

SHR/11  
REF Walking track proposal Gap Bluff

REVIEW OF ENVIRONMENTAL  
FACTORS

WALKING TRACK PROPOSAL  
GAP BLUFF



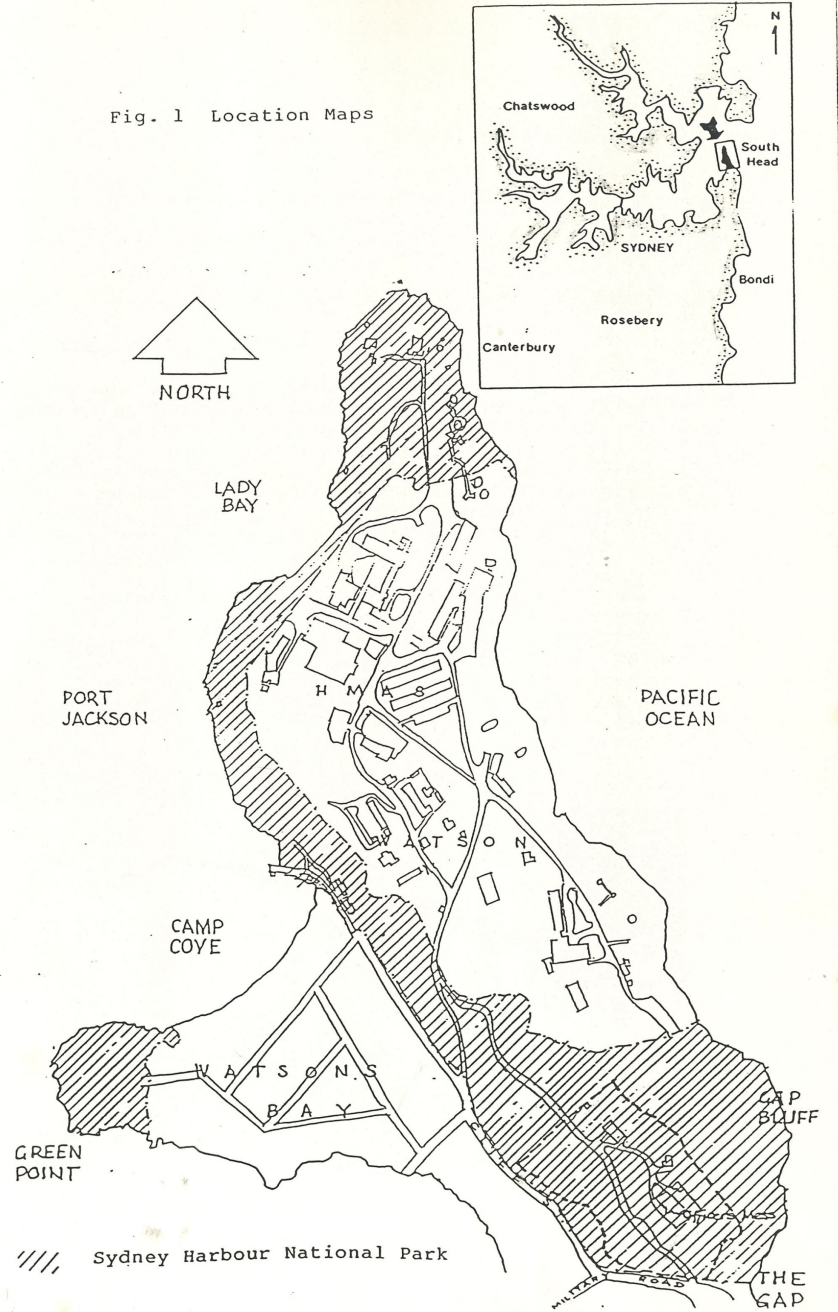
View from proposed lookout.

SYDNEY HARBOUR NATIONAL PARK

Prepared by Colin Killick  
April 1989

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Fig. 1 Location Maps



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REVIEW OF ENVIRONMENTAL FACTORS  
GAP BLUFF (DANIEL SOUTHWELL) WALKING TRACK

1.0 INTRODUCTION

- 1.1 Location: Gap Bluff, part of Sydney Harbour National Park, is located at South Head, Watsons Bay (fig 1). The area includes approximately 7 hectares of land flanked, on its eastern margin, by steep cliffs overlooking the Pacific Ocean and on its western side by the village of Watsons Bay. The southern boundary is marked by 'The Gap', while the northern perimeter fence is shared with HMAS Watson, a naval training installation.
- 1.2 Site History: The area was gazetted part of Sydney Harbour National Park in 1982. Previously the area was controlled by the Army, being used, from 1895 to the early 1940s, as the School of Artillery. The original landscape and vegetation were extensively altered during the Army's period of occupation. A large number of buildings were also built, of which several still remain. The most prominent of these is the Officers' Mess (fig 2).



Fig. 2 The Officers' Mess

Since 1982 public access to the area has not been permitted, mainly because of the lack of a walking track and unfenced steep cliffs, but also to permit natural regeneration of native plants.

In 1988 a proposal was received from the William E. Simon School of Business Administration, part of the University of Rochester, to use the Officers' Mess building as a private university. The proposal is still under consideration.

- 1.3 The Walking Track: The Walking Track will link the present Coastal Walkway, maintained by Woollahra Council, with Camp Cove via the high plateau of Gap Bluff (figs 3 & 4).

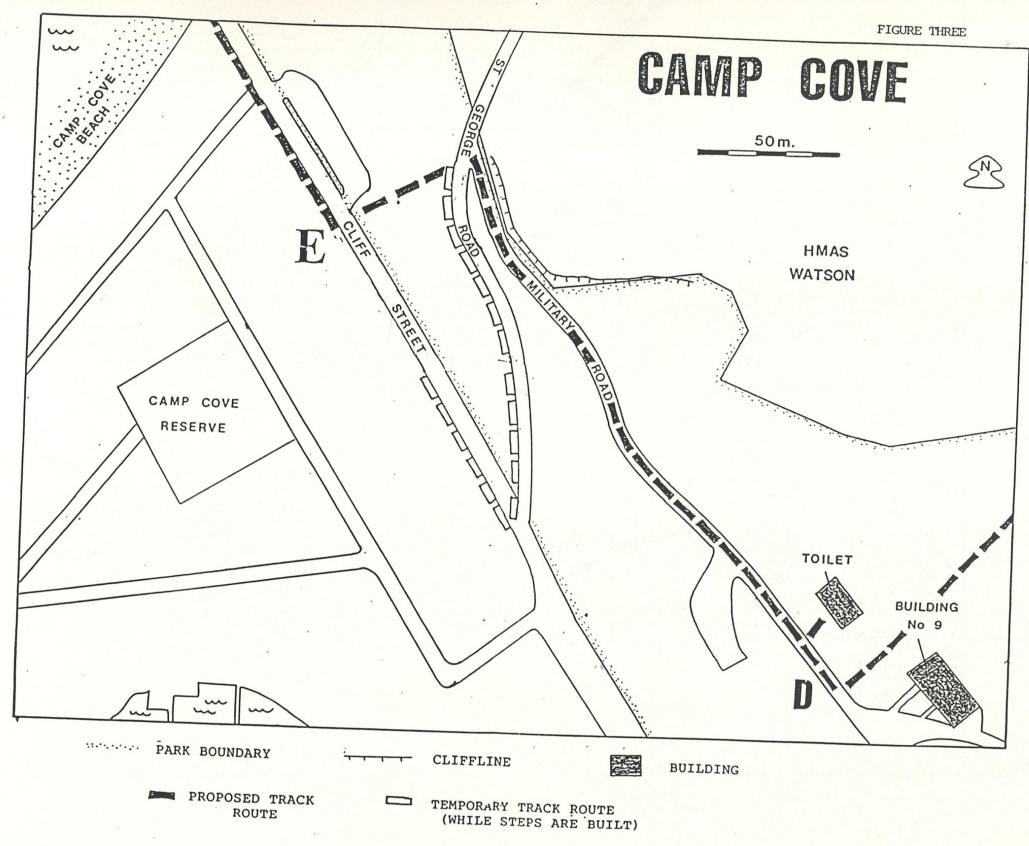
The track will follow the cliff along the northern edge of The Gap, ascending via steps to a high point which overlooks the Pacific Ocean and has extensive views along Sydney Harbour. From here, the track will head slightly inland to the northwest to avoid damaging natural revegetation along the cliff margin. At least one spur trail will be built to take visitors to a lookout at the cliff where there are spectacular views of North Head and Manly.

The route will then descend through a small area of bush, using existing steps built by the Army, to emerge beside the old Quartermaster's Store (also referred to as the Armoury Building). A toilet nearby will be refurbished for visitor use. Walkers will then follow the footpath along Military Road to near the HMAS Watson entrance. Steps will lead from there down to Camp Cove Beach through a grove of Coral Trees and Lantana.

- 1.4 The Name: A suggestion was received by Mr M. Rolfe, President of the Vaucluse Progress Association, that the track be named the 'Daniel Southwell Walking Track'. Daniel Southwell signed on HMS Sirius as a Midshipman, later becoming Mate during the voyage of the First Fleet. In 1790 he was given responsibility for the signal station at South Head. He left Sydney in 1791, later becoming a Lieutenant and finally dying of war wounds in the Battle of Lisbon, 1797. The anticipated date of opening of the track, 1990, marks the 200th anniversary of Daniel Southwell's appointment as Superintendent of the Signal Station. There are currently neither monuments nor any other reminders (street names etc) of Southwell's early presence in the area.

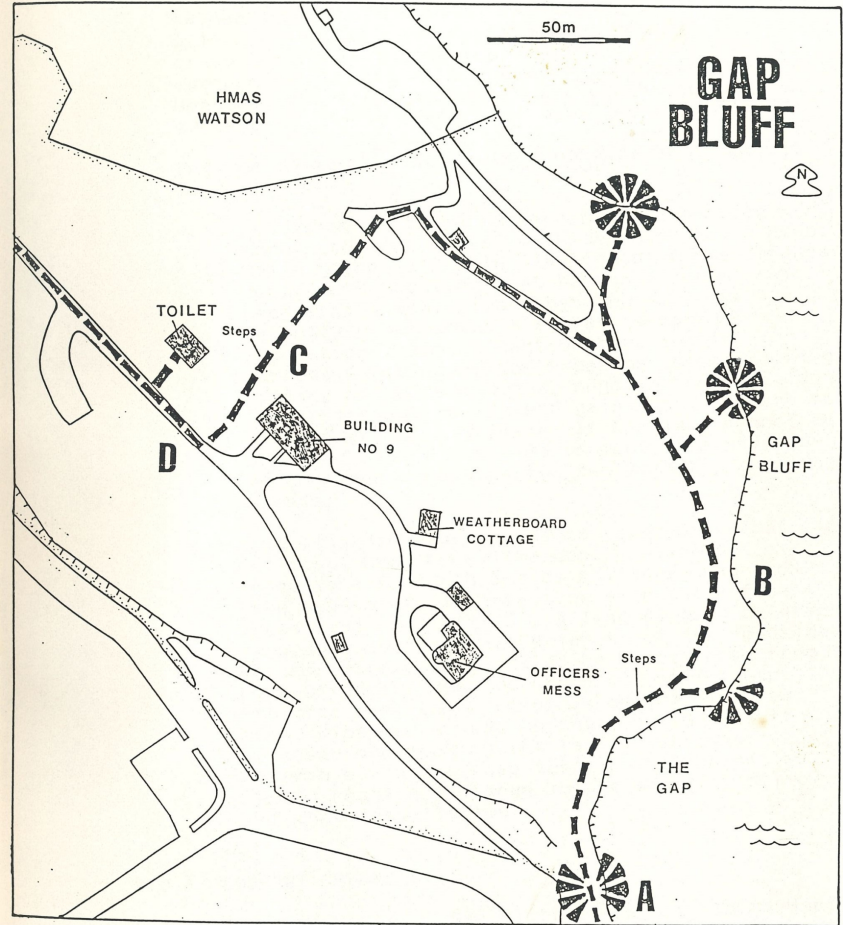
- 1.5 The future: If the Simon School proposal goes ahead, an area of land surrounding the Mess and other nearby buildings will be leased to the School until December 1993. After that date, total control of the

FIGURE THREE



MAP ONE

FIGURE TWO



PROPOSED TRACK ROUTE

CLIFFLINE

PARK BOUNDARY

LOOKOUT

BUILDING

area will return to the National Parks and Wildlife Service.

Beyond 1993, the National Parks and Wildlife Service will continue to run the Officers' Mess as a Conference/Training Centre. A similar facility is currently operated at the Quarantine Station, North Head, by the Service and has proved financially successful, being booked out many weeks in advance.

For the walking track, future consideration should be given to:

- \* Acquisition of the eastern cliffline along HMAS Watson to link Gap Bluff with Inner South Head. While there is little likelihood of the defence department vacating HMAS Watson for the next decade at least, given that the navy has recently constructed a Submarine Warfare Simulation Training Centre there and is currently replacing the asbestos cement roofing of many of the buildings, negotiations should be carried out to try and gain public access to this length of cliffline. If the land cannot be acquired by the State Government, the Navy may be consider refencing its own land for public access;
- \* Enabling disabled access to Lower Gap Bluff via Military Road from 'The Gap'. This would require a footpath beside Military Road from The Gap to its intersection with the Officers' Mess side road (fig 3). A less elegant solution would be to fence off a length of the roadside. A short track should also be constructed from the Officers' Mess to the cliff at The Gap. The toilets need to be refurbished for disabled use. Disabled access to the Upper Gap Bluff plateau overlooking the Pacific is only possible via the road through HMAS Watson and would require a change in the security policy of that installation.

## 2.0 ASSESSMENT CHECKLIST

2.1 Geology and Soils: Gap Bluff is part of South Head, which marks the southern entrance to Sydney Harbour. The headland is composed of resistant quartzose Triassic Hawkesbury Sandstone. The sandstone is low in nutrients and this, coupled with rapid leaching through the porous sands, results in a very poor soil.

Soils are typically thin, particularly on the higher parts of Gap Bluff. In protected eastern-facing locations at the base of inclines some thicker, more nutrient-rich soils have developed and support a

vigorous vegetation. Without a detailed study of soil composition, it is not possible to tell how much of this soil is fill introduced by the Army.

Some minor excavation is required in the vicinity of The Gap to link the new track with the existing Coastal Walkway (Section A). Some cutting of the sandstone bedrock to construct steps beside The Gap is also required. Wherever possible, use will be made of natural routes and features to minimise impact.

In all areas where the track runs closer than 10 metres to the edge of the cliff, joint patterns, fractures and undercutting of the rock have been examined to ensure there is no danger of collapse.

2.2 Meteorology and Hydrology: Much of the area is exposed to severe coastal weather, with mean average rainfall in excess of 1200mm. Rainfall tends to be heavy over relatively short periods, and can place great stress on drainage systems.

It is currently intended to construct the track out of concrete. This will minimise erosion and maintenance, particularly in an area likely to be heavily visited. In addition, concrete will be consistent with the Coastal Walkway, with which this trail will link, and reduce maintenance needs.

Areas where particular care needs to be taken in regard to drainage are:

- \* Section A to B - the steps from The Gap to the top of Gap Bluff. Bedrock is exposed over most of this distance and natural erosion has been minimal, despite the absence of vegetation cover over most of the proposed track route. Any concentrated flows of water can be readily diverted over the edge of the cliff by means of shallow drains.
- \* Section E - the steps from the HMAS Watson boom gate to Cliff Street. The soil here is thick and damp, bound by introduced species, including Coral Trees and Lantana. Care will have to be taken to ensure that the foundations for the steps are deep enough to avoid slippage, preferably anchored in places onto bedrock. The introduced plants grow vigorously in this area and will quickly bind any disturbed soil.

In other areas the topography is relatively flat and a camber on the track coupled with carefully positioned drains will solve any runoff problems.

The proposed track is several metres above sea level at its lowest point and will not be affected by



rising sealevels associated with the Greenhouse Effect.

- 2.3 Flora and Habitat: A detailed survey of flora was recently carried out as part of a Conservation Plan for the area. The only relatively rare species found were individuals of *Melaleuca hypericifolia*, which is uncommon in the Sydney region. These plants were found in situations which indicated they had been introduced and will not be affected by this proposal. No endangered species were found.

Section A to B - the lower section of this route consisted mainly of grasses and sedge, with scattered New Zealand Christmas Trees (*Metrosiderus excelsa*) and native shrubs, predominantly *Westringia fruticosa*. At least one small New Zealand Christmas Tree will have to be removed.

The steps to be constructed as part of this section will pass over terrain carrying little vegetation. There are scattered introduced and native shrubs in the area, a number of which are likely to be disturbed by the work. Damaged areas will be revegetated with plants propagated from stock at South Head. Seedlings have already been grown for this purpose.

Section B to C - The Army kept this area cleared of vegetation higher than grass for many decades. Many buildings were constructed (since demolished) and gardens established. Since the Service acquired the site in 1982 it has been managed passively, allowing native shrubs to reestablish themselves with little assistance other than removal of more problematic weeds such as Bitou Bush and Pampas Grass. The harsh coastal environment and thin, poor soil has apparently given many native shrubs a competitive advantage over introduced species and a low shrubby heath is gradually reappearing in places. Particularly along the cliffline, patches of *Leptospermum laevigatum*, *Melaleuca nodosa* and Epacridaceae are growing well.

The track will be directed inland, approximately 30 metres from the cliff edge, to ensure these regenerating patches are not disturbed. A spur trail is to be built to a lookout at the cliffside, but this will be built through an area which has currently little native plant growth. A safety fence is to be built along the entire length of the steep, high cliff. If carried out carefully, construction of the fence will have little effect on the vegetation.

Where possible, use of existing bitumen roads will be made rather than constructing new track surfaces.

These roads will also be utilised for bringing material into the area.

For the remainder of its distance in this section, the track will run through grass and sedge.

Section C to D - Concrete steps, built by the Army, already exist and will be repaired. This will involve some cutting back of overgrowth.

Section D to E - Most of this route uses the Military Road footpath. Near the HMAS Watson entrance, the route will descend, via new concrete steps, to Cliff Street. The new steps will be built in a grove of Coral Trees, with an undergrowth of Lantana, Morning Glory and Wandering Jew. Revegetation of this area would be a major task and be resisted by elements of the local community. It can also be suggested that the Coral Trees are an element of the cultural heritage of the area. While some clearing of the understory will be required during construction of the steps, past experience indicates the plants will swiftly return.

- 2.4 Fauna: after 100 of intense use, the area supports little native vertebrate fauna. At least one pair of Spur-Winged Plovers have been observed nesting in the area, and care will have to be taken to avoid damaging any of the ground nests of these birds. Apart from these, fauna includes typical suburban birds, such as Magpies, and small reptiles. None of these will be affected by the proposed development, though it is possible that the presence of regular visitors to this area may deter the Plovers from nesting there in the future.
- 2.5 Aboriginal Sites: a detailed survey of the Gap Bluff area for Aboriginal sites was carried out in 1978 by Tia Negerevich. No sites were located by Negerevich, though one engraving site had been described by Campbell in 1899. Campbell's site is presumed to have been destroyed during construction of the Officers' Mess building in 1936. The National Parks Central Region Cultural Resources Officer, Bronwyn Conyers, is familiar with the area and considers it to have no potential for future site discoveries.
- 2.6 Historical: The Historical Statement of Significance for the Gap Bluff area states that 'Gap Bluff is of regional historical significance as the site of the School of Gunnery/Artillery, from 1895 to early in the Second World War'.

After the Second World War the Army continued to occupy the area, firstly as a National Service Training Centre, then as a transit depot for Officers' serving overseas.

In 1982 the area was gazetted as National Park.

Significant buildings are the Officers' Mess and the 1895 School of Artillery Workshop. Important landscape elements include the Officers' Mess gardens and a number of features flanking Military Road, including the planted Canary Island Palms and Norfolk Pines. The Walking Track will not affect any of these items, generally being routed around the margin of the historic core of the area.

Items of historic importance which were outside the area considered in the Conservation Plan and which will be close to the track are a World War II Searchlight Shelter on the cliff overlooking The Gap, and the 1894 Artillery Practice Battery (a low concrete wall about 20 metres long) on the eastern cliff beside the HMAS Watson boundary fence. The Searchlight Shelter will be utilised as a lookout and a safety fence built around it. Otherwise, it will not be altered in any way. The Practice Battery will not be affected by the proposal, though a lookout will be built in close proximity to it (approximately five metres away). At the lookout will be some interpretation of the Battery.

The Toilet Block in the vicinity of Section C to D will be upgraded for public use. The facility was built in 1912, but was identified in the Conservation Plan as having little significance with few remaining original fittings.

## 2.7 Landscape & Aesthetic:

2.7.1 Views of the Park: The new development will mainly be visible from The Gap and from an area of Dover Heights overlooking Watsons Bay. The most visually obtrusive aspect of the work will be the safety fence along the length of the Gap Bluff cliffline. The safety fence will also be visible from the ocean, continuing a line of such fences from HMAS Watson south along the Coastal Walkway. The obtrusion created by such barriers has to be balanced against the need to ensure public safety in heavily populated Metropolitan areas and can be justified on that basis.

Elsewhere, the development will be visible from Cliff Street (Section E). However, the proposed route is already an informal track and should be improved by construction of steps. It will also be reasonably well screened by the moderately thick vegetation in the area.

2.7.2 Views from the Park: The work will not affect any views out of the Park. The Central Region Landscape Architect (Stan Rees) has identified

important views from the area which form the basis for the selection of lookout points and helped in selection of the track route (fig 5).

2.7.2 Internal Views: The safety fence will be the most obtrusive aspect of the development. The impact of the fence will be negated to a great extent by routing the track approximately 30 metres in from the cliff edge. Revegetation will thus hide much of the structure from view.

Other work will include cleaning up of debris in the area and removal of an old wooden fence which used to mark the old Navy/Army boundary. These developments will do much to improve the aesthetic appeal of the place.

2.8 Restoration & Revegetation: No revegetation program is associated with this development, other than the minimum necessary to repair any damage done during construction of the track. As previously mentioned, the high plateau of Upper Gap Bluff has encouraging unassisted native plant growth.

2.9 Alternative routes: There are a number of constraints on the choice of route. It must:

- \* link with the present Coastal Walkway and Cliff Street.
- \* allow visitors to enjoy the significant views
- \* utilise existing track surfaces wherever possible
- \* avoid damaging revegetating areas
- \* pass close to the toilet facilities
- \* avoid damaging historically significant sites

Given these parameters, the overall route selected is the most logical. Possible variations in detail include:

2.9.1 Using an old section of Army track and steps north-west of Section C to D, approximately following the line of the HMAS Watson boundary fence. However, this track is in poor condition and would require extensive repair work and clearing of vegetation. In addition, it would bypass the toilets and visitors would have to backtrack towards The Gap to reach that facility.

2.9.2 The precise location of the steps from Military Road to Cliff Street can be altered by moving them along a NW-SE axis. The position

FIGURE FIVE

FROM JIPUS CENTRAL REGIONS  
VIEWS TO  
MIDDLE  
HARBOUR

IMPERVIOUS WALL

UNIVERSITY

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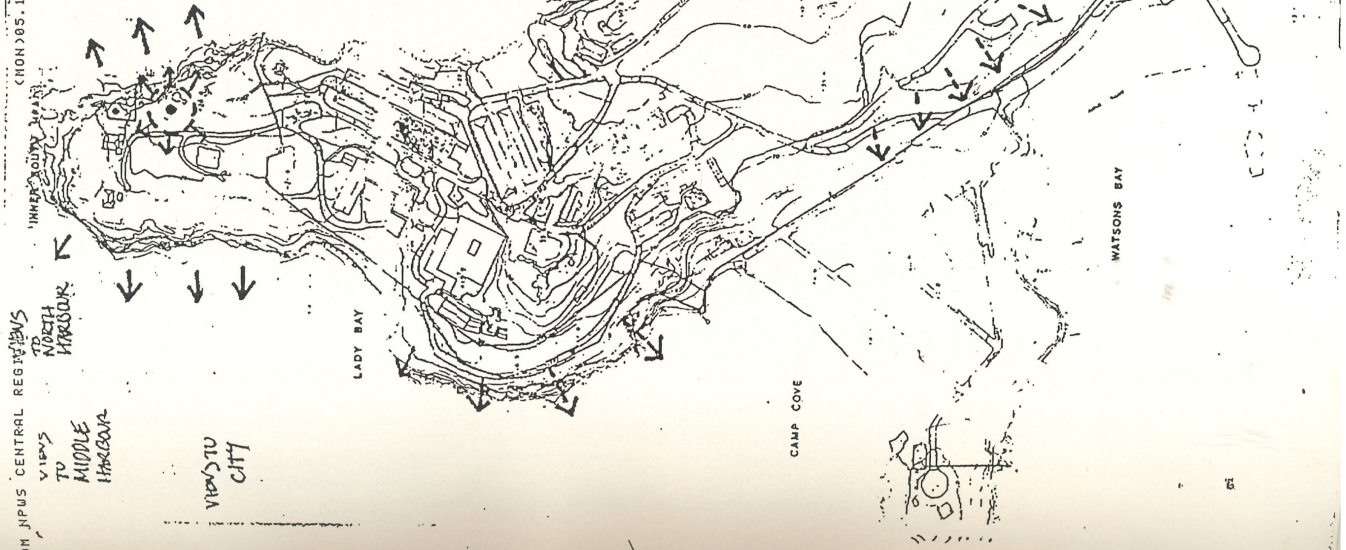
# SOUTH HEAD SYDNEY HARBOUR NATIONAL PARK

SCALE

UNIVERSITY

## SIGNIFICANT VIEWS

- EXPANSIVE VIEW TO WATER
- FILTERED VIEW TO WATER
- PROMINENT VIEWING LOCATIONS
- ☉ PANORAMIC VIEW



VIEWS TO  
CITY

LADY BAY

CAMP COVE

WATSONS BAY

GAP BLUFF

THE GAP

selected uses an existing route popular with joggers from HMAS Watson. It also avoids the need to damage an area between St Georges Road and Military Road revegetated by the Service several years ago.

- 2.10 Traffic: It will be necessary to place a Pedestrian Crossing across St Georges Road in the vicinity of the HMAS Watson boom gate to allow visitors to safely cross the road.

It is unlikely that additional visitors will be drawn to the Watsons Bay area with the sole aim of seeing this section of Sydney Harbour National Park. However, the impact of this development should be considered in a broader perspective, as South Head includes the Coastal Walkway and Inner South Head, The Gap, attractive and well-known beaches, the pleasant atmosphere of Watsons Bay and renowned restaurants.

All of these features draw visitors and tourists to an area that has little parking, narrow streets and no through traffic flow. It would be logical to warn visitors, many of whom are unfamiliar with the area and drive around bewildered and frustrated searching for parking, not to enter the 'dead-end' area of Watsons Bay, which effectively starts at the intersection of Robertson and Old South Head Roads.

The area is well serviced by buses, and a ferry runs from Circular Quay to the area on the weekends. It is important that in all Service publications advertising this area visitors be asked to leave their cars at home.

The Service should continue to liaise with Woollahra Council in its efforts to find a solution to this on-going problem.

- 2.11 Legislative controls: the development, to encourage use of the area by visitors, is permissible under the National Parks and Wildlife Act 1974.

Planning instruments applicable are:

Woollahra Local Environment Plan No 27, in which the area is zoned 8 'National Parks and Nature Reserves'. The development is not prohibited by any provisions of the LEP.

Sydney Regional Environmental Plan 14 (Eastern Beaches). The proposed development is consistent with the goals of the REP, which states that (section 6.6) 'A continuous walking trail along the Eastern Beaches coastline, linking all its open space is an important regional planning objective.'

The REP (Design & Management Guidelines 1.1.3.2) also asks consideration be given to

- \* providing barriers, fences and railings to ensure public safety in hazardous areas...
- \* providing a width and surface finish for sections of the walking trail appropriate to the landscape setting, the intensity of anticipated use, and maintenance requirements;
- \* minimising the clearance or disturbance of existing indigenous vegetation or ground surface, using elevated sections of walking trail where necessary;
- \* avoiding the use of structures (eg culverts, retaining walls and bridges) and where they are unavoidable, designing them in harmony with the surroundings;
- \* ensuring that a variety of types of path, from formal paths to bush tracks are included in its length;
- \* designing certain sections of the walking trail to safely accommodate disabled people, including those in wheelchairs' and;
- \* providing rest benches within sight of the coastal walking trail at approximately 150 metre intervals or at lesser intervals in more frequently used areas

The development is therefore permissible under the Environmental Planning & Assessment Act 1979 and State Environmental Planning Policy No 4 (Development Without Consent) applies.

While it is not necessary to apply to Woollahra Council for consent to build the track, it is important that Council be notified of this development as a matter of courtesy and because it will alter an established land use pattern in Watsons Bay.



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Sydney District

