant walk from Bradleys Head to Middle Head, through the Sydney Harbour National Park and the former military land at Chowder Bay.

The history of Clifton Gardens Reserve traces back to the popular pleasure-grounds that operated around Sydney Harbour from the mid 1880's to the early years of the 20th century. Although Clifton Gardens Reserve is one of the oldest pleasure-grounds in continuous operation on Sydney Harbour, limited evidence remains of the extensive recreation facilities that were built in the Reserve commencing circa 1863.

The present day wharf and pool are important elements that typify the nature and role that organised recreation venues played in the life of the community. The set of sandstone and concrete steps from Morella Road to the Reserve are significant locally because they demonstrate the popularity of the Reserve in the pre-motor car era. Sewage Pumping Station No. 54, located to the north east of the Reserve, is also of local historic value. The Sewage Pumping Station is the only example of this type of low-level pumping station design in the Municipality.

The bushland in the Reserve serves as an important buffer between the Sydney Harbour National Park to the north of the Reserve and residential development. The bushland provides significant habitat for flora locally, and has the potential to provide

habitat for two vulnerable fauna species protected by the *Threatened Species Conservation Act 1995*. These species are the Red-crowned Toadlet and the Powerful Owl. The bushland also has the potential to provide habitat for Sunshine Wattle (*Acacia terminalis* subsp. *Terminalis*), an endangered flora species listed in Schedule 1 of the *Threatened Species Conservation Act 1995*.

The Reserve has **regional significance** as a harbour front park located on the route of the Sydney Harbour Foreshore regional walking track. It has historic regional significance for its history as one of Sydney Harbour's foreshore pleasure gardens of the nineteenth and early twentieth century.

The Reserve has **local significance** as a much valued local recreational reserve for the people of Mosman.

6.1 LAND CATEGORIES AND RESERVATIONS

Section 2.1 of this document lists the ownership status of the land in Clifton Gardens Reserve. All of the Reserve is in Mosman Municipal Council's care, control and management, although Council does not own all of the land. Most of the Reserve is community land, under the *Local Government Act 1993*, with the exception of the foreshore. The foreshore is Crown land, and must be used and managed in accordance with the principles of Crown Land Management, as set out in s.11 of the *Crown Lands Act 1989*. The Department of Land and Water Conservation owns the Crown land in the Reserve.

Mosman Municipal Council classified all public land in the municipality in 1994 (Mosman Municipal Council 2001). The public land in the Reserve has been classified as "community land", in accordance with Section 25 of the Local Government Act. Under Section 45 of the Act, Council cannot dispose of the land. It must be retained for community purposes.

The Crown land in Clifton Gardens Reserve was reserved for public recreation in 1933 (J. Filocamo, *pers. comm.* 22.07.2002). The uses, activities, developments and agreements in relation to the Crown land are broadly defined by the public purpose of its reservation, in conjunction with the specific provisions of the zoning of the land under Council's Local Environmental Plan.

Case law judgments also influence the management of Crown land by the Department of Land and Water Conservation

and Council. The case law provides guidance on land uses, and has directed that land uses need to be supportive or ancillary to public purposes.

6.2 PRINCIPLES AND OBJECTIVES FOR MANAGEMENT

Principles for Management

As the basis for the management and future use of the Reserve, a series of land management principles have been developed. The sources of these principles have been:

- outcomes of the community consultation carried out during the preparation of this document;
- research into the natural and cultural values of the site; and
- input from Council's Officers involved with the management of the Reserve.

Principle One:

Clifton Gardens Reserve should be recognised for its regional significance as a part of the Sydney Harbour foreshore open space system, and as a significant reserve on the Bradleys Head to Middle Head regional walking track.

"bush walks nearby...access to Sydney Harbour National Park"

"go on long walks starting at the Army barracks and up towards Georges Heights"

"bush walk through to Bradleys Head...Chowder Bay and beyond"

Principle Two:

Clifton Gardens Reserve should be managed as a local recreational resource.

“swim, walk... picnic with friends and family”

“we take the children down to the Reserve”

“walk the dogs off lead”

“sitting and reading”

Principle Three:

Clifton Gardens Reserve should be managed to retain its neighbourhood character.

“this is a very precious and unique area...it would be a crime to use for the installation of sporting or entertainment facilities”

“Clifton Gardens is charming because it is low-key and without many built facilities”

“its atmosphere and character are unique”

“once you lose something irreplaceable you never get it back”

“Clifton Gardens should be kept as natural as possible for the enjoyment of the community as a whole”

Principle Four:

The scenic quality of Clifton Gardens and significant view corridors to, from and across the Reserve should be conserved.

“enjoy unspoilt surroundings”

“bird watching, the beautiful trees and natural features”

“serenity, quietness, views”

“private and peaceful”

“uncluttered, undeveloped naturalness”

Principle Five:

The Cultural History of the Reserve should be conserved and interpreted in its management and use.

“history and heritage must be paramount”

“the impression of the circular swimming baths, the very high tower, and my father diving from it...has always stayed [with me]”

Principle Six:

The informal social and recreation opportunities afforded by the Reserve should be enhanced.

“add more picnic tables in select areas so as not to encroach on the open space used for games”

“improve the toilets”

“build new playgrounds for different age groups”

“allow flexibility of use for different groups of people and changing usage over time”

“more shade trees”

“grass cover for games”

Principle Seven:

The natural biodiversity and ecosystem function of the Reserve's bushland should be enhanced and the Reserve should be managed in a manner that has no negative impact on water quality, including fish habitat and fish passage, in Sydney Harbour.

“keep the surrounding bush free of noxious weeds”

“replant the degraded [native] areas”

"rubbish reaching the Harbour and the beach via the stream needs to be dealt with"

Principle Eight:

Equitable access within the Reserve and to the pathways on neighbouring lands should be promoted.

"the steps should be upgraded"

"access to the wharf is important"

6.3 KEY MANAGEMENT ISSUES

Key issues to be addressed in the management of Clifton Gardens Reserve have been identified out of the consultation process (Section 3 and Appendix 1) and an analysis of the current condition of the Reserve (Section 2). To aid in the preparation of a management strategy, the issues arising out of the analysis of the Reserve and community consultation have been synthesised into the following brief list. The principles for management of the Reserve relate directly to these identified issues.

1. Level of usage and change to the Reserve;
2. Heritage significance;
3. Landscape / visual quality;
4. Natural biodiversity and water quality;
5. Transport, traffic and carparking;
6. Pedestrian safety and access;
7. Risk Management;
8. Funding;
9. Maintenance;
10. Crown Land management principles; and
11. Mosman Council generic land management objectives.

These key issues are addressed in detail in Section 7 of the Plan (Management Policy).

The intent of the Management Policy is to provide the means for maintaining and enhancing the values of Clifton Gardens Reserve identified by the community. Each of the identified management issues is discussed in this section. In accordance with accepted practice in the preparation of management plans, desired outcomes with regard to each issue are then identified along with actions for achievement of these and mechanisms for measurement of success.

Each identified action is, in turn, cross referenced to the Implementation Plan included at Section 8 of this of this document.

Section 7 of the Management Framework indicates the main issues identified in the planning study, relates these to the relevant principles for management and indicates desired outcomes, actions and performance measures to address each. The information is summarised in tabular form in Section 9 of the Framework.

7.1 LEVEL OF USAGE AND CHANGE TO THE RESERVE

Discussion

The community has repeatedly referred to a desire to retain the current level of use of the Reserve and not develop the Reserve in a manner that would be likely to contribute to increased usage patterns.

Relevant Principles

Principle Three:

Clifton Gardens Reserve should be managed in such a way that its current inherent qualities are retained and its level of use is not significantly altered.

Desired outcome

- Retention of the existing landscape character and continued improvement in the quality of the landscape resulting in a unified and attractive setting for the range of recreational opportunities offered by Clifton Gardens Reserve.
- The broad views of Sydney Harbour are retained and preserved in the ongoing upgrade of the Reserve.
- The amenity of the Reserve is improved

Action

- Assess all proposed improvements of the site for their impact on views to,

from and across the Reserve (Management Action No. 4).

- Assess all proposed improvements of the site for their potential to change the level of use of the Reserve (Management Action No. 4).

Performance Targets

- Landscape improvements are implemented in accordance with the masterplan.

7.2 HERITAGE SIGNIFICANCE

Discussion

The Reserve is listed as an Item of Local Heritage Significance in the Mosman Local Environmental Plan, 1998. In addition, a number of other items in or adjacent to the Reserve are listed as locally significant heritage items in the Local Environmental Plan:

- The steps to Clifton Gardens Reserve, Morella Road
- The Clifton Gardens Wharf and Pool
- Sewage Pumping Station No. 54

The Reserve has heritage significance principally for its historic use as one of Sydney's harbourfront pleasure gardens during the late nineteenth and early twentieth century.

Relevant Principles

Principle Five:

The cultural history of the Reserve should be conserved and interpreted in its management and use.

Desired Outcome

- The key elements that relate to the cultural heritage value of the Reserve are identified in this Management Plan and preserved in the upgrade of the Reserve.
- The heritage values of the Reserve are acknowledged and interpreted as a key component of its upgrade.

Action

- Implement the heritage interpretation concept included in this Management Plan (Management Action No. 10 and Landscape Masterplan Action Nos. 4, 5(i), E and I).
- Carry out an Interpretive Study for the Reserve as part of the design development of the Masterplan (Management Action No. 10).
- Ensure that the findings of the Aboriginal Heritage Study inform the Interpretive Study for the Reserve.
- Investigate the possibility of listing of the Reserve as an Item of State Heritage Significance to reflect its regional heritage values as an example of one of Sydney Harbour's late nineteenth century Pleasure Gardens (Management Action No. 8).
- Investigate opportunities for funding for interpretive and other heritage based works on the basis of the regional significance of the Reserve (Management Action Nos. 1 and 8).

Performance Targets

- The heritage values of Clifton Gardens Reserve are conserved and interpreted in its upgrade.

- An Interpretive Study is carried out to guide the conservation and interpretation of the heritage values of the Reserve.
- The possibility of the listing the Reserve as an Item of State Heritage Significance is acted upon.

7.3 LANDSCAPE / VISUAL QUALITY**Discussion**

The existing open and relaxed landscape character of Clifton Gardens Reserve has been repeatedly identified as a valuable element that should be retained in its management and maintenance.

Aspects of the Reserve that contribute to its open, relaxed character include:

- minimisation of structures on the ground plane;
- the existence of significant areas of open, unobstructed lawn;
- the natural backdrop of visually indigenous forest;
- the dominance of natural elements and tree canopy over built structures;
- use of tall growing tree species that allow open lines of sight below their canopies;

Aspects detracting from openness and general landscape quality of the Reserve include:

- Dominance of carparking, particularly in the peak summer months.
- Possible overuse of the park in peak periods.
- Use of shrub planting in the area between the carpark and the Reserve proper.

- Variable quality in the health, vigour and visual appearance of some trees on the Reserve.

Relevant Principles

Principle Three:

Clifton Gardens Reserve should be managed in such a way that its current inherent qualities are retained and its level of use is not significantly altered.

Desired Outcome

Clifton Gardens Reserve is improved with regard to its amenity and function as a regional and local recreational resource while retaining its current open and relaxed character.

Action

- Carry out any upgrade of Clifton Gardens Reserve in accordance with the landscape masterplan.
- Carry out an arboricultural assessment of all trees on the Reserve and implement a program of removal of senescent trees and replacement with tall open canopy shade trees appropriate to the open landscape character of the Reserve (Management Action No. 6).
- Ensure that any new structures on the Reserve are of appropriate scale, materials and finish in keeping with the overall principle that natural elements should be dominant in views to, from and across the Reserve (Management Action No. 4).
- Assess all proposed works to minimise impacts on view corridors from areas adjoining the Reserve.

- Investigate feasibility of undergrounding of powerlines across the Reserve as a measure to improve visual quality.

Performance Targets

- Landscape improvements and general upgrades implemented in accordance with the masterplan;
- Tree management carried out in accordance with best arboricultural practices

7.4 NATURAL BIODIVERSITY AND WATER QUALITY

Discussion

The biodiversity based values of Clifton Gardens Reserve, included in the portions that contain intact indigenous bushland, require best practice management to protect their integrity in perpetuity. Additional biodiversity values and sensitivities come out of the proximity of the Reserve to bushland in the Sydney Harbour National Park.

Further, the Reserve has particular sensitivities with regard to water quality due to the fact that it drains directly into Chowder Bay. Chowder Bay has particularly high water quality as a result of its location opposite the Harbour heads and the flushing that occurs in the area. Chowder Bay supports a correspondingly high quality marine ecology including a sea grass colony (Sydney Harbour and Parramatta River Development Control Plan, 1998) and, reportedly, a substantial sea horse population. Activities and works within Clifton Gardens Reserve must be carried out in a manner that has no negative effects on water quality, including fish habitat and

fish passage, in Chowder Bay and Sydney Harbour generally. Additionally, stormwater must be managed with respect to impacts on land-based natural biodiversity.

Relevant Principles

Principle Seven:

The natural biodiversity and ecosystem function of the Reserve's Bushland should be enhanced and the Reserve should be managed in a manner that has no negative impact on water quality, including fish habitat and fish passage, in Sydney Harbour.

Desired outcome

The natural biodiversity of Clifton Gardens Reserve and its surrounding area is enhanced and maintained as a result of the implementation of this Management Framework and masterplan.

Action

- Implement the program of bush regeneration works for Clifton Gardens Reserve prepared by ABR (a copy of which is included at Appendix 3) (Management Action No. 11).
- Explore opportunities for the reinstatement of native riparian vegetation communities (Landscape Masterplan Action No. 16).
- Assess all development applications pertaining to the Reserve for their impacts on natural biodiversity and water quality, including fish habitat and fish passage. Advocate the principles of water sensitive design (Management Action No. 4).
- Investigate opportunities for partnerships with other agencies such as National Parks and Wildlife to address common

management issues such as bush regeneration (Management Action No. 5).

Performance Targets

- The quality of bushland in Clifton Gardens Reserve is improved in the medium term and densities of indigenous material are raised to the levels indicated in the bush regeneration program prepared by ABR (see Appendix 3).
- Works in the upgrade of Clifton Gardens Reserve are executed with measures in place to protect the quality of bushland in the adjoining Sydney Harbour National Park
- Works in the upgrade of Clifton Gardens Reserve are executed with all measures in place to protect water quality, including fish habitat and fish passage, in Chowder Bay and Sydney Harbour generally.

7.5 TRANSPORT, TRAFFIC AND CARPARKING

Discussion

The Reserve carpark provides spaces for 118 cars, inclusive of one disabled space. Parking is managed on a "Pay and Display" basis. At the times of inspection of the Reserve, all of which occurred in the winter months of 2002, the carpark appeared to provide adequate space for users of the Reserve. However, anecdotal reports indicate that the Reserve parking is often inadequate to serve visitors during the spring and summer months. During this time, cars are reported to overflow into neighbourhood streets, particularly on weekends and holidays.

The fact that the Reserve is not currently served by public transport on weekends could possibly be a contributing factor to pressure for carparking during peak periods. However, given that the principle weekend function of the Reserve is as a picnicking destination, it is likely that the great majority of visitors would arrive by private vehicle, regardless of the availability of public transport. Further assessment during the summer months would be required to indicate the impacts of traffic on local amenity. Means of addressing any parking conflicts identified in peak periods could include restrictions on non resident parking in the street approaches to the Reserve. Such restrictions may have the added advantage of restricting levels of use of the Reserve, an issue that has been raised regularly in consultations.

Historically, Clifton Gardens Reserve has been accessible from the Harbour via public ferry. It is considered that ferry access should be viewed as a significant component of the heritage of the Reserve and that investigations should be carried out into reinstatement of the ferry service, at least on weekends. Alternatively, Sydney Harbour Ferries might be encouraged to run occasional heritage tours of the Harbour foreshore, including visits to sites of former pleasure gardens such as Clifton Gardens.

Relevant Principles

Principle Three:

Clifton Gardens Reserve should be managed in such a way that its current inherent qualities are retained and its level of use is not significantly altered.

Desired outcome

The implementation of the Management Framework and masterplan results in improvements to the amenity, recreational and heritage values of Clifton Gardens Reserve without the loss of its inherent qualities and without significant increases in its level of use.

Action

- Conduct a traffic survey of the Reserve and neighbourhood streets during the peak use period (summer holidays) and incorporate the findings into the Management Framework (Management Action No. 12).
- Assess any development application pertaining to the Reserve for their impacts on neighbourhood traffic conditions (Management Action No. 4).
- Carry out investigations into the adequacy of current public transport services to Clifton Gardens Reserve and investigate means of addressing any inadequacies (Management Action No. 13).
- Investigate the viability of reinstating the Sydney Harbour Ferry service to Clifton Gardens Reserve (Management Action No. 13).

Performance Targets

- Use levels of the Reserve do not place significant pressure on neighbourhood traffic conditions.
- Public transport services are adequate to serve the needs of users of Clifton Gardens Reserve.
- The viability of reinstatement of a public ferry service to the Reserve is investigated.

7.6 PEDESTRIAN SAFETY AND ACCESS

Discussion

Issues arising with regard to pedestrian safety and access include:

- Potential pedestrian / vehicular traffic conflicts along the access road to the Reserve.
- The lack of pedestrian access to the bushland valley between Morella Road and the Sydney Harbour National Park.
- Access for differently abled persons throughout the Reserve with particular regard to access to the Wharf, the Chowder Bay Barracks complex and to amenities facilities.
- Connectivity of the Reserve to the regional harbour foreshore walkway.

Relevant Principles

Principle One:

Clifton Gardens Reserve should be recognised for its regional significance as a part of the Sydney Harbour foreshore open space system, and as a significant reserve on the Bradleys Head to Middle Head regional walking track.

Principle Eight:

Equitable access within the Reserve and to the pathways on neighbouring lands should be promoted.

Desired outcome

- Safety issues are addressed with regard to traffic and pedestrian conflict areas.
- Access for all is a basis for all improvements to the Reserve.

- Access to the regional foreshore walking track is improved in the upgrade of the Reserve as indicated in the masterplan.

Action

- Provide speed restriction signage to all vehicular roads within the boundaries of the Reserve (Management Action No. 12).
- Provide pedestrian crossing identification at all locations where formalised pedestrian paths cross roadways within the Reserve (Management Action No. 12).
- Provide an accessible pathway along the foreshore for the length of the Reserve and complete the connection to the current entry to Chowder Bay Barracks (Landscape Masterplan Action No. 1).
- Provide an accessible path route from the parking area to the Clifton Gardens Wharf (Landscape Masterplan Action No. 1).
- Construct an accessible amenities block within the Reserve (Landscape Masterplan Action No. 4).

Performance Targets

- All facilities within the Reserve are accessible within the boundaries of all relevant planning controls.
- Pedestrian and vehicular safety are addressed in the upgrade of the Reserve.
- Speed restriction signage is installed at appropriate locations on the vehicular accessway in accordance with the requirements of Council's traffic engineer.

7.7 RISK MANAGEMENT

Discussion

Risk management is a significant issue for Council in formulating management practices for parks. Potential hazards should be identified and rectified to minimise any potential for accidents.

All new and existing play equipment must be safe for children to use. Surfaces under and surrounding play equipment must be maintained to create a safe play environment for children in Clifton Gardens Reserve.

The location of play equipment in Clifton Gardens Reserve needs to be considered in regard to any risks arising from proximity to the carpark, cliff areas or the Harbour.

Existing and proposed trees in the Reserve need to be assessed with regard to their potential hazard to users of the Reserve.

The use of the Reserve for off leash dog exercising should be appropriately managed for public risk.

Relevant Principles

No principles proposed in the Management Framework apply specifically to the issue of Risk Management.

Desired outcome

To create a safe recreational environment for all users of Clifton Gardens Reserve and to minimise Council's exposure to accident claims.

Action

- Formulate and implement a regular inspection checklist to identify potential safety issues (Management Action No. 7).
- Carry out a detailed arboricultural assessment of all trees in the Reserve with respect to hazard and instigate a program of tree removal or hazard reduction to address any identified hazards (Management Action No. 6).
- Repair and remove equipment, which is identified as a potential safety hazard for children (Management Action No. 7).
- Upgrade equipment as required ensuring that relevant safety standards are complied with (Management Action No. 7).
- Refine current maintenance practices to meet risk management requirements and relevant standards (Management Action Nos. 7 and 14).
- Locate the children's play area so that it is well separated from the off leash dog exercising area (Landscape Masterplan Action No. 6).

Performance Targets

- Inspection safety checklist formulated and maintenance regime implemented.
- Clifton Gardens Reserve is considered a safe play environment for children and a safe public recreational area generally.

7.8 MAINTENANCE

Discussion

The Management Strategy has identified the following maintenance services required for the proper management of Clifton Gardens Reserve:

- Safety inspections in accordance with risk management guidelines for playground equipment, trees, structures and surfaces.
- Ground surface maintenance including, in particular, measures to address compaction of surfaces such as lawn areas and areas below large trees.
- Arboricultural assessment, maintenance and soil testing.
- Ongoing maintenance of bushland areas to raise the ecological integrity of indigenous bushland within the Reserve.
- Maintenance of furniture, fences and signage.
- Rubbish removal.
- Maintenance of the toilet facilities and of any new facilities installed in the upgrade of the Reserve.

Given the high level of use of the Reserve, the level and effectiveness of the maintenance regime will impact directly on the quality of the recreational services offered by the Reserve and Council's risk management strategy.

Desired outcome

A well-maintained community recreational resource through increased efficiency of maintenance operations particularly in regard to trees, bushland, lawn areas, furniture, fences, signage, play equipment, litter control and toilet facilities.

Relevant Principles

Principle Four:

The scenic quality of Clifton Gardens and significant view corridors to, from and across the Reserve should be conserved.

Principle Six:

The informal social and recreation opportunities afforded by the Reserve should be enhanced.

Principle Seven:

The natural biodiversity and ecosystem function of the Reserve's Bushland should be enhanced and the Reserve should be managed in a manner that has no negative impact on water quality, including fish habitat and fish passage, in Sydney Harbour.

Action

- Review current work practices and procedures for maintenance operations through bench marking and adoption of industry best practice standards (Management Action No. 14).
- Prepare a maintenance schedule on a five-year rolling program with an annual review outlining routine maintenance procedures for all elements of the Reserve. The schedule is to be suitable for inclusion in Council's Risk Management Strategy (Management Action No. 14).
- Prepare a yearly appraisal of the maintenance costs associated with the Reserve in relation to the income produced by the Reserve and the recreation benefits to the community (Management Action No. 14).

- Consider installing a reticulated, automatic irrigation system to the turf areas in the Reserve (Landscape Masterplan Action No. 12).

Performance Targets

- Increased quality of recreational services offered by the Reserve;
- Reserve users express satisfaction at level of maintenance of Reserve facilities.

7.9 FUNDING

Discussion

The ongoing maintenance and management of Clifton Gardens Reserve is currently reliant on funding through Council's Reserves Section, Reserves Improvement Program and grant funding.

Under S.106 (3) of the *Crown Lands Act 1989*, all incomes received from the use of Crown reserves must be reinvested into the management or development of the Reserve. With respect to the Crown Land in Clifton Gardens Reserve, any income derived from leases or licences over the land would be required to go into revenue to be expended on the Reserve. Similarly, funds derived from fees levied from parking in the Reserve carpark and any other revenue raising activities should be funnelled into maintenance or works within the Reserve.

Currently income derived from the 'Pay and Display' parking at Clifton Gardens Reserve is less than the annual costs for maintenance and development of the Reserve. Equally, this income level is inadequate for the upgrade of Clifton Gardens Reserve as proposed in the masterplan or for its ongoing

management as described in the Management Strategy.

Possible funding sources for assistance for capital works as indicated in the master plan include:

- Corporate sponsorship
- PlanningNSW (Metropolitan Greenspace Program)
- Department of Sport and Recreation grants program
- Department of Land and Water Conservation Public Reserves Management Fund
- Department of Maritime Services monetary contribution
- Department of Works and Services (Coastal Management and other programs)
- Commonwealth Government sources.

In the short term, recurrent cost associated with the maintenance of the Reserve will need to be met by Council. Maintenance costs of the Reserve and its associated facilities will markedly increase with the upgrade of the Reserve as indicated in the masterplan.

Desired outcomes

To ensure that adequate levels of funding and cost recovery enable Council to meet the objectives of the Management Strategy within the stipulated timeframe and without placing unreasonable demand on Council funding.

Relevant Principles

Adequate funding is, of course, fundamental to the management and maintenance of Clifton Gardens Reserve. On that basis, all

eight recommended Principles for Management included in the draft Management Framework are of relevance to the issue of funding.

Action

- Identify and quantify current and potential revenue sources in the Reserve. Aside from the current returns coming from 'Pay and Display' parking, the potential may arise, for instance for short term lease of the Reserve, or parts thereof, for functions, corporate events, advertising, filming or the like. This potential would be expected to increase with the ongoing upgrade of the Reserve in accordance with the masterplan (Management Action No. 1).
- Negotiate an appropriate level of Council funding for the Reserve in light of the maintenance and capital works program identified in the Plan (Management Action No. 1).
- Identify and pursue financial grant opportunities and corporate sponsorship to assist in the development of new capital works in the Reserve (Management Action No. 1).

Performance Targets

- Increased percentage in cost recovery
- New income sources identified
- Management and capital works costs adequately recognised in funding allocations by Council.

7.10 CROWN LAND MANAGEMENT ISSUES

Discussion

Section 11 of the *Crown Lands Act 1989* includes a series of statutory principles under

which Crown Lands are required to be managed. These are listed in Section 2.4 of the Management Framework.

Desired outcomes

That the portion of Clifton Gardens Reserve that is Crown Land be managed by Mosman Council in a manner consistent with the statutory Principles for Management of Crown Land in the *Crown Lands Act, 1989*.

Actions

- Ensure consistency of management and maintenance of Crown Lands within Clifton Gardens Reserve with the statutory Principles for Crown Lands Management (Management Action No. 15).

Performance Targets

- A mechanism in Council's development assessment and lease / licence application system is included to test any development application or application for lease or licence over the Crown Lands within the Clifton Gardens Reserve for consistency with the statutory Principles for Crown Lands Management.

7.11 MOSMAN COUNCIL GENERIC LAND MANAGEMENT OBJECTIVES

Desired outcomes

The objectives in Mosman Council's generic Plans of Management for land categorised as Park (2001a) and Natural Areas (Bushland) (2001b) are achieved for the Community Land so classified within Clifton Gardens Reserve.

Actions

- Ensure consistency of management and maintenance within Clifton Gardens Reserve with Mosman Municipal Council's generic Plan of Management for land categorised as Park and Natural Areas (Bushland).

Performance Targets

- Report to Council, in accordance with the requirements of the Generic Plans of Management.



MOSMAN MUNICIPAL COUNCIL

CLIFTON GARDENS RESERVE SITE USER SURVEY

SUMMARY OF RESULTS

SUNDAY 14 JULY 2002 - 31 RESPONDENTS

1. Do you live in the Mosman Local Government Area?

Yes	10
No (list the LGA)	
Canterbury	2
Canada Bay	1
Dee Why	2
Fairfield City	1
Lane Cove	1
Manly	1
Parramatta	2
Randwick	1
Ryde	1
Warringah	1
Hornsby	1
Kempsey	1
Windsor	1
Woollahra	1
Woolongong (group of 10)	1
Overseas	1
Various (group of 16)	1
Various (group of 15 from North Shore)	1
<i>Total:</i>	<i>31</i>

2. How did you travel to the Reserve today?

Bicycle	-
Car (if by car, see 2a)	22
Public Transport (bus)*	-
Walk	8
Water craft	1
<i>Total:</i>	<i>31</i>

* Clifton Gardens Reserve is accessible by bus Monday to Friday (not on weekends).

2.a If you travelled to the Reserve by car, where did you park?

Carpark	20
Street (name street, if known)	2
<i>Total:</i>	<i>22</i>

3. How long did your journey take to come to the Reserve today?

0 – 15 mins	8
15 – 30 mins	6
30 – 45 mins	4
45 – 60 mins	5
>60 mins	8
<i>Total:</i>	<i>31</i>

4. How often do you come to the Reserve?

Daily	2
Weekly	1
Fortnightly	2
Monthly	3
Less than monthly	14
First time	8
Second time	1
<i>Total:</i>	<i>31</i>

5. What time of year do you come to the Reserve?

Year round	16
Spring and/or Summer	4
Autumn	1
Winter	4
First time	6
<i>Total:</i>	31

6. Why did you come to the Reserve today (you may select more than one)?**SOCIAL**

Meet friends and family	9
Picnic	11
<i>Total:</i>	20

RECREATION

Enjoy nature (bird watching etc.)	1
Fishing	7
Play	3
Restful/scenic setting	6
Swimming	1
Walk	12
Walk the dog	-
<i>Total:</i>	30

OTHER (that is, not Social or Recreation)

Studying the sea horses	1
-------------------------	---

7. What aspects or features of the Reserve are important (you may select more than one)?

All of it	1
Atmosphere – not too crowded	3
Beach access to the harbour	11
Bushland	2
Clean	4

What aspects or features of the Reserve are important (continued)?

Convenient	1
Fishing	2
Good facilities	1
History	1
Interesting (things to do)	1
Jetty access	1
No commercial development/shops	1
Parking	2
Pathways / walking tracks	5
Picnic facilities	10
Playground	1
Public swimming pool	-
Quiet/peaceful	4
Recreation area	1
Scenic/views	9
Sea horses – best site to find two particular species	1
Toilets	1
Trees and open space	6
Water and fresh air	1

Total: 70

8. Can you suggest any improvements that should be made to Clifton Gardens Reserve (you may select more than one)?

BBQ's (install)	4
Carpark (machines only take coins)	1
Coffee shop	1
Hand dryers in the toilets	1
Keep the same	9
More tables	1
Playground* (improved)	2
Shelter	6
Signs	1
Soap for toilets	1
No	9

Total: 36 (including
"No")

*Not generic, plastic equipment.

9. Are there any particular issues that should be addressed (you may select more than one)?

Anti-social behaviour	-
Better directional signs	1
Bike track for kids	1
Can feel vulnerable in winter when by one's self	1
Cleaner toilets	1
Create a marine reserve	1
Dogs	-
Hot water in showers	1
Less amateur fishing	1
Less boating	1
Lighting	-
Link between other foreshore paths	-
Litter in the bushland	1
Litter in the creek, and silted up	1
Litter in the water	1
Mooring/anchoring boats on sea grass	1
Playground and other elements should be unobtrusive	1
Security	-
Weeds in bushland	-
No	17
<i>Total: 30 (including "No")</i>	

10. Do you have any other comments about the Clifton Gardens Reserve?

None of the respondents made any further comments.



MOSMAN MUNICIPAL COUNCIL
CLIFTON GARDENS RESERVE QUESTIONNAIRE
SUMMARY OF RESPONSES

350 questionnaires were distributed and 36 responses were received

1. Do you use the Clifton Garden Reserve?

If yes, why do you use the Reserve?

Car Parking (2)

Close location to home (3)

Peaceful/natural setting (6)

Natural beauty (1)

Peaceful/natural setting (4)

Undeveloped naturalness (1)

Recreation (58)

Basketball (1)

Bird watching (1)

Fishing (1)

Jogging/Running (4)

Moor boat (2)

Nature walks (6)

Picnics (12)

Play equipment (4)

Relaxing (2)

Swimming (15)

Walk the dog (3) everyday (1)

Walking (6)

If no, why don't you use the Reserve?

Crowded on weekends, especially Sundays. Undesirable crowd (1)

2. What aspects of features of the Clifton Garden Reserve are important to you?

Access to Sydney Harbour (6)

Access to Chowder Bay (1)

Access to Maritime Headland (1)

Access to water (1)

Linkage paths along Harbour (3)

Clean and well managed (4)

Clean and tidy (1)

Cleanness of the water (2)

Well managed (1)

Not overcrowded (5)

Open Space (14)

Fresh air (1)

Grassed areas (1)

Off leash areas for the dogs (2)

Open unplanned Space (2)

Openness (2) for passive recreation (3)

Shark enclosure (1)

Tree cover over tables (1)

Views (1)

Peaceful (20)

Absence of shops (2)

Access to Maritime Headline (1)

Access to water (1)

Beach (4)

Place to observe nature (1)

Pool and Wharf (2)

Quiet, non-polluted area (3)

Relax (2)

Tranquillity and peaceful atmosphere (4)

Pier (2)

Safe (2)

Absence of hooligans (1)

Safe (1)

Shark net (1)

Trees and Gardens (6)

Birds (2)

Grass (1)

Preservation of natural flora and fauna (2)

Trees (1)

Variety of people on weekends (2)

Popular with a variety of people – fishermen, children, parents with ballgames... from a variety of ethnic and cultural groups (1)

Variety of people on the weekends (1)

3. Are there any issues that you think we should address in the Management Framework regarding the management of the Reserve?

Do not encourage more tourism (6)

Litter (12)

Fishing litter (3)

Picnic Rubbish/litter (2)

Rubbish/Litter dumping (7)

Maintenance/management (14)

Bush regeneration eg Block 5 Morella (1)

Cleaning of shark net (2)

Keep it neat and tidy, particularly around the toilet block (1)

Improve swimming facilities and keep them clean (1)

Maintenance of basketball nets (1)

Maintenance of Creek on north side needs cleaning (2), weed control (1)

Maintenance of stairs (1)
 Maintenance of stone wall (1)
 Maintenance of taps (1)
 Maintenance/management of lawn (1)
 Possible bush fire susceptibility (1)

Retain character and profile (1)

Retain the open space (3)

For future users (1)

Sexual activities in bush areas (1)

Vandalism (2)

Trees killed on South side (1)
 Noise of 'hot rod' cars at night (1)

How do you think these issues might be resolved?

Get unemployed youth involved in landscape construction and management (1)
 Continued consultation with community, with The Harbour Trust and National Parks (1)

4. Can you suggest any improvements that should be made to the Clifton Gardens?

Drainage (3)

Monitor possible raw sewage seepage from toilet system in storm events (1)
 Fix drainage around taps (2)

Employ a ranger (3)

Grade surface to remove different levelled areas (1)

Longer opening hours of toilets (1)

New or Improved Facilities (13)

More litter bins (2)
 Shade / Sheltered seatings (3)
 Shop (2) Restaurant (2)
 Toilets (2)

Update playground (2)

Parking (6)

Provide separate parking for residents and increase the cost of non-residents parking (1)

Reduce cost of parking (1)

Change pay system to an hourly rate (1)

Do not increase parking area (2)

Inconvenience of heavily parked streets in summer preferable to residential parking schemes (1)

Picnics (4)

BBQ facilities (1)

Picnics tables (3)

Plant more trees close to the car park like at Aston Park (1)

Reduce thick planting to avoid rubbish accumulation and unsavoury activities (1)

Replace exotics with native species (2)

Restrict Usage (9)

Ban ball games to stop interruption to picnic area (2)

Restrict fishing on jetty (4)

Restrict organised functions (3)

Retain the way it is (9)

Do not need a 'sweets or pie shop' (3)

It must not be developed (3)

Maintain status quo (1)

The minimum development the better (2)

Signage (3)

Increase litter signage (3)

Stop rubbish reaching ocean through creek (1)

5. Can you help us with the history of the Reserve (do you know any stories about important events, do you have any old photos)?

- ‘..impression of the circular swimming baths, the very high white tower...’

- Resident holds copies of Land Grants and old Certificates of Title as the land was distributed from the original Cliffe Estate; able to provide contact information to people with knowledge of the Army Submariners Base at the Northern end of Chowder Bay; has photos similar to photo used on leaflet in mailbox drop; Mitchell Library has a poster sized advertisement promoting the sale of land from the Clifton Gardens Estate.
- Refer to Gavin Souter, Phil Connane (residents of Mosman), Sydney Harbour Federation Trust information
- Author of Chowder Head Enigma (ref. P30 in the magazine Mosman 2088)
- Contact in QLD

6. Do you have any other comments about the Clifton Gardens Reserve?

- 'Keep everything as it is' (6)
- Prefer to see military facility of eastern end retain its informal nature (2)
- Too many tourists (1)
- Work undertaken in 1995 in relation to proposals should be considered (Ref 'Community News' Sept 1995) (1)
- 'Plant native trees at the back of the cleared lawn area to soften transition' (1)
- 'We have enjoyed observing the demographic changes of the visiting picnickers over the 20 years that we have been here. In the early eighties, the visitors were Greek (Greek music and barbeques); later they were Middle Eastern (Veiled women whom would go in the water fully dressed), now there are Island worshippers who harmonise wonderful Islander hymns and songs while the children enjoy themselves on the beach.'
- Keep open space, no commercial activity, play equipment should not be bright colours and new plants should be protected (2)
- 'Important part of daily routine', visits reserve twice a day with a local group of dog walkers
- 'Precious and unique blend of historic buildings, beach, bush and views – must be preserved'
- 'Bushland – important and must be maintained. Views – of Middle Head and the surrounding residential areas should be safeguarded. Houses from Cross St down the lowest levels of Clifton gardens residential area should be denied further opportunities to expose themselves by the removal of trees.'

ABR Bushland Regeneration Work Plan for Morella Road and Clifton Gardens Reserve

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8.1 AIMS OF THE LANDSCAPE MASTERPLAN

The landscape masterplan is a blueprint for the maintenance and management of Clifton Gardens Reserve in accordance with the management principles and policies identified in this Management Framework.

Most of these Principles and Policies basically aim at the preservation of the Reserve's current qualities and suggest improvement measures only at a small scale, in particular the overall setting and current use patterns are generally considered as qualities highly worth preserving. The beautiful setting of the site tends to distract from the fact that the Reserve's amenities, equipment and plantings are in urgent need of repair/replacement. This creates a chance for accordance with a forward looking landscape masterplan.

Accessibility and character of Mosman's harbour foreshore will continue to change and become more attractive for a wider range of people. A continuous walking track from Taronga Zoo/Bradley's Head to Balmoral via Middle Head is nearing completion. The reopened former military sites to the east of Clifton Gardens Reserve include the former Army school, which visually defines the Reserve strongly. It is highly likely that this site will be reused and that this will affect Clifton Gardens Reserve. It is important to retain and enhance the character of the Reserve, as a significant site in its own right within the sequence of open spaces along the Harbour foreshore.

One aspect that distinguishes Clifton Gardens Reserve from the other open spaces mentioned is its rich history as a recreational beach area. Currently, there are no apparent remnants of the impressive structures that once defined the site. The following elements are particularly relevant:

- the hotel on the spur above the site (which initiated development and gave the Reserve its name, also visually defining)
- the baths (most continuous and defining use and unique architectural form)
- the main pavilion (representing the variety of pavilions that have existed on the site, as a focal spot of the site, that is still in use as the main picnic area, its outline being reproduced by a grid of trees)

The landscape masterplan aims at an interpretation of these historical elements. The former buildings and uses will serve as a reference for necessary maintenance and management actions, supported by interpretive signage.

The second aspect is its proximity/easy accessibility from Mosman's residential areas, making it particularly important as a recreational space for the local population. The landscape masterplan aims to strengthen this role. Equitable access for the local population should be improved, and any maintenance and management of the site should reflect its role as a site for daily leisure. The quiet, protected character of the site makes it particularly suitable for target groups such as the elderly, families with young children and the disabled.

8.2 PROPOSED LANDSCAPE MASTERPLAN ACTIONS

Access

1. Construct foreshore walkway link

The aim is to provide a link between the foreshore track coming from Taronga Zoo to its continuation through the former Army School towards Middle Head. The link should at the same time provide wheelchair access from the carpark to the beach and wharf.

The landscape masterplan proposes a gravel pedestrian link, to be constructed adjacent to the seawall. Upgrading of an existing track through the National Park is also proposed to complete the connection from the former Army School to the Reserve.

Priority: High

This is a link of regional importance. It also extends the site by providing access to the viewpoints of the former Army School.

2. Realign maintenance track

To replace the current track, a reinforced lawn track is proposed along the edge of the site to provide vehicular access for maintenance of the Sewage Pumping Station No. 54, and also to provide dinghy access to the beach.

Priority: Medium

Boat trailer access is only of minor importance within the uses of the site.

3. Demolition - access

Demolition of parts of the existing pathways and paved areas in preparation/as a consequence of the suggested measures.

Interpretive and Park Elements

4. Interpretation of former Clifton Gardens Pavilion Site

Aim is an interpretation of the former Pavilion site on one of the focal points of the Reserve.

A lightweight pergola structure, that includes weatherproof roofs, provides a reference to the architecture of the original pavilion. Many of the bins, fountains etc that are currently scattered around the site could also be relocated to here, making them easier to find and integrated visually. The pavilion site should serve as a focal point for interpretive signage.

Priority: High

Redesign of the central picnic area becomes necessary with felling of the existing trees that currently provide shade and shelter.

5. Interpretation of former Clifton Gardens Hotel Site

A sequence of view platforms in the vicinity of the site of the former hotel includes interpretive signage. These could be a central element of the 'heritage walk' within the site. A roof structure reminiscent of the former hotel tower redefines the entry to the Reserve and serves as an additional hallmark.

The terraces also provide additional access from the bus stop and the existing view terrace to the main part of the Reserve.

Priority: Medium

6. Upgrade Activities Zone

The play and sports areas are concentrated in the north eastern corner of the site, putting them in view of the central picnic area, but well apart from the sheltered area in the SW of the site, which should be reserved for 'quiet' uses.

Elements include a turfed area for ball play, a hard court and playground equipment. It is intended that the play area be designed along a fairground theme to reflect the former pleasure garden functions of the Reserve. The future provision of shade structures to the playground area is proposed.

Beach front change cabins were a distinctive element in the historic layout of Clifton Gardens Reserve. The design of the playground areas, as shown on the landscape masterplan, is intended to reference the arrangement of the beach cabins as documented from the 1920's. The beach cabins could potentially be echoed in the configuration and design of play elements and other park furniture and be interpreted further as part of the interpretative signage (see Landscape Masterplan action no. I).

Priority: Medium

Implementation of this component of the landscape masterplan could occur gradually, as the necessity for renovation/maintenance and management arises.

7. Upgrade Reserve entry and sheltered SW corner

This area closest to the lower site entry should be maintained and managed for predominantly 'quiet' use, mainly by local residents. Especially in winter this is the favoured part of the site in terms of warmth and sunshine. The area also has the potential to incorporate unique features and materials, including public art. The planting at the base of the rock cliff should discourage access to the cliff.

The relocated amenities block (including showers and change rooms for the baths) is adjacent to the carpark, which is a more accessible and secure location than currently exists. The amenities block is to be designed according to the principles of water sensitive design.

Priority: High. Despite its potential, the area is currently in an unkempt state. It should be upgraded soon. Renovation/reorganisation of the amenities also seems unavoidable in the mid-term.

8. Upgrade Bathing enclosure and beach

The beach is important as the only readily accessible bathing area on the southern foreshore of Mosman. The baths have a rich history as one of the main attractions of the Reserve. As the area of the swimming enclosure is fairly restricted, there should be a divide between a shallow beach area and a deep water pool for swimming and diving. The circular outline of the deep-water pool refers to the original baths, the diving

platform relates to the former lighthouse structure.

Timber ramps with handrails provide a reference to the historic bathing pavilion and enable easy access for small children and the elderly to the beach.

Priority: Ramps to beach high, all others low
The ramps are necessary to make the beach more accessible for the desired target groups. The deep-water enclosure could become an attractive and defining element of the Reserve, but is not an essential.

9. (i) and (ii) Demolition - upgrade

Demolition of parts of the existing amenities and equipment areas and site preparation works a consequence of the suggested measures.

E. Entry signage

- Enhancement of the existing entry sign on top of site
- Replacement of signage on lower carpark entry
- Small scale signs on site entries of foreshore walk

Priority: Medium

I. Interpretive Signage - Site Heritage

The signage defines an informal trail that connects the points of heritage interest within the Reserve. Starting at the pavilion site as a focal point of the Reserve a sequence of signs leads to the wharf, the site of the former beach cabins and the heritage listed Sewage Station to the Former Army Maritime School. In the other direction there is a connection past the former pavilion sites to the view platform on the site of the former

hotel, which should become a second focal point of the interpretive signage.

The signs are to be designed with due regard to their impact on the open and relaxed character of the Reserve. They should be of a form and in locations to avoid visual clutter.

Priority: High. The heritage of the Reserve is little known to the general public and is currently not legible on site.

Planting

10. Turf replacement and irrigation (whole Reserve)

A complete replacement of the turfed areas in the Reserve would create the atmosphere of an urban park as opposed to the surrounding bushland. This is consistent with the site's history and its current uses.

Priority: Low

11. Tree Plantings

A large portion of the trees that currently define the Reserve and give shade and shelter have will be removed shortly, because of the problematic nature of their species. Replacements need to be made. The choice of feature trees for the turfed main area of the Reserve should reflect its history as a 19th century pleasure ground while avoiding problematic and weedy species.

- *Araucaria cunninghamii* and *Banksia integrifolia* to provide light shelter in the Activities Zone
- Additions to the native trees screening the carpark (*Melaleuca* sp.)

- Suitable large native trees along restored creek to stand out against the bushland backdrop (*Brachychiton acerifolius*, *Castanospermum australe*)
 - Small growing shade and flowering tree on Pavilion site (*Lagerstroemia* sp.)
 - Large feature tree (*Ficus rubiginosa*)
 - Row of shade trees in sheltered SW portion of site (*Cupaniopsis anacardifolia*)
 - Informal row of Port Jackson Figs (*Ficus rubiginosa*) to foreshore to complete indigenous riparian connection.
- creek line should be included in the restoration works, and be planted with locally indigenous riparian species.

Priority: Medium

Priority: High

12. Ornamental and screen plantings - upgrades and additions

- around the pavilion and former pavilion sites
- screening of amenities block with native ornamentals and feature plants

Priority: High

13. Bushland regeneration

Bushland regeneration measures according to existing plans on the rocky slopes and the hillside section of the Reserve. Adjustments should be made where necessary to preserve views across the Reserve from the former Hotel site.

Priority: High

14. Creek restoration

After removal of the senescent exotic trees adjacent to the creek, the creek line should be widened and restored according to riparian restoration principles. The areas between the maintenance track and the

The tables below outline a strategy for the implementation of the actions recommended in this Management Framework, and provide an ‘Opinion of Probable Cost’.

The ‘Responsibility’ column refers to the following:

- DLWC - Department of Land and Water Conservation
- EPD - Environment and Planning Department
- MAS - Manager Assets and Services
- MMC - Mosman Municipal Council
- MPA - Manager Property and Assets
- MPT - Manager Planning and Transport

MANAGEMENT ACTIONS

*Numbers refer to numbered actions in Section 7 (Management Policy) of the Management Framework.

DESIRED OUTCOME	ACTION NO.*	PRIORITY	OPINION OF PROBABLE COST	RESPONSIBILITY	PERFORMANCE TARGET
<ul style="list-style-type: none">To ensure that adequate levels of funding and cost recovery enable Council to meet the objectives of the Management Strategy within the stipulated timeframe and without unreasonable demand of Council funding.	1. Identify and pursue all avenues for funding for the development and management of the Reserve	High	N/A	EPD	<ul style="list-style-type: none">New income sources are identified.
<ul style="list-style-type: none">To ensure that adequate levels of funding and cost recovery enable Council to meet the objectives of the Management Strategy within the stipulated timeframe and without unreasonable demand of Council funding.	2. Negotiate an appropriate level of Council funding for maintenance and management of the Reserve in accordance with this Management Framework.	High	N/A	EPD	<ul style="list-style-type: none">Increased percentage in cost recoveryManagement and capital works costs adequately recognised in funding allocations by Council.
<ul style="list-style-type: none">To ensure that adequate levels of funding and cost recovery enable Council to meet the objectives of the Management Strategy within the stipulated timeframe and without placing unreasonable demand on Council funding.	3. Ensure that all revenue raised from “park and display” parking on the Reserve is allocated for management and improvements in the Reserve as required by the <i>Crown Lands Act 1989</i>	High	N/A	MMC & DLWC	<ul style="list-style-type: none">Management of the crown land in the Reserve is consistent with the statutory Principles for Management in the <i>Crown Lands Act 1989</i>.
<ul style="list-style-type: none">Retention of the existing landscape character and continued improvement in the quality of the landscape resulting in a unified and attractive setting for the range of recreational opportunities offered by Clifton Gardens Reserve.The broad views of Sydney Harbour are retained and preserved in the ongoing upgrade of the Reserve.Clifton Gardens Reserve is improved with regard to its amenity and function as a regional and local recreational resource while retaining its current open and relaxed character.The implementation of the Management Framework and masterplan results in improvements to the amenity, recreational and heritage values of Clifton Gardens Reserve without the loss of its inherent qualities and without significant increases in its level of use.	4. Ensure that development of the Reserve complies with all relevant legislation and controls, and the Management Framework	High	N/A	EPD	<ul style="list-style-type: none">Landscape improvements and general upgrades implemented in accordance with the masterplan.

DESIRED OUTCOME	ACTION NO.*	PRIORITY	OPINION OF PROBABLE COST	RESPONSIBILITY	PERFORMANCE TARGET
<ul style="list-style-type: none">The natural biodiversity of Clifton Gardens Reserve and its surrounding area is enhanced and maintained as a result of the implementation of this Management Framework and masterplan.	5. Investigate opportunities for partnerships with other agencies such as National Parks and Wildlife to address common management issues such as bush regeneration and dual stormwater quality/quantity control.	High	N/A	MAS	<ul style="list-style-type: none">The quality of bushland in Clifton Gardens Reserve is improved in the medium term and densities of indigenous material are raised to the levels indicated in the bush regeneration program prepared by ABR (see Appendix 3).
<ul style="list-style-type: none">Clifton Gardens Reserve is improved with regard to its amenity and function as a regional and local recreational resource while retaining its current open and relaxed character.To create a safe recreational environment for all users of Clifton Gardens Reserve and to minimise Council's exposure to accident claims.	6. Carry out arboricultural assessment of trees in Reserve and remove or make safe trees in poor condition.	High	N/A	MAS	<ul style="list-style-type: none">Tree management is carried out in accordance with best arboricultural practices.Clifton Gardens Reserve is considered a safe play environment for children and a safe public recreational area generally.
<ul style="list-style-type: none">To create a safe recreational environment for all users of Clifton Gardens Reserve and to minimise Council's exposure to accident claims.	7. Formulate and implement regular risk management safety checks within the Reserve	High	N/A	MAS	<ul style="list-style-type: none">An inspection safety checklist is formulated and a maintenance regime is implemented.Clifton Gardens Reserve is considered a safe play environment for children and a safe public recreational area generally.
<ul style="list-style-type: none">The key elements that relate to the cultural heritage value of the Reserve are identified in this Management Plan and preserved in the upgrade of the Reserve.	8. Investigate the possibility of listing the Reserve as a Item of State Heritage Significance	Medium	N/A	MPT	<ul style="list-style-type: none">The possibility of the listing the Reserve as an Item of State Heritage Significance is acted upon.
<ul style="list-style-type: none">Retention of the existing landscape character and continued improvement in the quality of the landscape resulting in a unified and attractive setting for the range of recreational opportunities offered by Clifton Gardens Reserve.The broad views of Sydney Harbour are retained and preserved in the ongoing upgrade of the Reserve.	9. Design development, documentation and construction in accordance with a staged process corresponding to available funding.	High	Stage One: \$45,000 Stage Two: \$25,000 Stage Three: \$30,000	MAS	<ul style="list-style-type: none">Landscape improvements are implemented in accordance with the masterplan.
<ul style="list-style-type: none">The heritage values of the Reserve are acknowledged and interpreted as a key component of its upgrade.	10. Carry out an interpretative study to identify appropriate methods and materials for interpretation of the heritage values of the reserve	High	\$15,000	MPT	<ul style="list-style-type: none">An Interpretive Study is carried out to guide the conservation and interpretation of the heritage values of the Reserve.
<ul style="list-style-type: none">The natural biodiversity of Clifton Gardens Reserve and its surrounding area is enhanced and maintained as a result of the implementation of this Management Framework and masterplan.	11. Carry out the program of bush regeneration works recommended in the Management Framework	Medium	\$250,000	MAS	<ul style="list-style-type: none">The quality of bushland in Clifton Gardens Reserve is improved in the medium term and densities of indigenous material are raised to the levels indicated in the bush regeneration program prepared by ABR (see Appendix 3).Works in the upgrade of Clifton Gardens Reserve are executed with measures in place to protect the quality of bushland in the adjoining Sydney Harbour National ParkWorks in the upgrade of Clifton Gardens Reserve are executed with all measures in place to protect water quality, including fish habitat and fish passage, in Chowder Bay and Sydney Harbour generally.

9. IMPLEMENTATION PLAN

DESIRED OUTCOME	ACTION NO.*	PRIORITY	OPINION OF PROBABLE COST	RESPONSIBILITY	PERFORMANCE TARGET
<ul style="list-style-type: none">The implementation of the Management Framework and masterplan results in improvements to the amenity, recreational and heritage values of Clifton Gardens Reserve without the loss of its inherent qualities and without significant increases in its level of use.Safety issues are addressed with regard to traffic and pedestrian conflict areas.	12. Conduct a traffic survey during a peak use period for the Reserve and implement traffic management and pedestrian safety measures arising	Medium	\$10,000	MPT	<ul style="list-style-type: none">Use levels of the Reserve do not place significant pressure on neighbourhood traffic conditions.Pedestrian and vehicular safety are addressed in the upgrade of the Reserve.Speed restriction signage is installed at appropriate locations on the vehicular accessway in accordance with the requirements of Council's traffic engineer.
<ul style="list-style-type: none">The implementation of the Management Framework and masterplan results in improvements to the amenity, recreational and heritage values of Clifton Gardens Reserve without the loss of its inherent qualities and without significant increases in its level of use.	13. Investigate adequacy of public transport services and viability of reinstatement of a public ferry service to Clifton Gardens Wharf.	Medium	N/A	MPT	<ul style="list-style-type: none">Public transport services are adequate to serve the needs of users of Clifton Gardens Reserve.The viability of reinstatement of a public ferry service to the Reserve is investigated.
<ul style="list-style-type: none">A well-maintained community recreational resource through increased efficiency of maintenance operations particularly in regard to trees, bushland, lawn areas, furniture, fences, signage, play equipment, litter control and toilet facilities.	14. Prepare and implement an annual maintenance schedule for the Reserve.	High	N/A	MAS	<ul style="list-style-type: none">Increased quality of recreational services are offered by the Reserve.Reserve users express satisfaction at level of maintenance of Reserve facilities.
<ul style="list-style-type: none">That the portion of Clifton Gardens Reserve that is Crown Land be managed by Mosman Council in a manner consistent with the statutory Principles for Management of Crown Land in the Crown Lands Act, 1989.	15. Ensure consistency of management and maintenance of Crown Lands within Clifton Gardens Reserve with the statutory Principles for Crown Lands Management.	Medium	N/A	MAS & MPT & DLWC	<ul style="list-style-type: none">A mechanism in Council's development assessment and lease / licence application system is included to test any development application or application for lease or licence over the Crown Lands within the Clifton Gardens Reserve for consistency with the statutory Principles for Crown Lands Management.
<ul style="list-style-type: none">The objectives in Mosman Council's generic Plans of Management for land categorised as Park (2001a) and Natural Areas (Bushland) (2001b) are achieved for the Community Land so classified within Clifton Gardens Reserve.	16. Ensure consistency of management and maintenance within Clifton Gardens Reserve with Mosman Municipal Council's generic Plan of Management for land categorised as Park and Natural Areas (Bushland).	High	N/A	MAS & MPT	<ul style="list-style-type: none">Report to Council, in accordance with the requirements of the Generic Plans of Management.

LANDSCAPE MASTERPLAN STAGE ONE

*Numbers refer to numbered actions in Section 7 (Management Policy) of the Management Framework

**Unless otherwise stated, the actions apply to the entire Reserve

ACCESS ACTIONS					
DESIRED OUTCOME	ACTION NO.*	PRIORITY	RESPONSIBILITY	OPINION OF PROBABLE COST	PERFORMANCE TARGET
<ul style="list-style-type: none">Access to the regional foreshore walking track is improved in the upgrade of the Reserve as indicated in the masterplan.	1. Construct foreshore walkway link in decomposed granite gravel or similar	High	MPA	\$50,000	<ul style="list-style-type: none">All facilities within the Reserve are accessible within the boundaries of all relevant planning controls.
<ul style="list-style-type: none">Access to the regional foreshore walking track is improved in the upgrade of the Reserve as indicated in the masterplan.	2. Realign maintenance track	Medium	MPA	\$85,000	<ul style="list-style-type: none">All facilities within the Reserve are accessible within the boundaries of all relevant planning controls.
<ul style="list-style-type: none">Access to the regional foreshore walking track is improved in the upgrade of the Reserve as indicated in the masterplan.	3. Demolition – access	High	MPA	\$20,000	<ul style="list-style-type: none">All facilities within the Reserve are accessible within the boundaries of all relevant planning controls.

INTERPRETIVE AND PARK ELEMENTS ACTIONS					
DESIRED OUTCOME	ACTION NO.	PRIORITY	RESPONSIBILITY	OPINION OF PROBABLE COST	PERFORMANCE TARGET
<ul style="list-style-type: none">The key elements that relate to the cultural heritage value of the Reserve are identified in this Management Plan and preserved in the upgrade of the Reserve.Access for all is a basis for all improvements to the Reserve.	4. (i) Interpretation of former Clifton Gardens Pavilion Site and (ii) relocate Amenities	High	MAS, MPT & MPA	(i): \$165,000 (ii): \$80,000	<ul style="list-style-type: none">The heritage values of Clifton Gardens Reserve are conserved and interpreted in its upgrade.All facilities within the Reserve are accessible within the boundaries of all relevant planning controls.
<ul style="list-style-type: none">The key elements that relate to the cultural heritage value of the Reserve are identified in this Management Plan and preserved in the upgrade of the Reserve.Clifton Gardens Reserve is improved with regard to its amenity and function as a regional and local recreational resource while retaining its current open and relaxed character.	9.(i) Demolition – upgrade (removal of existing elements at the Pavilion site and site preparation)	N/A	MAS, MPT & MPA	\$30,000	<ul style="list-style-type: none">The heritage values of Clifton Gardens Reserve are conserved and interpreted in its upgrade.Landscape improvements and general upgrades implemented in accordance with the masterplan.

PLANTING ACTIONS					
DESIRED OUTCOME	ACTION NO.	PRIORITY	RESPONSIBILITY	OPINION OF PROBABLE COST	PERFORMANCE TARGET
<ul style="list-style-type: none">Clifton Gardens Reserve is improved with regard to its amenity and function as a regional and local recreational resource while retaining its current open and relaxed character.	13. Tree plantings**	High	MAS	\$100,000	<ul style="list-style-type: none">Landscape improvements and general upgrades are implemented in accordance with the masterplan.
<ul style="list-style-type: none">The natural biodiversity of Clifton Gardens Reserve and its surrounding area is enhanced and maintained as a result of the implementation of this Management Framework and masterplan.	15. Bushland regeneration	N/A	MAS	-	<ul style="list-style-type: none">The quality of bushland in Clifton Gardens Reserve is improved in the medium term and densities of indigenous material are raised to the levels indicated in the bush regeneration program prepared by ABR (see Appendix 3).Works in the upgrade of Clifton Gardens Reserve are executed with measures in place to protect the quality of bushland in the adjoining Sydney Harbour National ParkWorks in the upgrade of Clifton Gardens Reserve are executed with all measures in place to protect water quality, including fish habitat and fish passage, in Chowder Bay and Sydney Harbour generally.

TOTAL STAGE ONE \$530,000

LANDSCAPE MASTERPLAN STAGE TWO

*Numbers refer to numbered actions in Section 7 (Management Policy) of the Management Framework
**Unless otherwise stated, the actions apply to the entire Reserve

INTERPRETIVE AND PARK ELEMENTS ACTIONS					
DESIRED OUTCOME	ACTION NO.	PRIORITY	RESPONSIBILITY	OPINION OF PROBABLE COST	PERFORMANCE TARGET
<ul style="list-style-type: none">The key elements that relate to the cultural heritage value of the Reserve are identified in this Management Plan and preserved in the upgrade of the Reserve.	5.(i) Install viewing platform and interpretative structure at the former Clifton Gardens Hotel Site	Medium	EPD	\$50,000	<ul style="list-style-type: none">The heritage values of Clifton Gardens Reserve are conserved and interpreted in its upgrade.
<ul style="list-style-type: none">The key elements that relate to the cultural heritage value of the Reserve are identified in this Management Plan and preserved in the upgrade of the Reserve.	5.(ii) Install stairs between the viewing platform and the carpark	Low	EPD	\$105,000	<ul style="list-style-type: none">The heritage values of Clifton Gardens Reserve are conserved and interpreted in its upgrade.
<ul style="list-style-type: none">Clifton Gardens Reserve is improved with regard to its amenity and function as a regional and local recreational resource while retaining its current open and relaxed character.	6. Upgrade Activities Zone	Medium	MAS	\$70,000	<ul style="list-style-type: none">Landscape improvements and general upgrades implemented in accordance with the masterplan.
<ul style="list-style-type: none">Clifton Gardens Reserve is improved with regard to its amenity and function as a regional and local recreational resource while retaining its current open and relaxed character.	7. Upgrade Reserve entry and the sheltered SW corner	Medium	MAS	\$60,000	<ul style="list-style-type: none">Landscape improvements and general upgrades implemented in accordance with the masterplan.
<ul style="list-style-type: none">Clifton Gardens Reserve is improved with regard to its amenity and function as a regional and local recreational resource while retaining its current open and relaxed character.	9. (ii) Demolition – Upgrade (removal of existing Amenities and site preparation)	N/A	MAS	\$20,000	<ul style="list-style-type: none">Landscape improvements and general upgrades implemented in accordance with the masterplan.

PLANTING ACTIONS					
DESIRED OUTCOME	ACTION NO.	PRIORITY	RESPONSIBILITY	OPINION OF PROBABLE COST	PERFORMANCE TARGET
<ul style="list-style-type: none">Clifton Gardens Reserve is improved with regard to its amenity and function as a regional and local recreational resource while retaining its current open and relaxed character.	14. Ornamental and screen plantings (around the proposed Pavilion, the former pavilion sites and the Amenities)	Medium	MPA	\$25,000	<ul style="list-style-type: none">Landscape improvements and general upgrades implemented in accordance with the masterplan.

SIGNAGE ACTIONS					
DESIRED OUTCOME	ACTION NO.	PRIORITY	RESPONSIBILITY	OPINION OF PROBABLE COST	PERFORMANCE TARGET
<ul style="list-style-type: none">Clifton Gardens Reserve is improved with regard to its amenity and function as a regional and local recreational resource while retaining its current open and relaxed character.	E. Entry signage	Medium	MAS	\$10,000	<ul style="list-style-type: none">The heritage values of Clifton Gardens Reserve are conserved and interpreted in its upgrade.
<ul style="list-style-type: none">The key elements that relate to the cultural heritage value of the Reserve are identified in this Management Plan and preserved in the upgrade of the Reserve.	I. Interpretive signage**	Medium	MPT & MAS	\$45,000	<ul style="list-style-type: none">The heritage values of Clifton Gardens Reserve are conserved and interpreted in its upgrade.

TOTAL STAGE TWO \$385,000

LANDSCAPE MASTERPLAN STAGE THREE

*Numbers refer to numbered actions in Section 7 (Management Policy) of the Management Framework
**Unless otherwise stated, the actions apply to the entire Reserve

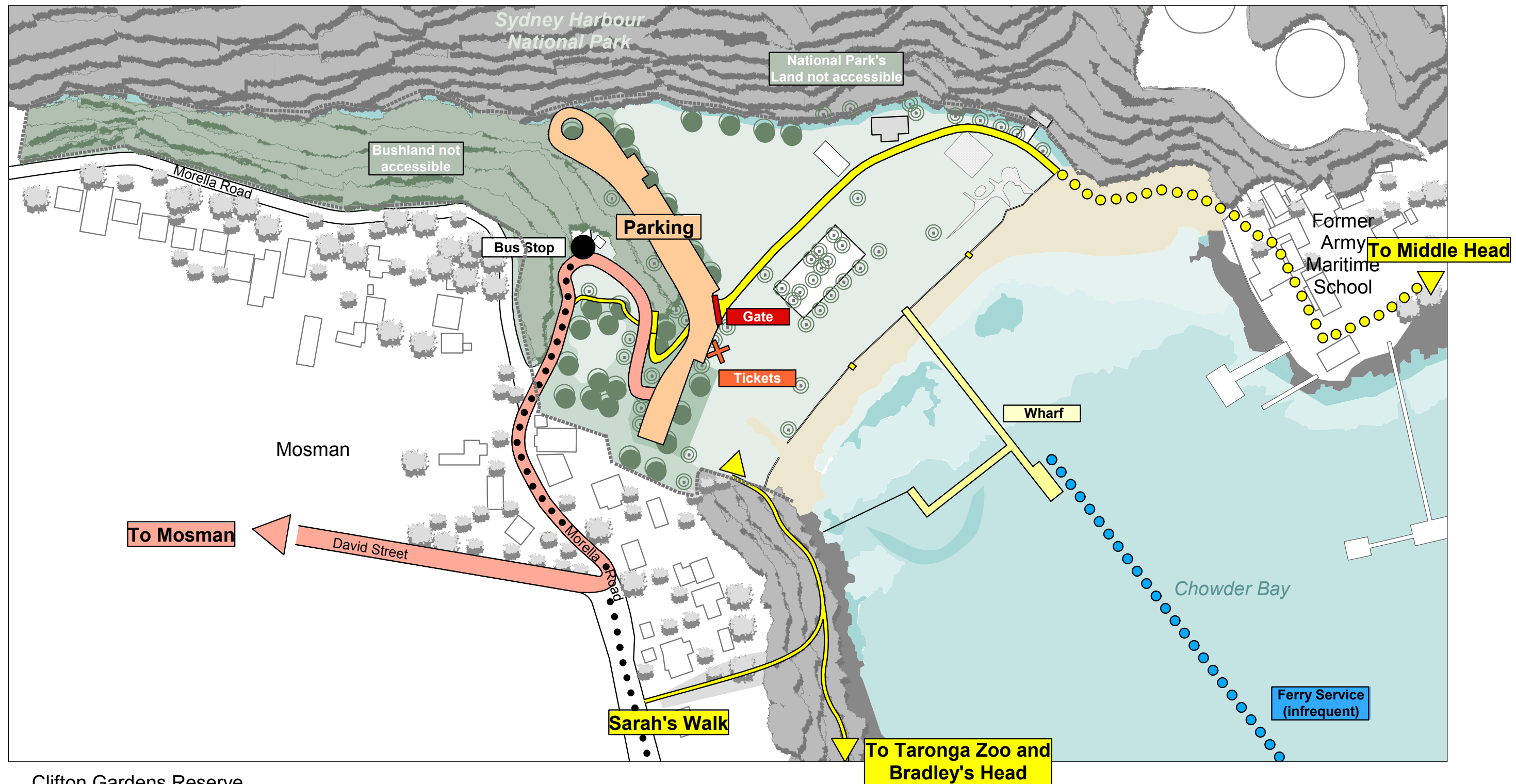
INTERPRETIVE AND PARK ELEMENTS ACTIONS					
DESIRED OUTCOME	ACTION NO.	PRIORITY	RESPONSIBILITY	OPINION OF PROBABLE COST	PERFORMANCE TARGET
<ul style="list-style-type: none">The key elements that relate to the cultural heritage value of the Reserve are identified in this Management Plan and preserved in the upgrade of the Reserve.	8. Upgrade swimming enclosure and beach	Low	MAS & MPA	\$445,000	<ul style="list-style-type: none">The heritage values of Clifton Gardens Reserve are conserved and interpreted in its upgrade.Landscape improvements and general upgrades implemented in accordance with the masterplan.

PLANTING ACTIONS					
DESIRED OUTCOME	ACTION NO.	PRIORITY	RESPONSIBILITY	OPINION OF PROBABLE COST	PERFORMANCE TARGET
<ul style="list-style-type: none">A well-maintained community recreational resource through increased efficiency of maintenance operations particularly in regard to trees, bushland, lawn areas, furniture, fences, signage, play equipment, litter control and toilet facilities.	12. (i) Turf replacement and (ii) turf irrigation (whole Reserve)	Medium	MAS	(i): \$160,000 (ii): \$70,000	<ul style="list-style-type: none">Increased quality of recreational services offered by the Reserve;Reserve users express satisfaction at level of maintenance of Reserve facilities.

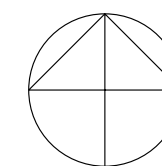
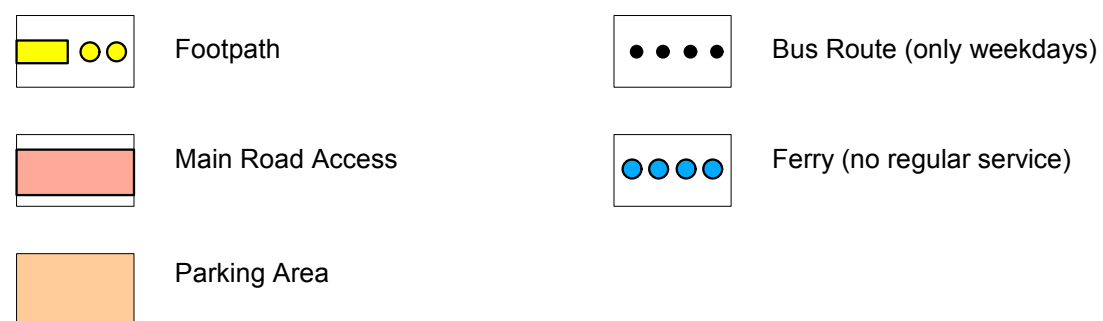
PLANTING ACTIONS					
DESIRED OUTCOME	ACTION NO.	PRIORITY	RESPONSIBILITY	OPINION OF PROBABLE COST	PERFORMANCE TARGET
<ul style="list-style-type: none">The natural biodiversity of Clifton Gardens Reserve and its surrounding area is enhanced and maintained as a result of the implementation of this Management Framework and masterplan.	16. Creek restoration	Medium	MAS	\$50,000	<ul style="list-style-type: none">Tree management carried out in accordance with best arboricultural practicesThe quality of bushland in Clifton Gardens Reserve is improved in the medium term and densities of indigenous material are raised to the levels indicated in the bush regeneration program prepared by ABR (see Appendix 3).Works in the upgrade of Clifton Gardens Reserve are executed with measures in place to protect the quality of bushland in the adjoining Sydney Harbour National ParkWorks in the upgrade of Clifton Gardens Reserve are executed with all measures in place to protect water quality, including fish habitat and fish passage, in Chowder Bay and Sydney Harbour generally.

TOTAL STAGE THREE \$725,000
GRAND TOTAL (ALL STAGES) \$1,640,000

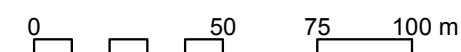
Disclaimer:
This document is not a Bill of Quantities and as such all quantities, dimensions, areas and costs should be verified by a Quantity Surveyor.



Clifton Gardens Reserve CIRCULATION AND ACCESS



MGA NORTH



PSB

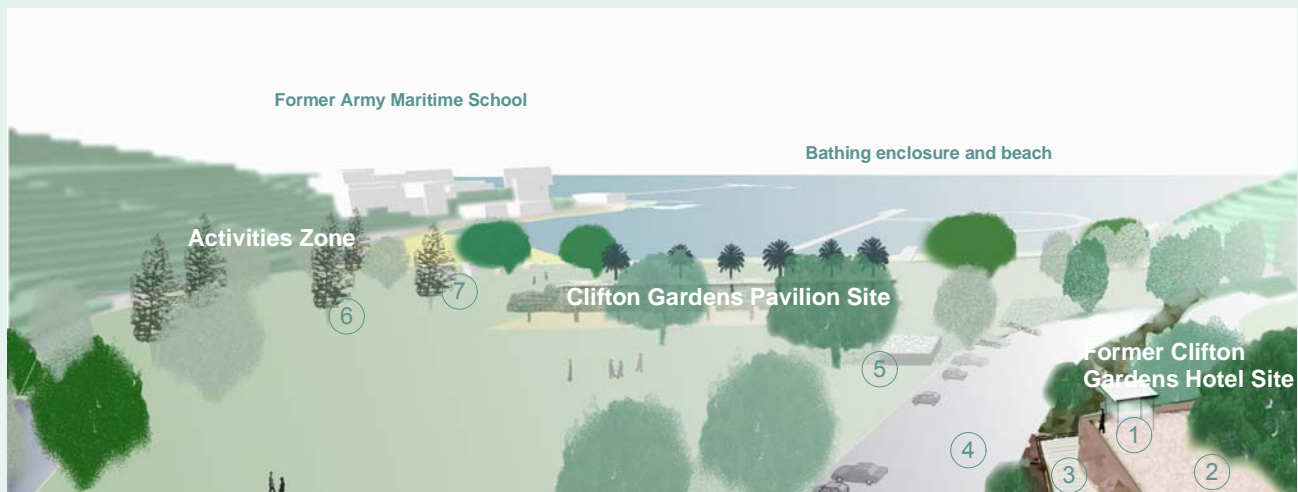
Pittendigh Shinkfield Bruce Pty Ltd ACN 057 578 980
360 Pacific Highway Crows Nest NSW 2065
Phone 02 9906 4500 Fax 02 9906 4479
Email psb@psb.com.au

Project N° : 02797

Date : 18.03.03

Scale : 1:2.000 @ A3

Drawing N° : L02



VIEW FROM FORMER HOTEL SITE

Former Clifton Gardens Hotel Site

- | | | |
|---|-----------------------|--|
| ① Shelter structure with interpretive signs and historic photographs | ④ Carpark | ⑥ Hardcourt |
| ② Upgraded existing viewing platform | ⑤ New amenities block | ⑦ Play equipment and interpretive structures |
| ③ Timber decks and stairs provide access between upper and lower park | | |



AERIAL VIEW FROM HARBOUR

Bathing enclosure and beach

- ① Deep water pool
- ② Timber ramp to beach
- ③ Grapel pathway adjacent to seawall
- ④ Port Jackson Fig

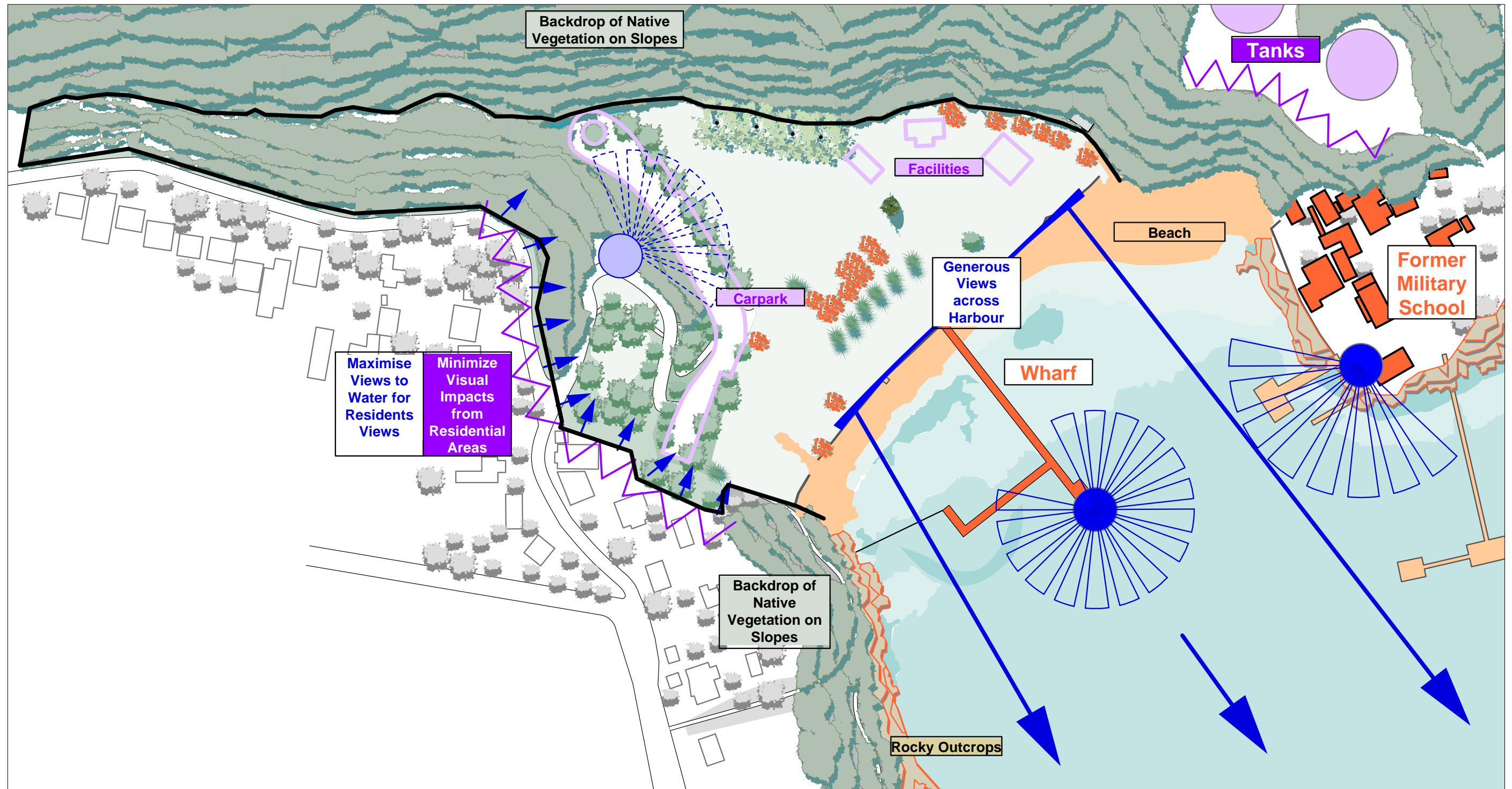
Clifton Gardens Pavilion Site

- ⑤ Picnic Benches
- ⑥ Feature Planting
- ⑦ Shade Trees
- ⑧ Light timber Pergola (2.5 m high)

- ⑨ Interpretive signage point
- ⑩ Playground
- ⑪ Creekline

Former Clifton Gardens Hotel Site

- ⑫ Upgraded existing viewing platform
- ⑬ Timber platforms and steps
- ⑭ Carpark

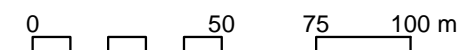
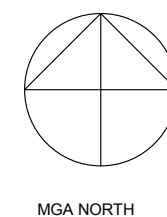


Clifton Gardens Reserve VIEWS AND VISUAL QUALITY

- Visually defining Buildings/Elements
- Backdrop of Native Vegetation on Slopes
- Rocky Outcrops

- Visually defining Trees
 - Poplar
 - Norfolk Pine
 - Coral Bean Tree
 - Phoenix Palm
- Elements with potentially negative visual Impact
- Maintain/Provide Screen

- Important Viewpoint
- Former Viewpoint with obstructed Views
- View Direction



PSB

Pittendigh Shinkfield Bruce Pty Ltd ACN 057 578 980
360 Pacific Highway Crows Nest NSW 2065
Phone 02 9906 4500 Fax 02 9906 4479
Email psb@psb.com.au

Project N° : 02797

Date : 18.03.03

Scale : 1:2,000 @ A3

Drawing N° : L03



The history of the site is interpreted in a series of 'stations' positioned across the site. Historic photographs form a basis for communicating local history.

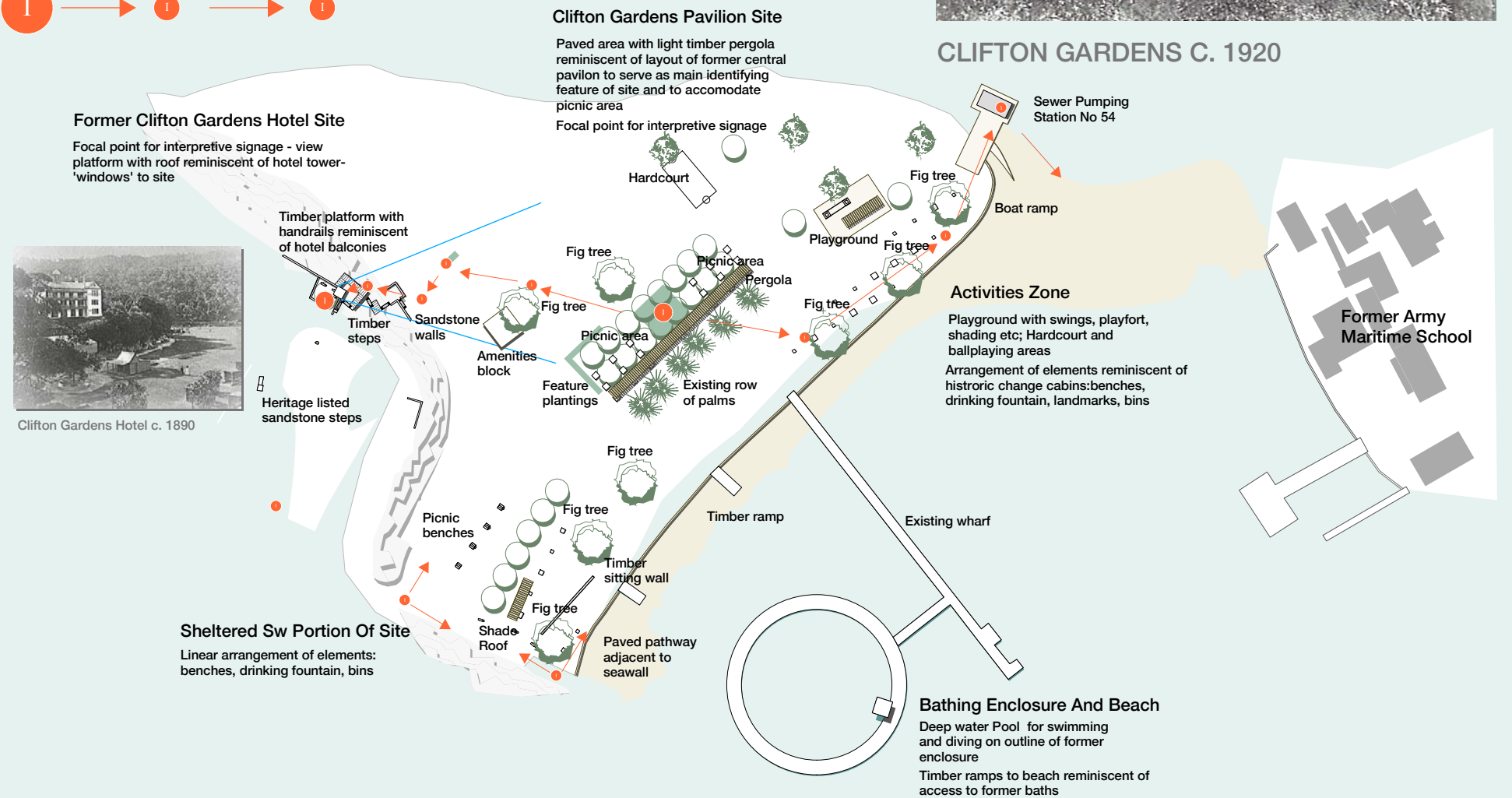
INTERPRETIVE ELEMENTS



CLIFTON GARDENS C. 1920



AERIAL VIEW FROM HARBOUR



Rock outcrop



Native trees



Timber handrails



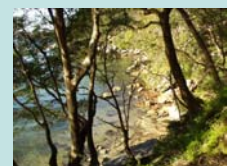
Playground



Sandstone Seawall



Feature Plantings



Bushland

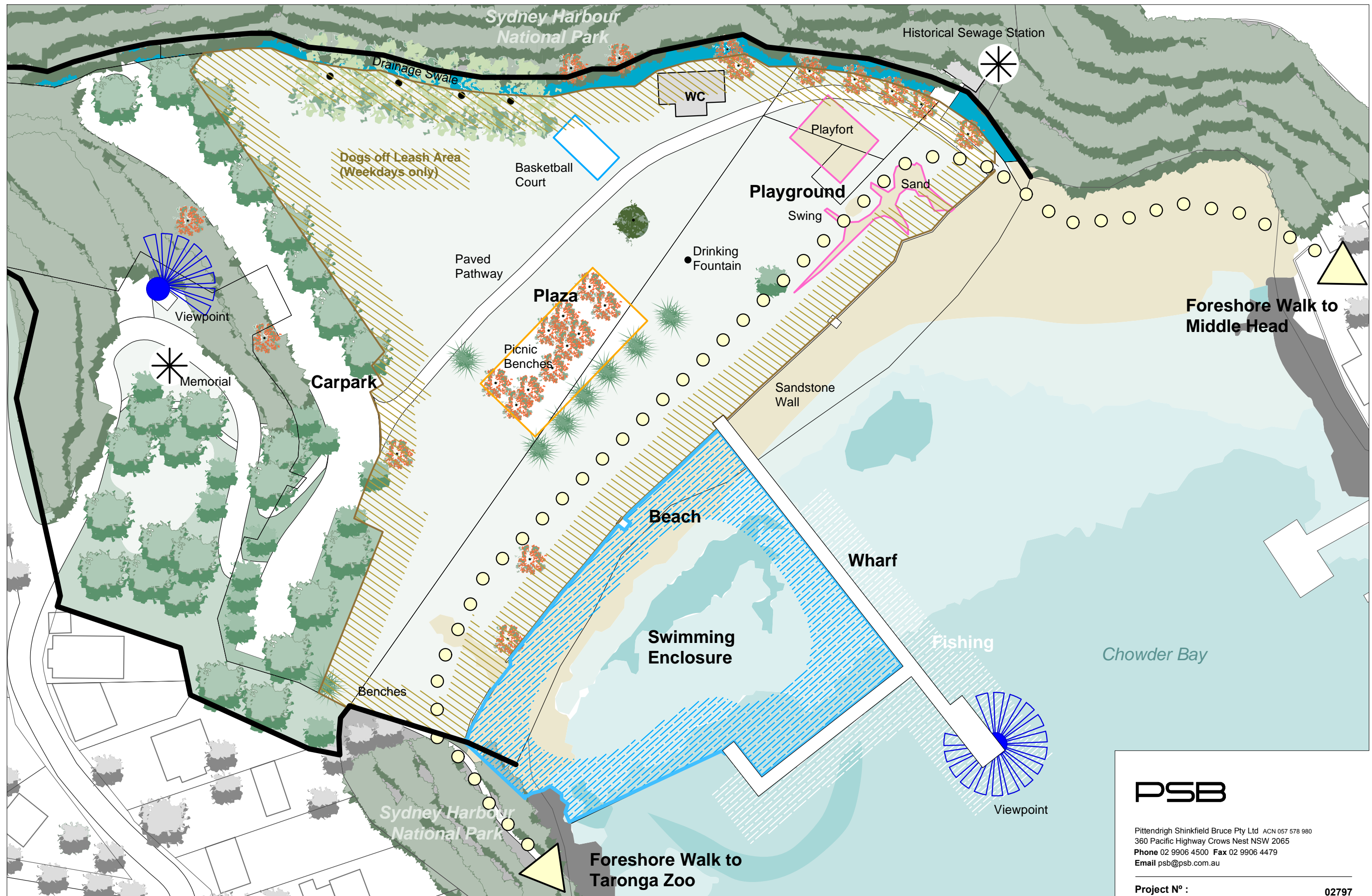
MATERIALS & ELEMENTS

ELEMENTS AND SIGNAGE - KEYPLAN

18.03.03

SK02

PSB



Clifton Gardens Reserve
EXISTING RECREATIONAL ELEMENTS



0 20 30 40 50 m

PSB

Pittendigh Shinkfield Bruce Pty Ltd ACN 057 578 980
360 Pacific Highway Crows Nest NSW 2065
Phone 02 9906 4500 Fax 02 9906 4479
Email psb@psb.com.au

Project N° : 02797

Date : 18.03.03

Scale : 1:1,000 @ A3

Drawing N° : L04

CLIFTON GARDENS RESERVE

LANDSCAPE MASTERPLAN



1:1000

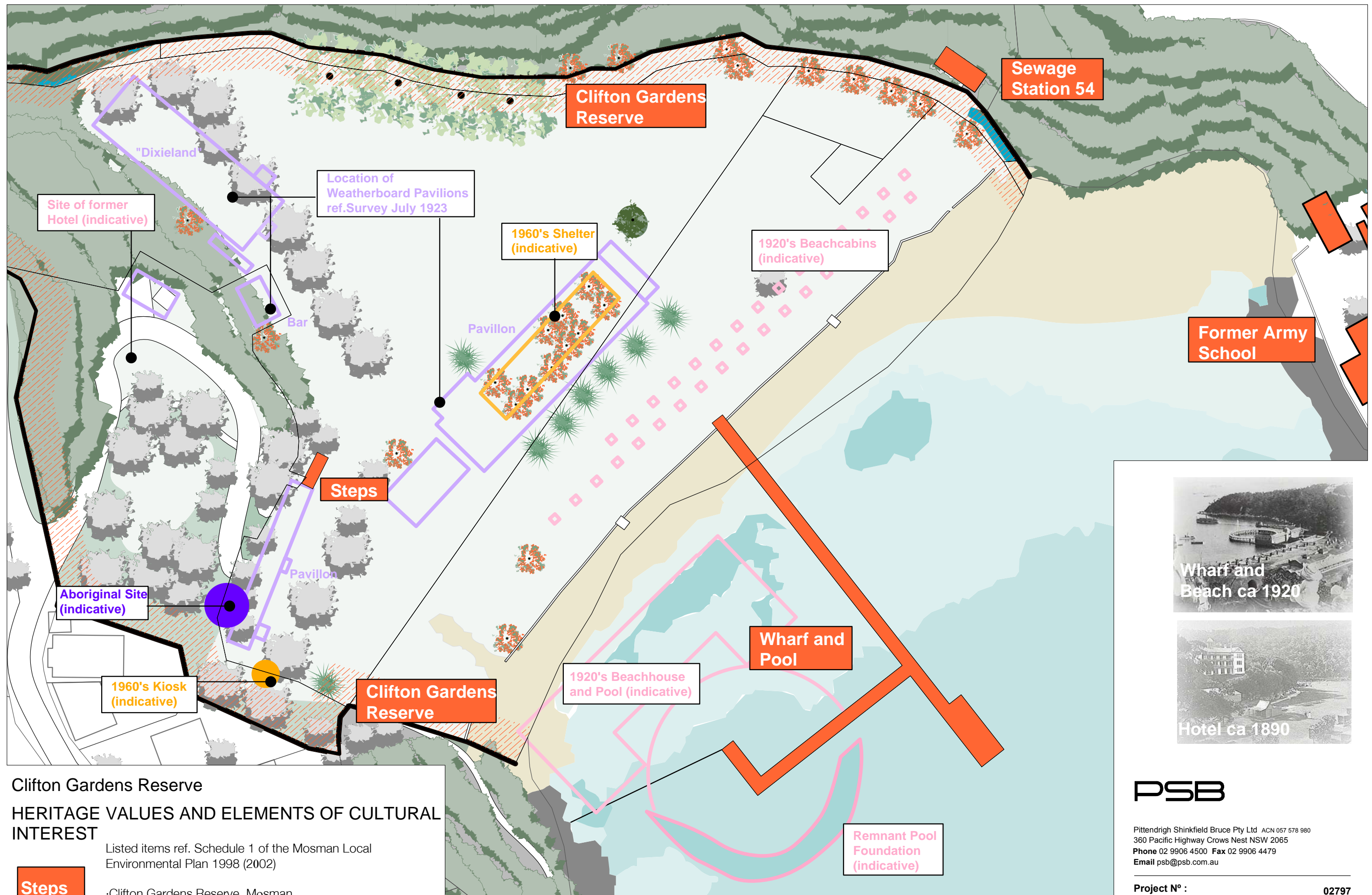
0 25 50 m



18.03.03

SK01

PSB



Clifton Gardens Reserve

HERITAGE VALUES AND ELEMENTS OF CULTURAL INTEREST

Listed items ref. Schedule 1 of the Mosman Local Environmental Plan 1998 (2002)

Steps

- Clifton Gardens Reserve, Mosman
- Steps to Clifton Gardens Reserve, Morella Road
- Wharf and Pool in Clifton Gardens
- Sewage Pumping Station No 54

PSB

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Summary of Submissions

Clifton Gardens Reserve Management Framework

Summary of Issues Raised and Number of Mentions in the Submission:

Built Form

Foreshore Access & Links:

Paths - 8

Water - 5

Vehicles - 6

Public Transport - 2

Ramps – 3

Furniture – 7

Activities Area – 6

Visual Impacts – 5

Amenities Block – 4

Swimming Enclosure – 4

Pavilion Site – 2

Seawall – 2

Signage – 2

Heritage Sites – 2

Natural Form

Revegetation

Weeds & Regen – 6

Trees – 6

Foreshore – 3

Turf – 1

Stormwater Control – 4

Habitats – 3

Pests – 2

Planning Context

Consultation – 8

Permits/Restrictions – 3

Performance Targets – 2

Maps/Plans - 2

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
1. Informal Quality Supports retaining the informal quality of the Reserve.	1 (most of the 18 submissions in implicit agreement)	Sydney Harbour Federation Trust	Noted	No action required.
2. Formal Elements: Some elements “at odds” with #1: <ul style="list-style-type: none"> Banded turf pattern Path along seawall (see #57) Timber sitting wall (see #51) Pergola at former pavilion site Play equipment sited on old change cabin area The more obtrusive location of amenities block (see #48) Deep water pool impacting on marine ecology Agrees with all of resident’s issues regarding playground. 	1 (most of the submissions critical of the Master Plan are implicitly based upon perceived departures from the Reserves “informal quality”)	Sydney Harbour Federation Trust	Principle Three of the Management Policy (p52) acts to ensure that any new structures within the Reserve are of an appropriate scale, materials and finish, in keeping with the overall principle that natural elements should be dominant in views to, from and across the Reserve. <ul style="list-style-type: none"> Banded turf pattern – it is acknowledged that the turf pattern may be difficult to maintain as a permanent element. The seawall path is to be of low visual impact. It should be constructed of a “soft” material such as decomposed granite gravel. Pergola at former pavilion site - Concerns were expressed with regard to the impact of the pergola as a built element. The pergola should be of lightweight construction and should be 	<ul style="list-style-type: none"> Delete the banded turf pattern from the masterplan and Management Framework. Ensure the seawall path is constructed in a low-key fashion using soft, low-impact materials such as decomposed granite gravel or similar. Retain the pergola in its present form subject to detailed design. Relocate the Amenities block further to the north-west, out of any direct line of view to the Harbour.

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			<p>of minimal height within relevant building controls. It will act as a means of definition of the extent of the old pavilion, and is considered on that basis to be an appropriate structure for the interpretation of the heritage values of the Reserve. It will also provide much needed shade in one of the more popular parts of the Reserve.</p> <ul style="list-style-type: none"> • The proposed relocation of the Amenities block is intended to make it more accessible to the designated swimming enclosure, so that it can function more effectively as a change room and general amenities facility and be closer to the centre of activity of the Reserve. Concerns have been raised in a number of submissions regarding the visual impact of the facility in its proposed location and the potential to attract undesirable activity closer to the activity centre of the Reserve. In this latter regard it is considered that location of the facility in a more public and accessible location will promote passive surveillance and discourage undesirable activity. The issue of the visual impact is accepted as a possible 	

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			detractor.. As a compromise, it is recommended that the amenities block be relocated adjacent to the carpark but further to the northwest, where it would not be in a line of view to the Harbour.	
<p>3. Foreshore access and links (PATHS)</p> <p>a). <i>Cycle route</i> connections between Morella Road and Chowder Bay Road should be investigated.</p> <p>b). <i>Cycle routes</i> should be indicated on the Landscape Masterplan.</p>	1	PlanningNSW	<p>The topography between Morella Road and Chowder Bay Road would make cycle access between these two points unfeasible. A route between Rawson Park and Georges Heights could provide a more suitable route.</p> <p>For the above reason, it is not considered to be appropriate to indicate cycle routes on the Landscape Masterplan.</p> <p>Consultation is recommended with Planning NSW, especially with reference to its proposed <i>Draft Integrated Land and Water Access Plan</i>.</p>	<p>a).Does not warrant amendment of the Framework.</p> <p>b).Investigate the feasibility of providing a cycle route elsewhere (eg. between Rawson Park and Georges Heights).</p>
<p>4. Foreshore access and links (PATHS)</p> <p>The realignment on the <i>maintenance track</i> could integrate with the NSW Planning proposed cycleway.</p>	1	Mosman Parks & Bushland Association	Consultation is recommended with Planning NSW, especially with reference to its proposed <i>Draft Integrated Land and Water Access Plan</i> .	Does not warrant amendment of the Framework.
<p>5. Foreshore access and links (PATHS)</p> <ul style="list-style-type: none"> The proposed <i>boardwalk</i> across the 	6	PlanningNSW Sydney	An alternative link involving upgrading of an existing bush track leadig from the sewage	Landscape Master Plan altered to reflect new link.

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<p>eastern end of the beach should be deleted so that the natural rock and sand features along this area remain undisturbed</p> <ul style="list-style-type: none"> Sydney Harbour Federation Trust should be consulted to identify alternative access to the Trust's site at <i>Chowder Bay</i>. The SYDNEY HARBOUR FEDERATION TRUST is concerned about the impact of the path on the Creek, rocks and cliff edge. 		<p>Harbour Federation Trust</p> <p>Foreshores & Waterways Planning Development Advisory Committee</p> <p>Waterways Authority</p> <p>Residents</p>	<p>pumping station to the upper (western) edge of the Maritime School is now recommended. It should be noted that this will not be accessible for disabled persons.</p>	
<p>6. Foreshore access and links (PATHS)</p> <p>A track through the bush with a pedestrian bridge across the creek further upstream would be more appropriate than the proposed <i>boardwalk</i>. This option is endorsed by Sydney Harbour Federation Trust.</p>	2	Resident / Sydney Harbour Federation Trust.	As above	As above
<p>7. Foreshore access and links (PATHS)</p> <p>The existing <i>bush track</i> between the Reserve and the Trust's land should serve as the link between these two sites</p>	2	Residents	Noted	Master Plan to be amended.
<p>8. Foreshore access and links (PATHS)</p> <p>The <i>maintenance track</i> should not be realigned;</p>	1	Resident	Was realigned to maximise use of the open space.	No amendment to the exhibited plan.

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it serves as an unofficial dividing line between the picnic areas and play areas				
<p>9. Foreshore access and links (PATHS) The <i>foreshore walkway link</i> along the water's edge is considered to be:-</p> <ul style="list-style-type: none"> a) unnecessary; a ramp could provide disabled access to the pool. b) Better replaced by wheelchair access path eastward from carpark (MPRB) c) out of character with natural foreshore (MPBA) d) interfering with people sitting on the seawall (before swimming or watching children) e) replaced with signs at both ends of the Reserve to indicate link. 	6	NSW Fisheries Sydney Harbour Federation Trust Mosman Parks & Bushland Association / 3 Residents	<ul style="list-style-type: none"> a) Disabled users require access to the Wharf, Barracks, amenities block and other points better accessed by a pathway. It also extends the site by providing viewpoints of the former Army School. b) The walkway link adjacent to the foreshore seeks to reinforce the cultural landscape character of the 'Pleasure Garden' period. The link is to be constructed of low impact, free draining materials and is not considered to conflict with the ecological values of the Reserve. c) The link is proposed "adjacent" to the seawall (p62), and therefore will not adversely impact upon people sitting on the seawall. d) The foreshore link is of regional importance (p62), and the proposed walkway is intended to reinforce this link. e) Signs are proposed at the north and south entrance to the Reserve. 	Amend Framework to widen design options on page 44 (disability access): "Access paths to natural areas <i>and</i> foreshore..."
10. Foreshore access and links (PATHS)	1	Mosman Parks	Path not recommended for demolition as it	No action required.

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Presumes “demolition – access” (p69) refers to <i>path and steps</i> between Morella Rd (12.5) and carpark (3).		& Bushland Association	provides access between Morella Rd & carpark. Demolition refers to site preparation for any improvement in the regional foreshore walking track.	
11. Foreshore access and links (WATER) Facilities for recreational <i>water craft</i> should be investigated to enable equitable access to Sydney Harbour.	1	PlanningNSW	The Landscape Masterplan proposes to provide dinghy access only to the beach, as part of the realignment of the maintenance track (p. 62). No formal boat ramp structure as vehicular access is proposed.	Does not warrant amendment of the Framework, as the facilities cited are already proposed.
12. Foreshore access and links (WATER) Water based access facilities (ie <i>jetty and pontoon</i>) should be provided. The Sydney Harbour Federation Trust and Mosman Parks & Bushland Authority support <i>ferry access</i> to the Reserve. State Transit Authority does not support ferry access on the grounds that insufficient demand for a regular service exists.	4	PlanningNSW / Sydney Harbour Federation Trust State Transit Authority Mosman Parks & Bushland Authority	A wharf currently services Clifton Gardens Reserve, which is available for use by the public.	Does not warrant amendment of the Framework, as the facilities cited exist already.
13. Foreshore access and links (WATER) Alterations to the existing <i>jetty</i> to promote public access to the site may attract funding by the Waterways Asset Development and Management Program (WASAMP)	1	Waterways Authority	The Harbour and jetty are outside of the scope of the Management Framework. However, the advice from the Waterways Authority should be noted, should Council propose the make alterations to the existing jetty in the future.	Does not warrant amendment of the Framework.
14. Foreshore access and links (WATER) The provision of a public <i>boat launching</i>	1	NSW National Parks & Wildlife	The proposed access to the beach would be for use by small craft only, such as	Does not warrant amendment of the Framework.

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facility would have a considerable impact on the use of the area		Service	dinghies. Dinghies are currently launched from the beach on an informal basis. Without more permanent facilities, these craft have the potential to erode the beach.	
15. Foreshore access and links (WATER) <ul style="list-style-type: none"> Do not provide a <i>boat ramp</i> for public use, as this will cause parking in the Reserve and require long parking spaces The Sydney Harbour Federation Trust partly supports this view, stating that a <i>ramp</i> at the north-eastern end would need to be controlled to prevent vehicles encroaching into Reserve space. 	2	Resident / Sydney Harbour Federation Trust	No formal boat ramp is proposed. Access location for small craft only is to be provided to avoid conflict with other beach activities and erosion potential.	Does not warrant amendment of the Framework.
16. Foreshore access and links (VEHICLES) <i>Car parking</i> No objection is raised to the Draft Framework, but Council may wish to consider the provision of additional parking or a parking strategy to increase car parking facilities in the summer months, to avoid queuing on Morella Road	1	Roads & Traffic Authority	Submission should be noted, for future action.	This matter should be dealt with in a traffic study during the design development phase.
17. Foreshore access and links (VEHICLES) <i>Traffic volume</i> A summer usage impact study is required.	1	Sydney Harbour Federat'n Trust	Submission should be noted, for future action.	This matter should be dealt with during the design development phase.
18. Foreshore access and links (VEHICLES)	1	Resident	Advice should be noted in traffic study.	As above.

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<i>Car parking</i> Do not provide extra parking or food/drink outlets				
19. Foreshore access and links (VEHICLES) <i>Car parking</i> <ul style="list-style-type: none"> The seasonal “heavy car parking in Morella Road... is a minor inconvenience compared with the inconvenience of a resident parking scheme.” 	1	Resident	Advice should be noted in traffic study.	This matter should be dealt with during the design development phase.
20. Foreshore access and links (VEHICLES) Engage an engineer to review the access <i>road</i> , particularly the cantilevered section of the road, and the stone retaining wall on the last corner.	1	Resident	Comment should be noted.	Addressed in Council’s risk management program (Management Action No. 7).
21. Foreshore access and links (VEHICLES) Consider widening the access road, down to the car park	1	Resident	This has been considered as part of the masterplanning process and been rejected because it is cost prohibitive.	Does not require amendment of the Framework.
22. Foreshore access and links (PUBLIC TRANSPORT) Access to the Reserve <ul style="list-style-type: none"> Public transport access to the Reserve has been described accurately. It is unlikely that there would be sufficient demand to increase public transport access to the Reserve. 	1	State Transit Authority	The submission supports the findings of the draft Framework in terms of public transport patronage.	Record the submission, for future reference when addressing Action No. 13 (p. 68).
23. Foreshore access and links (PUBLIC TRANSPORT) Need for <i>more</i> public transport to alleviate	1	Mosman Parks & Bushland Association	Noted	This matter should be dealt with in a traffic study during the design development phase.

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vehicle crowding				
24. Foreshore access and links (RAMPS) Trust acknowledges the need for improved access from grassed area to beach, but questions the two proposed <i>timber ramps</i> as the best solution.	1	Sydney Harbour Federation Trust	Submission should be noted, for future action. The timber ramps are proposed as a reference to beach access from the historic beach pavilion.. They would be further referenced in future interpretive signage.	This matter should be dealt with during the design development phase.
25. Foreshore access and links (RAMPS) More prone than “stone” steps to collect rubbish and sustain damage during storms	1	Mosman Parks & Bushland Association	Submission should be noted, for future action. The timber ramps are proposed as a reference to beach access from the historic beach pavilion.. They would be further referenced in future interpretive signage.	This matter should be dealt with during the design development phase.
26. Foreshore access and links (RAMPS) <i>Disabled</i> access to the wharf would be more direct from the pergola	1	Resident	Path from pergola, as described, would unnecessarily divide a currently open lawn area.	Does not require amendment of the Framework.
27. Activities Area (S.W. corner) <ul style="list-style-type: none"> Seating structures in S.W. corner for child’s play unnecessary because beach is sufficient Question why, if S.W. corner is favoured for sunshine, shade structures for children are suggested 	3	Residents / Sydney Harbour Federation Trust	<ul style="list-style-type: none"> Simple timber seating and shade trees would increase the amenity of the Reserve for parents . Provision of shade is important requirement for all public areas. 	Does not require amendment of the Framework
28. Activities Area The activities zone, with hard court, is supported but these facilities should <i>not be moved</i> from their present location. The hardcourt should not be increased in size.	2 1	Mosman Parks & Bushland Association / 1 Resident	.It has been determined that the hardcourt will maintain its current location and will not be increased in size.	Amend document and plans.

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<p>29. Activities Area</p> <p>Questions the need to build new play areas for <i>different groups</i>. Children need sand, water, seesaw & slide; older groups have netball hoops , informal ballgames, swimming & fishing.</p>	2	Mosman Parks & Bushland Association / Resident	<ul style="list-style-type: none"> • Mosman Recreation Needs Assessment Study (2000) identified “upgraded/more substantial playgrounds” as of value to the community. • It is not intended to provide specific segregated play areas for different age groups. • All design elements suggested should be noted for future consideration. 	Does not require amendment of the Framework
<p>30. Activities Area</p> <p>Play equipment should be constructed of timber, rather than <i>plastic</i></p>	2	Residents	.Council’s policy is that timber play equipment is not installed due to health risks.	This matter should be dealt with during the design development phase.
<p>31. Activities Area</p> <ul style="list-style-type: none"> • Play equipment should be constructed of timber, rather than <i>plastic</i>. The old and “not distinctive” razzle dazzle below Athol Hall was nevertheless popular; • Playground should <i>remain</i> where it is, unfenced and easily accessible to the beach (not separated by a seawall) 	3	Mosman Parks & Bushland Association / Resident / Sydney Harbour Federation Trust	The playground is intended to have a second function as an interpretive element to reflect the pleasure garden/fun park heritage of the Reserve. For this reason it has been located close to and on the same axis as the parallel rows of interpretive elements proposed for this part of the Reserve. In response to submissions it is intended to relocate the play area further west so that it is closer to its current location but is out of the line of sight to the Harbour from the pavilion site. It should, however, be kept in its currently proposed orientation parallel to the foreshore interpretive group,	Amend the Plan.

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			and should be designed in detail along the fun park / pleasure ground theme.	
<p>32. Activities Area</p> <p>The Playground area:</p> <ul style="list-style-type: none"> • 'natural'-looking play equipment in an unfenced area; • play equipment <i>should not be moved</i> closer to water, for safety reasons; • Play equipment should be located closer to the pavilion (Sydney Harbour Foreshore Trust) • trees for <i>shade</i> rather than any structure. 	3	Mosman Parks & Bushland Association / Residents	The playground is intended to have a second function as an interpretive element to reflect the pleasure garden/fun park heritage of the Reserve. For this reason it has been located close to and on the same axis as the parallel rows of interpretive elements proposed for this part of the Reserve. In response to submissions it is intended to relocate the play area further west so that it is closer to its current location but is out of the line of sight to the Harbour from the pavilion site. It should, however, be kept in its currently proposed orientation parallel to the foreshore interpretive group, and should be designed in detail along the fun park / pleasure ground theme.	Amend the Plan.
<p>33. The amenities block</p> <p>Should <i>not be relocated</i>; it is discrete where it is currently and would be dangerous for pedestrians if relocated to the car park.</p>	4	Residents	<ul style="list-style-type: none"> • The proposed relocation of the Amenities block is intended to make it more accessible to the designated swimming enclosure, so that it can function more effectively as a change room and general amenities facility and be closer to the centre of activity of the Reserve. Concerns have been raised 	Amend the Plan.

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
			in a number of submissions regarding the visual impact of the facility in its proposed location and the potential to attract undesirable activity closer to the activity centre of the Reserve. In this latter regard it is considered that location of the facility in a more public and accessible location will promote passive surveillance and discourage undesirable activity. The issue of the visual impact is accepted as a possible detractor.. As a compromise, it is recommended that the amenities block be relocated adjacent to the carpark but further to the northwest, where it would not be in a line of view to the Harbour.	
<p>34. The amenities block <i>The South-west Corner:</i></p> <ul style="list-style-type: none"> • Fear that the amenities block relocated to the s.w. corner will attract bus & car passengers to what was envisioned as the “quiet” area of the Reserve; Suggest busses be directed around the corner (to midpoint of carpark), closer to existing amenities block; • Suggest disabled parking should be away 	3	Mosman Parks & Bushland Association / Residents	<ul style="list-style-type: none"> • Amenities block currently inconveniently placed for easy and disabled access. Busses can be directed away from the S.W. corner, but will require access to amenities block preferably closer than N.E. corner. • Easy disabled access to amenities is a matter of priority. (“Spaces” refers to proposed increase in parking bays). 	Amend document and plans. Proposed location of amenities block to be amended as indicated under Item 2 (ie. Adjacent to carpark but further northwest out of line of view to Harbour).

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<p>from amenities block, especially if busses dropping passengers here (questions why p.63 refers to “spaces” , plural);</p> <ul style="list-style-type: none"> One resident upported upgrading of the amenities block; One resident stated the existing amenities block in need of maintenance, not rebuilding. 			<ul style="list-style-type: none"> Mosman Recreation Needs Assessment Study (2000) identified the need for “improved amenities” (see p43) 	
<p>35. The amenities block</p> <p>The block should be <i>relocated</i>; but not to the position indicated (it should not be the first thing you see when entering the Reserve)</p>	3	Residents	<ul style="list-style-type: none"> We advocate relocation to a location convenient to the Beach. The proposed relocation of the Amenities block is intended to make it more accessible to the designated swimming enclosure, so that it can function more effectively as a change room and general amenities facility and be closer to the centre of activity of the Reserve. Concerns have been raised in a number of submissions regarding the visual impact of the facility in its proposed location and the potential to attract undesirable activity closer to the activity centre of the Reserve. In this latter regard it is considered that location of the facility in a more public and accessible location will promote passive surveillance and discourage undesirable activity. The issue of the visual impact is accepted 	Amend document and plans. Proposed location of amenities block to be amended as indicated under Item 2 (ie. Adjacent to carpark but further northwest out of line of view to Harbour..

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			as a possible detractor.. As a compromise, it is recommended that the amenities block be relocated adjacent to the carpark but further to the northwest, where it would not be in a line of view to the Harbour.	
<p>36. The amenities block</p> <p>The amenities block should <i>not be relocated</i> because of the apparent unnecessary expense of replumbing</p>	1	Resident	<ul style="list-style-type: none"> We advocate relocation to a location convenient to the Beach. The proposed relocation of the Amenities block is intended to make it more accessible to the designated swimming enclosure, so that it can function more effectively as a change room and general amenities facility and be closer to the centre of activity of the Reserve. Concerns have been raised in a number of submissions regarding the visual impact of the facility in its proposed location and the potential to attract undesirable activity closer to the activity centre of the Reserve. In this latter regard it is considered that location of the facility in a more public and accessible location will promote passive surveillance and discourage undesirable activity. The issue of the visual impact is accepted 	Amend document and plans. Proposed location of amenities block to be amended as indicated under Item 2 (ie. Adjacent to carpark but further northwest out of line of view to Harbour..

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			as a possible detractor.. As a compromise, it is recommended that the amenities block be relocated adjacent to the carpark but further to the northwest, where it would not be in a line of view to the Harbour.	
37. Pavilion Site <i>Pergola</i> seems adequate provided an attractive form of shading material is provided, ie. wooden shingles.	1	Resident	Submission should be noted, for future action. Structure is intended to be of lightweight, low-impact construction and form.	This matter should be dealt with during the design development phase.
38. Pavilion Site <i>supported</i> in principle, plus: <ul style="list-style-type: none"> No bulky built structure; Possibly a rain shelter. 	1	Resident	This matter should be dealt with during the design development phase.	Does not require amendment of the Framework.
39. Pavilion Site supports some open-sided structure to <i>shelter</i> families during rain, possibly with a gable roof.	1	Mosman Parks & Bushland Association	Advice should be noted for future action. This matter should be dealt with during the design development phase.	Does not require amendment of the Framework.
40. Furniture Provide <i>picnic tables</i> that are protected from the sun and rain	1	Resident	Submission should be noted, for future action.	This matter should be dealt with during the design development phase.
41. Furniture Provide electric <i>BBQs</i>	1	Resident	Council's position is that electric BBQs are not to be provided because of difficulties in maintenance and keeping in a clean and serviceable condition.	This matter should be dealt with during the design development phase.
42. Furniture Provide <i>hardstand areas</i> around all water	1	Resident	Submission should be noted, for future action.	This matter should be dealt with during the design development phase.

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outlets				
43. Furniture Use state of the art, maximum vandal proof, maximum resistance to exposure <i>materials</i> in the Reserve.	1	Resident	Submission should be noted, for future action.	This matter should be dealt with during the design development phase.
44. Furniture <i>Litter</i> : (especially food scraps from weekend picnics) left out of provided. Fishermen on wharf littering. Rubbish behind toilet block. Recommend: a) Ranger visits 3-5pm on weekends; b) Amenities block not moved closer to car park c) Plant only low and hardy shrubs around amenities block to discourage rubbish buildup	4	Mosman Parks & Bushland Association / 3 Residents	The Landscape Masterplan proposes to relocate scattered bins under the pergola making them easier to find (p62). Issue of litter to be noted for attention by Parks maintenance staff.	Does not require amendment of the Framework.
45. Swimming Enclosure <i>Upgrade</i> Swimming Enclosure Approval for this proposal would only be granted by the Authority if there were no unacceptable impacts to the existing environmental values of the Harbour (eg. seagrass beds)	1	Waterways Authority	Advice should be noted, for future action.	This matter should be dealt with during the design development phase. Amend page 64 ("Priorities") so that the requirement for an environmental impact statement is noted.
46. Swimming Enclosure The proposed swimming enclosure should be <i>withdrawn</i> from the Landscape Masterplan; it	1	Resident	The proposed swimming enclosure is generally supported. Submission should be noted for future consideration. Its provision	Does not require amendment of the Framework.

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would be too costly to construct and maintain			is intended as a reference to the original swimming enclosure as indicated on historic photographs and plans of the Reserve.	
47. Swimming Enclosure <i>Why</i> further divide the area into shallow & deep areas if it is already restricted in size?	1	Mosman Parks & Bushland Association	The creation of a deep area is intended to increase bathing options, and would increase overall size of bathing enclosure.	Does not require amendment of the Framework.
48. Swimming Enclosure The proposed improvements to the Reserve are <i>supported</i> , but will the baths be accessible from the beach as they are now, or only from a wharf?	1	Resident	Access to the current swimming enclosure will continue to be provided from the beach.	Does not require amendment of the Framework.
49. The Seawall The seawall works should ensure that there is <i>no encroachment</i> seaward as a result of these works	1	Waterways Authority	Seawall is to be retained.	Does not require amendment of the Framework.
50. The Seawall <ul style="list-style-type: none"> Indicates occasional considerable <i>damage</i> to the seawall and previous asphalt path caused by high tides and rough seas, especially at the southern end; <i>Opposed</i> to seawall at northern end of beach, suggesting it would wash away. 	1	Mosman Parks & Bushland Association	Seawall is to be retained.	Does not require amendment of the Framework.
51. Visual Impact (VIEWS) <ul style="list-style-type: none"> The improvement of views from the <i>bus stop</i> is not advocated if it involves the removal of trees that currently screen views to residential 	1	Planning NSW	The removal of vegetation from the area below the bus stop would not impact on views from the Reserve to the adjoining residential areas. Only exotic vegetation	Does not warrant amendment of the Framework.

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<p>areas from the Reserve (PNSW)</p> <ul style="list-style-type: none"> The installation of viewing platforms & stairs is opposed (MP&BA) 	1	Mosman Parks & Bushland Association	<p>would be removed.</p> <p>Views from the Reserve to the adjoining residential areas are obscured by vegetation at higher levels than the bus stop. The installation of viewing platforms and stairs will provide opportunities for historical interpretation and filtered views across the Reserve to the Harbour, and will improve connections between the upper and lower sections of the Reserve.</p>	
<p>52. Visual Impact (VIEWS)</p> <p>Unightly <i>exposed</i> areas overlooking Reserve: Caused by residents being given Council permission to remove vegetation obstructing their views to the Harbour. Council should become involved in more 'consultation' before such work occurs.</p>	1	Mosman Parks & Bushland Association	Submission should be noted, for future action.	Does not warrant amendment of the Framework.
<p>53. Visual Impact (VIEWS)</p> <p>Minimise visual impact of <i>bush regeneration</i> on nearby residents.</p>	1	Sydney Harbour Federation Trust	Bush regeneration should occur with due regard for the visual impact of all works.	Revise Principle Three Action (p52) to ensure that all works have due regard for their impact on views from areas adjoining the Reserve.
<p>54. Visual Impact (POWERLINES)</p> <p><i>Powerlines</i> traverse the site, detracting from the Reserve's 'natural' character. Removal "would be an improvement" (Sydney Harbour Federation Trust).</p>	2	Sydney Harbour Federation Trust / Resident	Undergrounding of powerlines would have a definite benefit with respect to visual quality but with significant cost implications. Advice should be noted for future investigation.	Does not warrant amendment of the Framework. Issue to be investigated by Council in implementation of the Masterplan.

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
55. Artwork <ul style="list-style-type: none"> The use of artwork as an 'educational' or site interpretation element is <i>appropriate</i> Any artwork incorporated into the site should be <i>complimentary</i> to the site and enhance the visitor's experience 	1	PlanningNSW	<p>The management principles outlined in section 6 of the Framework provide the basis for the future management of the Reserve.</p> <p>The Draft framework endorses the inclusion of public art.</p> <p>Specifically, management principle 5 states that 'the cultural history of the Reserve should be conserved and interpreted in its management and use (p. 48).'</p>	Does not require amendment of the Framework.
56. Heritage (Signage): <ul style="list-style-type: none"> Supports <i>low-key</i> and unobtrusive interpretive signage; Connected by an informal track (not trail). 	1	Mosman Parks & Bushland Association	<ul style="list-style-type: none"> Noted The Reserve signage is intended to be low-key in design and discretely located. It is to be of a form appropriate to the character of the Reserve. This matter should be dealt with during the design development phase. 	Does not require amendment of the Framework.
57. Heritage (Signage): Should be <i>more discrete</i> and lower than illustrated. Recommends Harbour Trust signs.	1	Resident	Advice should be noted for future action	Does not warrant amendment of the Framework.
58. Heritage (European): <ul style="list-style-type: none"> Sewage Pumping Station No. 54 (listed in Schedule 1 of Mosman LEP 1998): <ul style="list-style-type: none"> a) <i>Public access</i> to the building not 	1	Sydney Water	Submission should be noted, for future action.	These matters to be investigated in the interpretive. Study.

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
<p>feasible.</p> <p>b) SPS54 is a <i>functioning</i> low-level station in “good physical condition”.</p> <p>c) Considers SPS54 to be of technical, historical and architectural <i>significance</i> (to be managed within State Owned Heritage Asset Management Guidelines).</p> <p>d) All works relevant to building to involve a Heritage Assessment and/or Statement of Heritage <i>Impact</i>.</p> <p>e) Supports identifying <i>signage</i>, to be freestanding, not attached to building.</p> <ul style="list-style-type: none"> Hotel site: The “remains” of Hotel are significant & should be recognised Submarine Mining Depot: Requires information (when viewed from Hotel site. Creation of the Reserve: Interpretation required. 	<p>1</p> <p>1</p> <p>1</p>	<p>Sydney Harbour Federation Trust.</p>		
<p>59. Heritage (Aboriginal): The findings of the Mosman Aboriginal Heritage Study should inform interpretive work on the site.</p>	2	Sydney Harbour Federation Trust / NPWS	The aboriginal occupation of the site is acknowledged in the Framework (p30).	Amend Section 7.2 (p50) of the Framework to reflect further information on aboriginal heritage in relation to the Gardens site.
<p>60. Revegetation (Weeds & Regeneration) The Authority <i>encourages</i> the proposed weed</p>	1	Waterways Authority	Noted.	Does not require amendment of the Framework.

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
removal programs, and enhancement of the bushland within the Reserve. The remediation of the creekline and associated riparian planting is supported. The proposal to improve public facilities and access, as well as improving connection with the Reserve, is supported.				
61. Revegetation (Weeds & Regeneration) <i>Supports</i> the removal of weeds to enhance the natural environment.	1	Mosman Parks & Bushland Association	Noted.	Does not require amendment of the Framework.
62. Revegetation (Weeds & Regeneration) <i>Supports</i> need for a weed eradication program, for the creek bed, south west cliff faces, some private gardens on Morella Road near the Reserve.	1	Sydney Harbour Federation Trust	Advice should be noted for future action. A coordinated approach between the Council, the Trust and the NPWS is recommended. These works will occur as part of proposed bush regeneration.	This matter should be dealt with during the design development phase.
63. Revegetation (Weeds & Regeneration) Bush regeneration The proposal to carry out on-going bush regeneration and the removal of exotic weed species is supported.	1	NSW National Parks & Wildlife Service	Noted	Amend Management Action No. 5 to include stormwater management.
64. Revegetation (Weeds & Regeneration) <i>Supports</i> bush regeneration to improve the “ecological integrity of indigenous bushland”. To this end, suggests only using seeds or cuttings taken from the local area.	1	Mosman Parks & Bushland Association	Advice should be noted, for future action.	This matter should be dealt with during the design development phase.
65. Revegetation (Weeds & Regeneration) Recommends a list of plant species with <i>invasive</i> root systems to be discouraged.	1.	Sydney Water	Bush regeneration works associated with Sydney Water assets to be carried out in consultation with Sydney Water.	Does not require amendment of the Framework.

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
<p>66. Revegetation (Trees)</p> <ul style="list-style-type: none"> The proposed trees in the Reserve are <i>not indigenous</i> to the locality. Justification as to the choice of species should be provided. 	1	PlanningNSW	Clifton Gardens is a former 'Pleasure Garden' and has a long history of use for recreation purposes. The choice of tree species has been made to both compliment and reinforce the historic values of Reserve. After discussion with Council's landscape architect, it has been agreed that Evergreen Magnolias proposed in the Masterplan will be substituted with <i>Cupaniopsis anacardioides</i> (Tuckeroo) as a species more suited to the site conditions.	Amend Masterplan.
<p>67. Revegetation (Trees)</p> <ul style="list-style-type: none"> Consider using species that are <i>native</i> to the Sydney Basin. Rather than using <i>Phoenix canariensis</i>, the locally indigenous <i>Livistona australis</i> would be more suitable. 	2	NSW Parks and Wildlife Service / Resident	<i>Livistona australis</i> would be appropriate but it is slow growing.	Investigate alternatives at detailed design phase.
<p>68. Revegetation (Trees)</p> <p><i>Coral trees</i> regularly fracture in high winds. Should be replaced</p>	2	Resident	Based on previous advice about the hazard potential of these trees, it is anticipated that they will require removal in the short term.	Does not require amendment of the Framework.
<p>69. Revegetation (Trees)</p> <p>The proposed trees for the Reserve seem an <i>excellent</i> choice.</p>	1	Resident	Noted.	Does not require amendment of the Framework.
<p>70. Revegetation (Trees)</p> <p>There is concern as to why trees in the vicinity</p>	2	Planning NSW / Mosman	The safe useable life expectancy of the existing exotic trees is a key management	Does not warrant amendment of the Framework.

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
of the picnic area are to be felled. A more appropriate approach would be to allow <i>replacement</i> trees to establish.		Parks & Bushland Association	<p>issue within the Reserve (p. 9).</p> <p>All tree removal is to be based upon arboricultural advice. Based on previous advice about the hazard potential of these trees, it is anticipated that they will require removal in the short term.</p> <p>Current arboricultural practice does not advocate staggered tree removal and replacement programs.</p>	
<p>71. Revegetation (Trees)</p> <p>The establishment of trees with tall, bare, trunks and open canopies (to promote views) is encouraged <i>adjacent to the foreshore</i>, to provide connectivity with the adjoining natural areas</p>	1	Waterways Authority	<p>Tall, clean-trunked trees are not considered appropriate to the cultural character of Clifton Gardens Reserve. In order to address this submission, it has been agreed that a number of Port Jackson Figs will be proposed along the foreshore at locations that will not substantially detract from views. The only benefit would be to improve riparian connectivity. Could potentially impact on views to the Harbour from the Reserve.</p>	Amend Masterplan and document to include Port Jackson figs strategically placed on the foreshore.
<p>72. Revegetation (Trees)</p> <p>Opposed to “thick screen of trees along the <i>foreshore</i>” [sic] as habitat. Outer edge of Reserve currently performs this function.</p>	2	Mosman Parks & Bushland Association / Resident	<p>The Landscape Masterplan proposes “retaining [the Reserve’s] current open and relaxed character” Trees on the foreshore are to be planted as indicated in Item 71, with positioning to consider retention of</p>	Amend Masterplan and document to include Port Jackson figs strategically placed on the foreshore.

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
			views.	
73. Revegetation (Trees) The proposed planting of trees adjacent to the <i>foreshore</i> is strongly opposed. The trees in this location will reduce views of the foreshore.	1	Resident	Concept of planting of trees on the foreshore is a response to submissions by Dept of Land and Water Conservation and Waterways Authority. Foreshore tree planting is to consider views to the Harbour.	Council to consider options with regard to foreshore tree planting.
74. Revegetation (Turf) <i>Opposed</i> as too expensive to maintain	1	Mosman Parks & Bushland Association	Mosman Recreation Needs Assessment Study (2000) identified the need to “upgrade informal recreation areas” (see p44). The banded turf indicated in the exhibition document and Masterplan is to be deleted due to maintenance implications. Advice should be noted.	This matter should be dealt with during the design development phase.
75. Stormwater control Devices should be located off-line and there should be no blockages to fish passage.	1	NSW Fisheries	Advice should be noted, for future action.	This matter should be dealt with during the design development phase.
76. Stormwater control Water quality improvement requires stormwater catchment and treatment measures relating to Bradleys Head Road, Cross Street, Burrawong Ave, Morella Rd and Rawson Park.	1	Sydney Harbour Federation Trust	Advice should be noted, for future action.	This matter should be dealt with during the design development phase.
77. Stormwater control The continuation and extension of the joint stormwater management works at Taylors Bay are essential to the success of any bush regeneration project	1	NSW National Parks & Wildlife Service	Noted	Amend Management Action No. 5 to include stormwater management.
78. Stormwater control	1	NSW Fisheries	Advice should be noted, for future action.	These issues should be considered in the

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
<p>Consider the following main points within planning instruments:</p> <ul style="list-style-type: none"> • No net increase in runoff and no reduction in water quality • Detention ponds and other stormwater treatment devices should be off-line and at-source • No blockages to fish passage • Avoid ponding of waterways • Protect threatened species, populations and ecological communities and their habitat listed under the Fisheries Management Act 1994 • Take into consideration Habitat Protection Plans, Threatened Species Recovery Plans or Threat Abatement Plans under the Fisheries Management Act 1994 relevant to the area • Riparian buffer zone guidelines (see submission) • Avoid reclamation or dredging of water land • Avoid development in floodplains • Any proposal for works should avoid the destruction of marine vegetation • Snags within waterways should not be moved • Potential acid sulphate soils or other 				development approval process.

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
<p>types of contamination should be determined prior to construction</p> <ul style="list-style-type: none"> Consider ground water impacts 				
<p>79. Habitats</p> <p>Natural Biodiversity and Water Quality</p> <p>Include fish habitat and fish passage in the following sentence: -</p> <p>‘Activities and works within Clifton Gardens Reserve must be carried out in a manner that has no negative effects on water quality in Chowder Bay and Sydney Harbour.’</p>	1	NSW Fisheries	Fish habitat and fish passage should be included, as fish habitat plays an important role in maintaining biodiversity.	Amend the appropriate sections of the Framework accordingly.
<p>80. Habitats</p> <p>Natural Biodiversity and Water Quality</p> <p>Include instream vegetation in riparian zones (trees/snags, macrophytes and algae), which should be contiguous with the rest of the riparian zone</p>	1	NSW Fisheries	Advice should be noted, for future action.	Instream vegetation to be included in Framework as a matter to be addressed in natural resource management.
<p>81. Habitats</p> <p>Review of the aquatic habitats and species, including <i>threatened species</i>, should be included in any environmental study to ensure the Framework conserves this significant portion of biodiversity</p>	1	NSW Fisheries	Environmental impact assessment will be required in any development application consequent to the adoption of the Masterplan.	Ensure that refurbishment of the Reserve is subject to statutory development approval processes including species and habitat impact assessment.
<p>82. Pests (Rabbits):</p> <ul style="list-style-type: none"> Major carriers of paralysis ticks Attract foxes into the area Attracts dogs off leash into the bush for 	1	Resident	An action should be inserted recommending that an integrated pest management program for the Reserve be developed.	Amend the Framework to include this action.

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
prolonged periods				
83. Pests Non-native birds (pigeons; Common Mynas) <ul style="list-style-type: none"> Threatening indigenous species (Rosellas, Kookaburras, etc). 	1	Resident	An action should be inserted recommending that an integrated pest management program for the Reserve be developed.	Amend the Framework to include this action.
84. Dieback Spread of dieback by walkers in bushland valley between Morella Road and the Sydney Harbour National Park should be addressed.	1	Resident	An action should be inserted recommending that an integrated pest management program for the Reserve be developed.	Amend the Framework to include this action.
85. Dieback Angophora species may be suffering root fungus <i>phytophthora cinnamomi</i> , as possibly revealed by dieback along Morella Road.	2	Resident	An action should be inserted recommending that an integrated pest management program for the Reserve be developed.	Amend the Framework to include this action.
86. Dieback Suggests the storage of large <i>mulch</i> piles in Morella Rd may contribute to spread (especially Camphor Laurels).	1	Mosman Parks & Bushland Association	An action should be inserted recommending that an integrated pest management program for the Reserve be developed.	Amend the Framework to include this action.
87. Planning Process (Consultation) Council is advised to consult with <i>Sydney Harbour Federation Trust</i> , to ensure that there is consistency in the management of the adjoining areas.	1	PlanningNSW	Representatives of Sydney Harbour Federation Trust participated in the development of the Draft Management Framework. The proposed management of Clifton Gardens Reserve has been reviewed by Sydney Harbour Federation Trust, and has been found to be acceptable.	Carry out ongoing consultations with Sydney Harbour Federation Trust during the design development and construction process.
88. Planning Process (Consultation) <i>Consultative Committee</i>	1	Waterways Authority	The formation of a consultative committee is recommended for those aspects of the	Recommend formation of a working group in Implementation Plan.

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
Consider establishing a consultative committee comprising relevant government and community stakeholders to assist with the further development and implementation of Council's plan			Management Framework that would involve multiple stakeholders.	
89. Planning Process (Consultation) Creekline restoration works should involve consultation with the <i>Community Environmental Contract team</i> , who have and will again jointly apply with National Parks and the Harbour Trust for a grant to improve water quality and creek restoration work.	1	Resident	Advice should be noted, for future action. These works will occur as part of proposed bush regeneration.	This matter should be dealt with during the design development phase.
90. Planning Process (Consultation) Supports cooperation with <i>NPWS</i> .	1	Mosman Parks & Bushland Association	Noted	Does not require amendment of the Framework.
91. Planning Process (Consultation) <i>Bush care volunteers</i> <ul style="list-style-type: none"> A commitment to use professional bush regeneration contractors in Clifton Gardens would encourage volunteer groups to continue with their efforts 	1	NSW National Parks & Wildlife Service	Council has entered into a contract to carry out bush regeneration works. Council will continue to encourage volunteer assistance in bush regeneration on the Reserve.	Does not require amendment of the Framework.
92. Planning Process (Consultation) Inter-agency cooperation <ul style="list-style-type: none"> The Service is <i>supportive</i> of the proposal to work together with Council on the restoration of the natural areas of the Reserve 	1	NSW National Parks & Wildlife Service	Noted	Does not require amendment of the Framework.

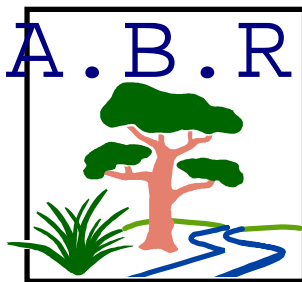
Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
93. Planning Process (Consultation) <i>Supports</i> inter-agency cooperation	1	Mosman Parks & Bushland Association	Noted	Does not require amendment of the Framework.
94. Planning Process (Consultation) Coordination between existing foreshore walk information and future information provided by the <i>NPWS and SHFT</i> . Interpretation may be achieved from Trust land looking towards the Reserve. Information also required on Submarine Mining Depot and former methods of filling and grassing bays.	1	Sydney Harbour Federation Trust	Submission should be noted, for future action as a component of interpretive study.	Issue should be investigated in preparation of Interpretive Strategy. Amend Framework to include consultation with National Parks & Wildlife Service & Sydney Harbour Foreshore Trust in preparation of interpretive strategy, along with inclusion of information on Submarine Mining Depot and former methods of filling and grassing bays.
95. Planning Process (Restrictions) Permissible Uses and Consent Requirements Beach/foreshore protection works (includes the proposed sea wall works, ramps to the beach, and widening of the creekline) require a permit for dredging and reclamation under Section 200, <i>Fisheries Management Act 1994</i>	1	NSW Fisheries	More specific information should be provided on Section 200 of the Fisheries Management Act 1994	Amend section 2.4 of the Framework, to include Section 200 of the Fisheries Management Act 1994
96. Planning Process (Restrictions) Restricting Fishing on the Wharf <i>NSW Fisheries</i> regulates fishing closures (Recreational Fishing Section), and future proposals to restrict fishing on the wharf in the Reserve should be directed to NSW Fisheries.	1	NSW Fisheries	Advice should be noted, for future action.	Does not warrant amendment of the Framework.
97. Planning Process (Restrictions)	1	Waterways	Advice should be noted, for future action.	Does not warrant amendment of the

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
Seawall and Beach Access Ramps Consultation with the <i>Waterways Authority</i> should occur to ensure there is no encroachment of the ramps onto the Authority's land.		Authority		Framework.
98. Planning Process (Performance Targets) How will the performance targets be reviewed and monitored?	1	PlanningNSW	The Framework should be amended to include the following comments: - <ul style="list-style-type: none"> that performance targets should be reviewed annually; and that the implementation plan should be revised after 5 years. 	Amend the Framework to include the identified comments.
99. Planning Process (Performance Targets) Measurement of 'enhanced biodiversity and ecosystem function' <ul style="list-style-type: none"> How will Council measure enhanced biodiversity and ecosystem function? The Service is willing to provide access to the results of flora and fauna surveys that have been carried out in the past 	1	NSW National Parks & Wildlife Service	Council's bush regeneration officer to consider in consultation with NSW National Parks & Wildlife Service.	Does not require amendment of the Framework.
100. Planning Process (Maps/Plans) <ul style="list-style-type: none"> Some maps are difficult to read (Figure 2, SK01 and SK04) Maps are at different scales, difficult to compare different proposals. 	1	PlanningNSW	<ul style="list-style-type: none"> Document well received to date, and no negative responses were received from others. 	No amendment required.
101. Planning Process (Maps/Plans) <ul style="list-style-type: none"> The bus route shown on Drawing L02 follows 	2	Resident / Mosman Parks & Bushland	<ul style="list-style-type: none"> Bus route is as submission indicates. Hotel location on Drawing L05 based on indications of remnant boundary, 	<ul style="list-style-type: none"> Amend Drawing L02 accordingly. Amend Drawing L05 and Master Plan Sk01 to read as "indicative site of

Issue / Submission	No. of Times Issue Raised	Submitting Parties	Comment	Recommended Action
<p>Morella/Kardinia/Burrawong/Thompson Streets, not David Street</p> <ul style="list-style-type: none"> The former hotel site indicated on Drawing L05 was on the road corner opposite the proposed viewing platform. 		Association	and the existence of the roadway which predates the demolition of the Hotel. Further verification required.	former hotel" and indicating revised position of site.

SUMMARY OF ISSUES ARISING FROM PUBLIC EXHIBITION

18 March 2003



WORK PLAN – MORELLA ROAD – OPTION B

Catchment:	Port Jackson
Bushland Site:	Morella Road
Performance Target:	Improve to next level: (70+% Indigenous)
Year:	2002-03
Cost for year: @Rate \$27.25	\$ 13,734
Cost to reach Performance Target by 2011:	\$109,074
Total Hours worked in 2 nd year's Annual Work Plan	Hours: 504

Prepared by:

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Overall Strategy for Bushland Restoration

For the purposes of this work plan we will again divide the reserve into work zones. We use these zones to assist in describing our work strategy for the site. They are not to be confused with the Retain, Regenerate and Revegetate zones although there may be some correlation.

Zone A; the creekline corridor with nutrient rich sediment favoring such weeds *Hedychium gardnerianum*, *Ligustrum lucidum* and *Ligustrum sinense*. *Ligustrum lucidum* is a particular problem in this Zone with innumerable seedlings waiting for their chance to prosper.

Zone B; the north-facing slope, which contains a relatively higher level of resilience throughout. This Zone is infested chiefly with *Lantana camara*, *Protasparagus aethiopicus*, *Tradescantia fluminensis* and a mix of exotic vines. A number of inappropriately planted native species exist in the form of large Tallow woods (*Eucalyptus microcorys*), Lemon-scented Gums (*E. citriodora*) and Sydney Blue Gums (*E. saligna*). These trees may give the appearance of a reasonable native canopy however they dominate the remnant *Angophora costata*/*E. piperita* Open Forest.

Zone C; a new zone introduced by ABR in 2002-03 to include the immediate area of the road edge to a distance of 5m, and which was comprehensively treated in 2001-02 and considered a part of Zone B. This zone has been introduced in order to take account of the difference in the level of resilience. While patches within this zone are regenerating well, it is overall a relatively degraded area, requiring revegetation.

The aim of our strategy is to achieve an increase in native vegetation density from 30-69% to 70-90% within a ten-year period while maintaining or enhancing whatever habitat value currently exists. It was apparent at the beginning in October 2001¹ that no previous work had been carried out on the site. At the time of the production of this report (September 2002), ABR had a year of regeneration conducted at the site. The land on the northern side of the creek is National Park and is in better condition. It will be a guide to likely regeneration outcomes on the site.

At present (September 2002) this reserve would have a native vegetation density of about 35 %. There are a few patches of remnant bushland within Zone B, particularly around sandstone outcrops that may have potential for regeneration but the remaining areas are too weed infested to determine whether any regeneration potential exists. Testing of the soil for an original, intact soil profile would be helpful.

The aim of work at the site will be to re-establish the remnant Sydney Sandstone Gully Forest (Open Forest) so typical of the Sydney region and dominated by *Angophora costata*, *Eucalyptus piperita* and *Corymbia gummifera*. Whether this can be done naturally or by revegetation will need to be ascertained a little further down the track.

Canopy protection work is a must but the clearing of weedy trees, shrubs and groundcovers will need to be done gradually. Over-clearing of purely weedy areas could well be disastrous for those resilient areas that remain and for habitat.

The weed-ranking list only allows for ten weeds to be listed. We have had to omit weeds such as *Tradescantia fluminensis*, *Ehrharta erecta*, *Ligustrum sinense* and *Hedychium gardnerianum*.

¹ October, 2001 was the beginning of the ten year contract period

The strategy for this site over 10 years will encompass the following initiatives:

- Canopy protection of the whole reserve and gradual eradication of the exotic vines such as *Ipomoea indica*, *Lonicera japonica*, *Anredera cordifolia*, *Delaria odorata*, *Acetosa sagittata* and *Araujia sericifolia* which infest various parts but particularly Zone B.
- Canopy protection of the whole reserve focusing on *Lantana camara*, which is engulfing canopy trees at a rate barely matched by the exotic vines.
- Comprehensive weeding of the remnant native patches in Zones A and B to establish islands of native strength where resilience may be high and regeneration potential is more promising.
- Short to medium term retention of *Lantana camara* infestations on the Morella Road edges to act as a buffer to further weed infestation and to maintain fauna habitat.
- In the short term, herbaceous weeds on the Morella Road edge should be sprayed and mulched using the copious supply of mulch on the roadside at the bottom of the hill. This will further strengthen the road edge buffer.
- Control of ground covers such as *Tradescantia fluminensis*, *Protasparagus aethiopicus* and *Parietaria judaica* to allow for possible regeneration or future revegetation should regeneration prove unsuccessful.
- Staged removal of woody weeds such as *Ligustrum lucidum*. Working from areas of probable regeneration potential into less promising areas.
- Removal of inappropriate trees will be a long-term goal, as only a few remnant canopy trees exist. Larger specimens of *Ligustrum lucidum*, and their like, should be removed to eliminate their profuse seed source. They will be drilled and filled and left in situ until they are felled and used as habitat or as fuel for possible pile burns (or both).
- Uncovering of sandstone rock outcrops, in all 3 zones, from weed and sediment to promote regeneration in the immediate areas and retard weed infestation by subtly warming surrounding areas.
- Supplementary planting throughout the newly created Zone C in order to bolster the resilience of the road edge and to protect the rest of the reserve from weed invasion. A simplified planting regime of rapidly growing colonisers and monocots is recommended.

General Tasks To Be Undertaken By Season

Spring:

- Treat weeds as per Monthly list, annuals, woody weed seedlings
- Spray prep and spray
- Monitor and identify seed bearing natives for later seed collection
- Monitor and promote regeneration
- Flame weeding
- Follow-up vines work prior to summer flush
- Annual assessment, creation of work plans and annual report
- Maintain previous & new plantings - Final supplementary Planting
- Drill woody weeds to promote spring/summer regen.
- Prepare plant list and order for delivery in autumn
- Assess and protect habitat areas
- Cull Pittosporum
- Follow-up Trad raking
- Water plantings
- Mulching (if required)
- Update species lists

Summer:

- Seed collection for native propagules
- Follow-up vines for canopy protection
- Continue de-flowering & bagging annual weeds esp. grasses
- Spray prep and spray
- No flame weeding (Fire issue)

- Spray Blackberry
- Monitor and protect regenerating natives
- Conserve and protect habitat
- Broadcast native seed as found on site also Lomandra
- Collect Dianella/Lomandra seed early December

Autumn:

- Spray Trad for winter raking
- Planting preparation of areas, plant, water, mulch
- Plug-ins – Transplanting
- Continue control of herbaceous weeds e.g. Propagules
- Flame weeding
- Pile Burns

Winter:

- Consolidate Weed control
- Continue planting if warm enough
- Open up new areas if necessary (primary work)
- Pile Burns
- Target winter annuals e.g. Burr medic.
- Maintain plantings
- Rake Trad

Annual Work Plan

Based on: Achieving 70+% indigenous vegetation density over 10 years.
Current Indigenous Vegetation Density: 30-69%

List Of Worst Ten (10) Weeds In The Reserve at October 2002

Rank	Weed Botanic Name Common Name	Reason for Rank
1	<i>Ipomoea indica</i> Morning Glory	This vine has the potential to smother canopy trees and shrubs and cover the ground as well. Difficult to eradicate it needs to be strictly controlled. Mainly in Zone B but capable of overrunning the reserve.
2	<i>Ligustrum lucidum</i> Broad leaf Privet	Large trees prevent light from passing through the canopy to germinate native seed. Diversity of species is restricted and understorey and groundcover plants may disappear over time. Each tree can produce thousands of seedlings annually.
3	<i>Lantana camara</i> Lantana	Has invaded a number of canopy trees often in concert with exotic vines. Despite its habitat value, where it is invading canopy it must be removed, as it will smother a tree if left. At shrub level it may form a monoculture and negate areas of native resilience.
4	<i>Lonicera japonica</i> Honeysuckle	This vine has established a foothold on the interface between Zones A and B with a huge number of seedlings and needs to be eradicated while it still in manageable quantities. If left unchecked it will smother trees, shrubs and groundcovers alike.
5	<i>Asparagus densiflorus</i> Asparagus Fern	Capable of densely covering the ground and preventing germination of native species. Produces copious berries, which either fall to the ground or are spread by birds. Time consuming to eradicate. Mostly infesting Zone B.
6	<i>Anredera cordifolia</i> Madeira Vine or Anredera	Another vine capable of smothering canopy trees and shrubs. It produces huge amounts of tubers that need to be assiduously removed from the ground. Currently in Zone B but easily capable of spreading throughout the reserve.
7	<i>Acetosa sagittata</i> Turkey Rhubarb	A prolifically seeding vine that is not yet in plague proportions but is becoming established along the top edge of Zone B. Must be treated in the short term to prevent it becoming a long-term problem.
8	<i>Delaria odorata</i> Cape Ivy	This vine is becoming well established in Zone B and will continue to smother trees and shrubs if left unchecked. It spreads quickly through all vegetation layers.
9	<i>Parietaria judaica</i> Pellitory	If left unchecked can produce a virtual groundcover monoculture. Produces seed prolifically throughout the year. It can prevent the germination of native seed and swamp seedlings. Difficult to eradicate. Mainly in Zone B.
10	<i>Araujia sericifolia</i> Moth Vine	As for the other vines, must be controlled to prevent smothering of trees and shrubs. Like the Cape Ivy, still only in Zone B.

Annual Work Plan Monthly Sequence

OCTOBER 2002

Date working	Hours	Cost	Remaining Year Budget
11 October 2002	21	\$572.25	
25 October 2002	21	\$572.25	

- **Submit plant order to nominated provenance nurseries to allow enough time for seed collection and propagation over the coming season. This is vital to ensure maximum species richness come planting time in Autumn 2003.**

Zone A – Creekline

- Continue to encourage the unique nature of the Warm Temperate Rainforest in this zone, focusing on native species such as *Todea barbara*, *Pteris tremula*, *Calochlaena dubia*, *Synoum glandulosum*, *Acmena smithii* and *Ceratopetalum gummiferum*. Specifically, this will involve the selective drilling of *Ligustrum lucidum* and *Ligustrum sinense* at the onset of flowering and the targeting of *Tradescantia fluminensis* and *Hedychium gardnerianum*.

Zone B – North-facing Slope

- NO WORK IN OCTOBER 2002

Zone C – Road Edge

- Spray preparation and spray² targeting *Ehrharta erecta*, *Protasparagus aethiopicus* and other herbaceous weeds along the road edge. This work will continue through the summer months to Autumn 2003 to break the *Ehrharta erecta* life cycle and to prepare the site for planting at this time. *Protasparagus aethiopicus* propagules to be removed from site.

NOVEMBER 2002

Date working	Hours	Cost	Remaining Year Budget
8 November 2002	21	\$572.25	
22 November 2002	21	\$572.25	

Zone A – Creekline

- NO WORK IN NOVEMBER 2002

Zone B – North-facing Slope

- Follow up work focusing on *Lantana camara*, *Ipomoea indica*, *Lonicera japonica*, *Dipogon lignosus* and *Delairea odorata*. The work will seek to ensure that the canopy protection (of remnant *Angophora costata* and *Eucalyptus piperita*) carried out in the previous year is consolidated.

² Roundup Biactive™ @ 1:100

- Maintenance work focusing on *Tradescantia fluminensis* and *Protasparagus aethiopicus* in the better areas that were treated in 2001-02. All refuse to be bagged and removed from the site.

Zone C – Road Edge

- Spray preparation and spray targeting *Ehrharta erecta*, *Protasparagus aethiopicus* and other herbaceous weeds along the road edge. This work will continue through the summer months to Autumn 2003 to break the *Ehrharta erecta* life cycle and to prepare the site for planting at this time. *Protasparagus aethiopicus* propagules to be removed from site.
- Mulch areas as needed to reduce herbaceous weed growth.
- Prepare areas for planting.

DECEMBER 2002

Date working	Hours	Cost	Remaining Year Budget
13 December 2002	21	\$572.25	
27 December 2002	21	\$572.25	

Zone A – Creekline

- Continue to encourage the unique nature of the Warm Temperate Rainforest in this zone, focusing on native species such as *Todea barbara*, *Pteris tremula*, *Calochlaena dubia*, *Synoum glandulosum*, *Acmena smithii* and *Ceratopetalum gummiiferum*. Specifically, this will involve the selective drilling of *Ligustrum lucidum* and *Ligustrum sinense* at the onset of flowering and the targeting of *Tradescantia fluminensis* and *Hedychium gardnerianum*.

Zone B – North-facing Slope

- Follow up work focusing on *Lantana camara*, *Ipomoea indica*, *Lonicera japonica*, *Dipogon lignosus* and *Delairea odorata*. The work will seek to ensure that the canopy protection (of remnant *Angophora costata* and *Eucalyptus piperita*) carried out in the previous year is consolidated.
- Continue the primary removal of weeds from the best areas of resilience within this zone being careful to not overclear due to habitat and maintenance constraints. However, it is crucial that some primary clearance takes place now, otherwise the opportunity for recruitment of native canopy species may be lost.

Zone C – Road Edge

- NO WORK IN DECEMBER 2002

JANUARY 2003

Date working	Hours	Cost	Remaining Year Budget
10 January 2003	21	\$572.25	
24 January 2003	21	\$572.25	

Zone A – Creekline

- Continue to encourage the unique nature of the Warm Temperate Rainforest in this zone, focusing on native species such as *Todea barbara*, *Pteris tremula*, *Calochlaena dubia*, *Synoum glandulosum*, *Acmena smithii* and *Ceratopetalum gummiferum*. Specifically, this will involve the selective drilling of *Ligustrum lucidum* and *Ligustrum sinense* at the onset of flowering and the targeting of *Tradescantia fluminensis* and *Hedychium gardnerianum*.

Zone B – North-facing Slope

- NO WORK IN JANUARY 2003

Zone C – Road Edge

- Spray preparation and spray targeting *Ehrharta erecta*, *Protasparagus aethiopicus* and other herbaceous weeds along the road edge. This work will continue through the summer months to Autumn 2003 to break the *Ehrharta erecta* life cycle and to prepare the site for planting at this time. *Protasparagus aethiopicus* propagules to be removed from site.

FEBRUARY 2003

Date working	Hours	Cost	Remaining Year Budget
14 February 2003	21	\$572.25	
28 February 2003	21	\$572.25	

Zone A – Creekline

- NO WORK IN FEBRUARY 2003

Zone B – North-facing Slope

- Follow up work focusing on *Lantana camara*, *Ipomoea indica*, *Lonicera japonica*, *Dipogon lignosus* and *Delairea odorata*. The work will seek to ensure that the canopy protection (of remnant *Angophora costata* and *Eucalyptus piperita*) carried out in the previous year is consolidated.
- Maintenance work focusing on *Tradescantia fluminensis* and *Protasparagus aethiopicus* in the better areas that were treated in 2001-02. All refuse to be bagged and removed from the site.
- Selectively cull (i.e., drill) *Pittosporum undulatum* in some of the better areas as these are reducing the capacity for regeneration.

Zone C – Road Edge

- Spray preparation and spray targeting *Ehrharta erecta*, *Protasparagus aethiopicus* and other herbaceous weeds along the road edge. This work will continue through the summer months to Autumn 2003 to break the *Ehrharta erecta* life cycle and to prepare the site for planting at this time. *Protasparagus aethiopicus* propagules to be removed from site.

MARCH 2003

Date working	Hours	Cost	Remaining Year Budget
14 March 2003	21	\$572.25	
28 March 2003	21	\$572.25	

Zone A – Creekline

- Continue to encourage the unique nature of the Warm Temperate Rainforest in this zone, focusing on native species such as *Todea barbara*, *Pteris tremula*, *Calochlaena dubia*, *Synoum glandulosum*, *Acmena smithii* and *Ceratopetalum gummiferum*. Specifically, this will involve the selective drilling of *Ligustrum lucidum* and *Ligustrum sinense* at the onset of flowering and the targeting of *Tradescantia fluminensis* and *Hedychium gardnerianum*.

Zone B – North-facing Slope

- Follow up work focusing on *Lantana camara*, *Ipomoea indica*, *Lonicera japonica*, *Dipogon lignosus* and *Delairea odorata*. The work will seek to ensure that the canopy protection (of remnant *Angophora costata* and *Eucalyptus piperita*) carried out in the previous year is consolidated.
- Maintenance work focusing on *Tradescantia fluminensis* and *Protasparagus aethiopicus* in the better areas that were treated in 2001-02. All refuse to be bagged and removed from the site.

Zone C – Road Edge

- Final spray preparation and spray targeting *Ehrharta erecta*, *Protasparagus aethiopicus* and other herbaceous weeds along the road edge prior to planting in April. *Protasparagus aethiopicus* propagules to be removed from site.

APRIL 2003

Date working	Hours	Cost	Remaining Year Budget
11 April 2003	21	\$572.25	
25 April 2003	21	\$572.25	

Zone A – Creekline

- Continue to encourage the unique nature of the Warm Temperate Rainforest in this zone, focusing on native species such as *Todea barbara*, *Pteris tremula*, *Calochlaena dubia*, *Synoum glandulosum*, *Acmena smithii* and *Ceratopetalum gummiferum*.

Specifically, this will involve the selective drilling of *Ligustrum lucidum* and *Ligustrum sinense* at the onset of flowering and the targeting of *Tradescantia fluminensis* and *Hedychium gardnerianum*.

Zone B – North-facing Slope

- NO WORK IN APRIL 2003

Zone C – Road Edge

- Plant supplementary plants ordered for this zone in October 2002. Mulch certain areas if required.

MAY 2003

Date working	Hours	Cost	Remaining Year Budget
9 May 2003	21	\$572.25	
23 May 2003	21	\$572.25	

Zone A – Creekline

- Continue to encourage the unique nature of the Warm Temperate Rainforest in this zone, focusing on native species such as *Todea barbara*, *Pteris tremula*, *Calochlaena dubia*, *Synoum glandulosum*, *Acmena smithii* and *Ceratopetalum gummiferum*. Specifically, this will involve the selective drilling of *Ligustrum lucidum* and *Ligustrum sinense* at the onset of flowering and the targeting of *Tradescantia fluminensis* and *Hedychium gardnerianum*.

Zone B – North-facing Slope

- Follow up work focusing on *Lantana camara*, *Ipomoea indica*, *Lonicera japonica*, *Dipogon lignosus* and *Delairea odorata*. The work will seek to ensure that the canopy protection (of remnant *Angophora costata* and *Eucalyptus piperita*) carried out in the previous year is consolidated.
- Prepare pile burns for burning in Spring 2003 with refuse from drilled woody weeds and *Pittosporum undulatum*.

Zone C – Road Edge

- NO WORK IN MAY 2003. Plantings from April will be allowed to take root and establish before maintenance begins.

JUNE 2003

Date working	Hours	Cost	Remaining Year Budget
13 June 2003	21	\$572.25	
27 June 2003	21	\$572.25	

Zone A – Creekline

- NO WORK IN JUNE 2003

Zone B – North-facing Slope

- Follow up work focusing on *Lantana camara*, *Ipomoea indica*, *Lonicera japonica*, *Dipogon lignosus* and *Delairea odorata*. The work will seek to ensure that the canopy protection (of remnant *Angophora costata* and *Eucalyptus piperita*) carried out in the previous year is consolidated.
- Maintenance work focusing on *Tradescantia fluminensis* and *Protasparagus aethiopicus* in the better areas that were treated in 2001-02. All refuse to be bagged and removed from the site.
- Continue to prepare pile burns for burning in Spring 2003 with refuse from drilled woody weeds and *Pittosporum undulatum*.

Zone C – Road Edge

- Spray preparation and spray targeting *Ehrharta erecta*, *Protasparagus aethiopicus* and other herbaceous weeds along the road edge. This work will focus on maintaining the plantings from April 2003. *Protasparagus aethiopicus* propagules to be removed from site.

JULY 2003

Date working	Hours	Cost	Remaining Year Budget
11 July 2003	21	\$572.25	
25 July 2003	21	\$572.25	

Zone A – Creekline

- Continue to encourage the unique nature of the Warm Temperate Rainforest in this zone, focusing on native species such as *Todea barbara*, *Pteris tremula*, *Calochlaena dubia*, *Synoum glandulosum*, *Acmena smithii* and *Ceratopetalum gummiferum*. Specifically, this will involve the selective drilling of *Ligustrum lucidum* and *Ligustrum sinense* at the onset of flowering and the targeting of *Tradescantia fluminensis* and *Hedychium gardnerianum*.

Zone B – North-facing Slope

- NO WORK IN JULY 2003

Zone C – Road Edge

- Spray preparation and spray targeting *Ehrharta erecta*, *Protasparagus aethiopicus* and other herbaceous weeds along the road edge. This work will focus on maintaining the plantings from April 2003. *Protasparagus aethiopicus* propagules to be removed from site.

AUGUST 2003

Date working	Hours	Cost	Remaining Year Budget
8 August 2003	21	\$572.25	
22 August 2003	21	\$572.25	

Zone A – Creekline

- Continue to encourage the unique nature of the Warm Temperate Rainforest in this zone, focusing on native species such as *Todea barbara*, *Pteris tremula*, *Calochlaena dubia*, *Synoum glandulosum*, *Acmena smithii* and *Ceratopetalum gummiferum*. Specifically, this will involve the selective drilling of *Ligustrum lucidum* and *Ligustrum sinense* at the onset of flowering and the targeting of *Tradescantia fluminensis* and *Hedychium gardnerianum*.

Zone B – North-facing Slope

- Follow up work focusing on *Lantana camara*, *Ipomoea indica*, *Lonicera japonica*, *Dipogon lignosus* and *Delairea odorata*. The work will seek to ensure that the canopy protection (of remnant *Angophora costata* and *Eucalyptus piperita*) carried out in the previous year is consolidated.
- Maintenance work focusing on *Tradescantia fluminensis* and *Protasparagus aethiopicus* in the better areas that were treated in 2001-02. All refuse to be bagged and removed from the site.

Zone C – Road Edge

- Spray preparation and spray targeting *Ehrharta erecta*, *Protasparagus aethiopicus* and other herbaceous weeds along the road edge. This work will focus on maintaining the plantings from April 2003. *Protasparagus aethiopicus* propagules to be removed from site.

SEPTEMBER 2003

Date working	Hours	Cost	Remaining Year Budget
12 September 2003	21	\$572.25	
26 September 2003	21	\$572.25	

Zone A – Creekline

- Cull *Cyathea cooperi* in favour of the locally native *Cyathea australis*, which is present in the reserve.

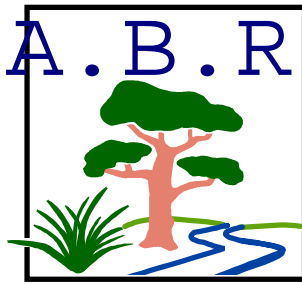
- Continue to encourage the unique nature of the Warm Temperate Rainforest in this zone, focusing on native species such as *Todea barbara*, *Pteris tremula*, *Calochlaena dubia*, *Synoum glandulosum*, *Acmena smithii* and *Ceratopetalum gummiferum*. Specifically, this will involve the selective drilling of *Ligustrum lucidum* and *Ligustrum sinense* at the onset of flowering and the targeting of *Tradescantia fluminensis* and *Hedychium gardnerianum*.

Zone B – North-facing Slope

- Follow up work focusing on *Lantana camara*, *Ipomoea indica*, *Lonicera japonica*, *Dipogon lignosus* and *Delairea odorata*. The work will seek to ensure that the canopy protection (of remnant *Angophora costata* and *Eucalyptus piperita*) carried out in the previous year is consolidated.
- Maintenance work focusing on *Tradescantia fluminensis* and *Protasparagus aethiopicus* in the better areas that were treated in 2001-02. All refuse to be bagged and removed from the site.
- Burning of the piles created during the Winter of 2003 (subject to approval).

Zone C – Road Edge

- Spray preparation and spray targeting *Ehrharta erecta*, *Protasparagus aethiopicus* and other herbaceous weeds along the road edge. This work will focus on maintaining the plantings from April 2003 and should by now be reduced to minimal attention. *Protasparagus aethiopicus* propagules to be removed from site.



WORK PLAN – CLIFTON GARDENS – OPTION B

Catchment:	Port Jackson
Bushland Site:	Clifton Gardens Reserve
Performance Target:	Improve to next level: (30-69% Indigenous)
Year:	2002-03
Cost for year:	\$18,312
Cost to reach Performance Target by 2011:	\$133,560
Total Hours worked in first year's Annual Work Plan	Hours: 672

Prepared by:

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Overall Strategy for Bushland Restoration

For the purposes of this work ABR has divided the reserve into work zones. We use these zones to assist in describing our work strategy for the site. They are not to be confused with the Retain, Regenerate and Revegetate zones although there may be some correlation.

Zone A - the top end of the reserve from the southern edge of the Morella Rd reserve down to the car park and up to the bus turning zone. It is the part of the reserve that retains a hint of bushland, as it has not been subject to landscaping in years gone by. It is in poor condition and by far the most degraded zone.

Zone B - the once landscaped area above the car park. This area has almost no remnant bushland and negligible resilience although it does contain attractive rock outcrops and rock walls that would enhance the appearance of the area. Planting of Eucalypts of dubious value over the years provide some canopy along with the surviving, or recently departed, native *Angophora costata*, *E. botryoides*, *E. piperita* and *Corymbia gummifera*. Zone B has a mulched strip of mainly planted bush on the car park edge, which is in need of significant further planting to bolster its modest plant density. Some regeneration of *Banksia integrifolia* is occurring on the southern side where a number of seedlings have been located. Some of these seedlings should be transplanted to other parts of the strip to help thicken the edge with appropriate species. By and large this whole zone is in need of weed control and revegetation as natural regeneration from a seed bank is most unlikely. Planting of prolific native groundcovers such as *Lomandra*, *Dianella*, *Microlaena*, *Themeda* and *Imperata* will definitely further our cause.

Zone C - the planted strip adjacent to the mown area at the most western part of the work area plus the thin strip of highly degraded bush and garden beds up towards the two vandalized figs. We have noted the odd native plant struggling for survival under the weeds but as for Zone B, gradual clearance of weed areas and revegetation is the only hope. Some of the weed area will be retained for habitat until suitable vegetation has been established.

Zone D - the upper garden beds adjacent to Morella Rd, which are in slightly better condition than the rest of the reserve. Because there is a reasonable canopy here, the weed infestation is not as thick and should be easier to control and enhance than the other zones.

At present this reserve would have a native vegetation density at the lower end of the <30% band. The selected option is to increase the native vegetation density to the 30-69% band. This will be achieved without the benefit of regeneration in the early years. We will need to rely on effective weed control and revegetation to meet this target.

The ABR strategy for this site over 10 years would encompass the following initiatives:

- Canopy protection of the whole reserve and gradual eradication of the exotic vines such as *Ipomoea indica*, *Lonicera japonica* and *Acetosa sagittata*.
- Canopy protection of the whole reserve from *Lantana camara* where it is engulfing canopy trees.
- Maintenance of the mulched strip on the car park edge of Zone B including planting of appropriate local species in all vegetation layers.
- Maintenance of the planted area in Zone C. It requires ongoing weed control and some supplementary planting to create a canopy layer that won't ultimately affect views from the nearest residences.

- Weeding around the few natives remaining in Zone A to see if any resilience is left in the soil. Should there be no resilience then gradual clearing of weeds and revegetation would be recommended.
- In Zones B and C, where there is almost no likelihood of resilience at all, gradual removal of weeds and revegetation would be the recommended approach. At all times, the retention of more than adequate faunal habitat will be a priority, particularly in Zone C where *Lantana camara* patches provide good small bird habitat. A number of active Possum dreys exist amidst *Ligustrum spp.*, *Lantana camara* and *Lonicera japonica*. They will be retained in the short to medium term until their owners find alternative accommodation. In general, areas of woody weed will not be totally eradicated until significant alternative habitat has been created.
- Retention of planted Eucalypts and *Corymbia eximia* for their canopy and heritage value at least in the medium term. However, planting of appropriate shade trees to ultimately take their place is suggested.
- Establishment of mown edges between the grassed areas and garden beds through spraying and mulching, or if that proves ineffective, use of logs and branches from within the reserve or off-site.
- Uncovering of sandstone rock outcrops and rock walls, in all Zones, from weed and sediment to promote regeneration in the immediate areas and retard weed infestation by subtly warming surrounding areas. They will also visually enhance the areas that will require revegetation, giving those areas a more natural look.

Annual Work Plan

Based on: Achieving 30-69% indigenous vegetation density.
Current Indigenous Vegetation Density: <30%

List Of The 10 Worst Weeds In The Reserve As At October 2002

Rank	Weed <i>Botanic Name</i> Common Name	Reason for Rank
1	<i>Protasparagus aethiopicus</i> Asparagus Fern	Capable of densely covering the ground and preventing germination of native species. Produces copious berries, which either fall to the ground or are spread by birds. Time consuming to eradicate. Infesting all zones.
2	<i>Parietaria judaica</i> Pellitory	If left unchecked can produce a virtual groundcover monoculture. Produces seed prolifically throughout the year. It can prevent the germination of native seed and swamp seedlings. Difficult to eradicate. Mainly in Zones B and C.
3	<i>Ehrharta erecta</i> Panic Veldt Grass	If left unchecked can produce a virtual groundcover monoculture. Produces seed prolifically throughout the year. Like Asparagus Fern, it can prevent the germination of native seed and swamp seedlings. Difficult to eradicate.
4	<i>Ligustrum</i> sp. Broad leaf and Small leaf Privet	Large trees prevent light from passing through the canopy to germinate native seed. Diversity of species is restricted and understorey and groundcover plants may disappear over time. Each tree can produce thousands of seedlings annually.
5	<i>Acetosa sagittata</i> Turkey Rhubarb	A prolifically seeding vine that is not yet in plague proportions but is established in each zone. Must be treated in the short term to prevent it becoming a long-term problem.
6	<i>Lonicera japonica</i> Honeysuckle	This vine has established a foothold in Zones A and B and needs to be eradicated while it still in manageable quantities. If left unchecked it will smother trees, shrubs and groundcovers alike.
7	<i>Lantana camara</i> Lantana	Has invaded a number of canopy trees often in concert with exotic vines. Despite its habitat value, where it is invading canopy it must be removed, as it will smother a tree if left. At shrub level it may form a monoculture and negate areas of native resilience if they in fact exist.
8	<i>Nephrolepis cordifolia</i> Fishbone Fern	A fast spreading inhabitator of moist situations that can form large and ever-expanding monocultures if left unchecked. Already large infestations exist in Zones A and B.
9	<i>Araujia sericifolia</i> Moth Vine	As for the other vines, must be controlled to prevent smothering of trees and shrubs. Numerous seedlings exist and mature plants are dotted throughout the reserve.
10	<i>Ipomoea indica</i> Morning Glory	This vine has the potential to smother canopy trees and shrubs and cover the ground as well. Difficult to eradicate it needs to be strictly controlled. Evident in all zones.

General Tasks To Be Undertaken By Season

Spring:

- Treat weeds as per Monthly list, annuals, woody weed seedlings
- Spray prep and spray
- Monitor and identify seed bearing natives for later seed collection
- Monitor and promote regeneration
- Flame weeding
- Follow-up vines work prior to summer flush
- Annual assessment, creation of work plans and annual report
- Maintain previous & new plantings - Final supplementary Planting
- Drill woody weeds to promote spring/summer regen.
- Prepare plant list and order for delivery in autumn
- Assess and protect habitat areas
- Cull Pittosporum
- Follow-up Trad raking
- Water plantings
- Mulching (if required)
- Update species lists

Summer:

- Seed collection for native propagules
- Follow-up vines for canopy protection
- Continue de-flowering & bagging annual weeds esp. grasses
- Spray prep and spray
- No flame weeding (Fire issue)

- Spray Blackberry
- Monitor and protect regenerating natives
- Conserve and protect habitat
- Broadcast native seed as found on site also Lomandra
- Collect Dianella/Lomandra seed early December

Autumn:

- Spray Trad for winter raking
- Planting preparation of areas, plant, water, mulch
- Plug-ins – Transplanting
- Continue control of herbaceous weeds e.g. Propagules
- Flame weeding
- Pile Burns

Winter:

- Consolidate Weed control
- Continue planting if warm enough
- Open up new areas if necessary (primary work)
- Pile Burns
- Target winter annuals e.g. Burr medic.
- Maintain plantings
- Rake Trad

Annual Work Plan Monthly Sequence

OCTOBER 2002

Date working	Hours	Cost	Remaining Year Budget
4 October 2002	28	\$ 763	
18 October 2002	28	\$ 763	

- **Submit plant order to nominated provenance nurseries to allow enough time for seed collection and propagation over the coming season. This is vital to ensure maximum species richness come planting time in Autumn 2003. Applies to zones B, C and D.**

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.
- Begin primary work in selected resilient areas in order to ensure that any potential for regeneration is not lost. This will involve more intensive work on *Lantana camara* and other woody weeds. Care will be taken in order to ensure that overclearing does not occur such that maintenance is minimised and habitat is intact.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*. This work to encourage the mesic species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.
- Removal of *Erythrina X sykesii* specimens in the center of the zone (subject to consultation with council and the necessary approvals).

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica*, *Oxalis pes-caprae*, *Nothoscordum borbonicum* and other flowering and seeding herbaceous weeds.

NOVEMBER 2002

Date working	Hours	Cost	Remaining Year Budget
1 November 2002	28	\$ 763	
15 November 2002	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*. This work to encourage the mesic species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica*, *Oxalis pes-caprae*, *Nothoscordum borbonicum* and other flowering and seeding herbaceous weeds.

DECEMBER 2002

Date working	Hours	Cost	Remaining Year Budget
6 December 2002	28	\$ 763	
20 December 2002	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.
- Begin primary work in selected resilient areas in order to ensure that any potential for regeneration is not lost. This will involve more intensive work on *Lantana camara* and other woody weeds. Care will be taken in order to ensure that overclearing does not occur such that maintenance is minimised and habitat is intact.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*. This work to encourage the mesic species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica*, *Oxalis pes-caprae*, *Nothoscordum borbonicum* and other flowering and seeding herbaceous weeds.

JANUARY 2003

Date working	Hours	Cost	Remaining Year Budget
3 January 2003	28	\$ 763	
17 January 2003	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*. This work to encourage the mesic species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica*, *Oxalis pes-caprae*, *Nothoscordum borbonicum* and other flowering and seeding herbaceous weeds.

FEbruary 2003

Date working	Hours	Cost	Remaining Year Budget
7 February 2003	28	\$ 763	
21 February 2003	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.
- Begin primary work in selected resilient areas in order to ensure that any potential for regeneration is not lost. This will involve more intensive work on *Lantana camara* and other woody weeds. Care will be taken in order to ensure that overclearing does not occur such that maintenance is minimised and habitat is intact.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds. Target *Conyza* sp. in February.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*. This work to encourage the mesic species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica*, *Oxalis pes-caprae*, *Nothoscordum borbonicum* and other flowering and seeding herbaceous weeds.

MARCH 2003

Date working	Hours	Cost	Remaining Year Budget
7 March 2003	28	\$ 763	
21 March 2003	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.
- Begin primary work in selected resilient areas in order to ensure that any potential for regeneration is not lost. This will involve more intensive work on *Lantana camara* and other woody weeds. Care will be taken in order to ensure that overclearing does not occur such that maintenance is minimised and habitat is intact.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Mulch prior to planting if necessary.
- Supplementary planting especially around the car park area at the end of March.

Zone C

- Mulching immediately prior to planting as required.
- Supplementary planting in an attempt to re-instate the entire vegetation community over time. Plants ordered in October 2002.

Zone D

- Mulch the proposed planting areas immediately prior to planting if required.
- Supplementary planting session comprised of simplified community to avoid “view” issues with local residents (i.e., no trees).

APRIL 2003

Date working	Hours	Cost	Remaining Year Budget
4 April 2003	28	\$ 763	
18 April 2003	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.
- Begin primary work in selected resilient areas in order to ensure that any potential for regeneration is not lost. This will involve more intensive work on *Lantana camara* and other woody weeds. Care will be taken in order to ensure that overclearing does not occur such that maintenance is minimised and habitat is intact. This work to encourage the mesic species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*.

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Prepare piles for burning in Winter/Spring with the woody weed refuse from primary work (mostly *Lantana camara*).

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica*, *Oxalis pes-caprae*, *Nothoscordum borbonicum* and other flowering and seeding herbaceous weeds.

MAY 2003

Date working	Hours	Cost	Remaining Year Budget
2 May 2003	28	\$ 763	
16 May 2003	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*. This work to encourage the mesic species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Prepare piles for burning in Winter/Spring with the woody weed refuse from primary work (mostly *Lantana camara*).

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.

JUNE 2003

Date working	Hours	Cost	Remaining Year Budget
6 June 2003	28	\$ 763	
20 June 2003	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.
- Begin primary work in selected resilient areas in order to ensure that any potential for regeneration is not lost. This will involve more intensive work on *Lantana camara* and other woody weeds. Care will be taken in order to ensure that overclearing does not occur such that maintenance is minimised and habitat is intact.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Cut-&-paint juvenile and medium sized *Pittosporum undulatum* leading into Spring in order to increase light levels for plantings that were planted during Autumn.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*. This work to encourage the mesic species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica*, *Oxalis pes-caprae*, *Nothoscordum borbonicum* and other flowering and seeding herbaceous weeds.

JULY 2003

Date working	Hours	Cost	Remaining Year Budget
4 July 2003	28	\$ 763	
18 July 2003	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Cut-&-paint juvenile and medium sized *Pittosporum undulatum* leading into spring in order to increase light levels for plantings that were planted during autumn.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*. This work to encourage the mesic

species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Target *Ochna serrulata* as it flowers in late winter along with other juvenile woody weeds. Some *Pittosporum undulatum* can be culled at this point.

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.

AUGUST 2003

Date working	Hours	Cost	Remaining Year Budget
1 August 2003	28	\$ 763	
15 August 2003	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.
- Begin primary work in selected resilient areas in order to ensure that any potential for regeneration is not lost. This will involve more intensive work on *Lantana camara* and other woody weeds. Care will be taken in order to ensure that overclearing does not occur such that maintenance is minimised and habitat is intact.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Cut-&-paint juvenile and medium sized *Pittosporum undulatum* leading into spring in order to increase light levels for plantings that were planted during autumn.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*. This work to encourage the mesic species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.

- Target *Ochna serrulata* as it flowers in late winter along with other juvenile woody weeds. Some *Pittosporum undulatum* can be culled at this point.
- Piles to be burnt (subject to the normal approvals).

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica*, *Oxalis pes-caprae*, *Nothoscordum borbonicum* and other flowering and seeding herbaceous weeds.

SEPTEMBER 2003

Date working	Hours	Cost	Remaining Year Budget
5 September 2003	28	\$ 763	
19 September 2003	28	\$ 763	

Zone A

- Follow up canopy protection work throughout this zone targeting *Ipomoea indica* and *Lantana camara*, which are a threat to the long-term health of the canopy.

Zone B

- Spray preparation and spray maintenance sweep targeting *Ehrharta erecta*, *Bidens pilosa*, *Parietaria judaica* and other flowering and seeding herbaceous weeds.
- Continue to move from the good to the bad sweeping through areas that have not had primary treatment as yet. Target *Senna pendula* var. *glabrata*, *Nephrolepis cordifolia*, *Ageratina adenophora*, *Parietaria judaica*, *Solanum mauritianum*, *Ligustrum lucidum* and *Ligustrum sinense*. This work to encourage the mesic species (e.g., *Pittosporum undulatum*, *Glochidion ferdinandi* and *Ficus rubiginosa*) in the medium term and planted non-local natives.

Zone C

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.
- Piles to be burnt (subject to the normal approvals).

Zone D

- Follow up targeting of *Protasparagus aethiopicus*, *Lantana camara* and *Ipomoea indica*.