Community & Environment Committee

Agenda: *Community & Environment Committee*

Date: *Monday 28 February 2005*

Time: *6.00pm*

Outline Of Meeting Protocol & Procedure:

- The Chairperson will call the Meeting to order and ask the Committee/Staff to present apologies or late correspondence.
- The Chairperson will commence the Order of Business as shown in the Index to the Agenda.
- At the beginning of each item the Chairperson will ask whether a member(s) of the public wish to address the Committee.
- If person(s) wish to address the Committee, they are allowed four (4) minutes in which to do so. Please direct comments to the issues at hand.
- If there are persons representing both sides of a matter (eg applicant/objector), the person(s) against the recommendation speak first.
- At the conclusion of the allotted four (4) minutes, the speaker resumes his/her seat and takes no further part in the debate unless specifically called to do so by the Chairperson.
- If there is more than one (1) person wishing to address the Committee from the same side of the debate, the Chairperson will request that where possible a spokesperson be nominated to represent the parties.
- The Chairperson has the discretion whether to continue to accept speakers from the floor.
- After considering any submissions the Committee will debate the matter (if necessary), and arrive at a recommendation (R items which proceed to Full Council) or a resolution (D items for which the Committee has delegated authority).

Delegated Authority ("D" Items):

- Community Services and Programmes.
- Health.
- Liquor Licences.
- Fire Protection Orders.
- Library Services
- Licensing.
- Regulatory.
- Waste Minimisation
- Residential Parking Schemes (surveillance and administration).
- Traffic Management (Traffic Committee Recommendations).
- Waverley/Woollahra Process Plant.
- To require such investigations, reports or actions as considered necessary in respect of matters contained within the Business Agendas (and as may be limited by specific Council resolution).
- Confirmation of the Minutes of its Meeting.
- Any other matter falling within the responsibility of the Community and Environment Committee and not restricted by the Local Government Act or required to be a Recommendation to Full Council as listed below.

Recommendation only to the Full Council ("R" Items):

- Such matters as are specified in Section 377 of the Local Government Act and within the ambit of the Committee considerations.
- Matters which involve broad strategic or policy initiatives within responsibilities of the Committee.
- Matters requiring the expenditure of moneys and in respect of which no Council vote has been made.
- Matters delegated to the Council by the Traffic Authority of NSW.
- Matters <u>not</u> within the specified functions of the Committee, or which are not the subject of a Business Agenda (current or past).
- Matters reserved by individual Councillors, in accordance with any Council policy on "safeguards".
- Parks and Reserve Plans of Management (Strategies, Policies and Objectives)
- Residential Parking Schemes - Provision and Policies

Committee Membership: 7 Councillors
Quorum: The quorum for a Committee meeting is 4 Councillors.

WOOLLAHRA MUNICIPAL COUNCIL

Notice of Meeting

24 February 2005

To: The Mayor, Councillor Rundle, ex-officio
Councillors Marcus Ehrlich (Chair)
Anthony Boskovitz
Claudia Cullen
Tanya Excell
Wilhelmina Gardner
Andrew Petrie
John Walker

Dear Councillors

Community & Environment Committee Meeting – 28 February 2005

In accordance with the provisions of the Local Government Act 1993, I request your attendance at a Meeting of the Council's **Community and Environment Committee** to be held in the **Council Chambers, 536 New South Head Road, Double Bay, on Monday 28 February 2005 at 6.00pm.**

Gary James
General Manager

Meeting Agenda

Item	Subject	Pages
1	Leave of Absence and Apologies	
2	Late Correspondence	
3	Declarations of Interest	
	Items to be Decided by this Committee using its Delegated Authority	
D1	Confirmation of Minutes of Meeting held on 14 February 2005	1
D2	Introduction of 40km/h speed limits	2
D3	Woollahra Oval No. 1 maintenance & use – 219.G	7
D4	Solar Energy us for lighting & traffic signals – 990.G	14
	Items to be Submitted to the Council for Decision with Recommendations from this Committee	
R1	Royal Hospital for Women Park Plan of Management – 1023.G POM	26

Item No: D1 Delegated to Committee
Subject: **Confirmation of Minutes of Meeting held on 14 February 2005**
Author: Les Windle, Manager - Governance
File No: See Council Minutes
Reason for Report: The Minutes of the Meeting of Monday 14 February 2005 were previously circulated. In accordance with the guidelines for Committees' operations it is now necessary that those Minutes be formally taken as read and confirmed.

Recommendation:

That the Minutes of the Community and Environment Committee Meeting of 14 February 2005 be taken as read and confirmed.

Les Windle
Manager - Governance

Item No: D2 Delegated to Committee

Subject: **Introduction of 40 km/h speed limits**

Author: S Mack – Consultant Traffic Engineer
File No: 255.G Reports Pt 13
Reason for Report: Council Notice of Motion

Recommendation:

A. That Council endorse the following order of priority for investigation of options for 40 km/h Speed Zones:

1. Bellevue Hill Shopping Centre in Bellevue Road, between Victoria Road and Riddell Street (as previously resolved).
2. The Double Bay Commercial Centre, bounded by Sydney Harbour, Sherbrooke Avenue, New South Head Road, Kiaora Road, Forest Road, Manning Road, New South Head Road again, and Ocean Avenue.
3. The Queen Street Shopping Precinct, bounded by Jersey Road, Ocean Street and Oxford Street.
4. Rose Bay and Rose Bay East Shopping Centres, bounded by New South Head Road, Norwich Road, Norwich Lane, Newcastle Street, Old South Head Road, Hamilton Street, Carlisle Street, Dover Road, Caledonian Road and Sydney Harbour.

B. That community consultation be carried out on each project following suitability assessments and preparation of traffic calming options in accordance with RTA guidelines, Local Traffic Committee endorsement in principle, and adoption by the Community and Environment Committee.

Council Resolution

Council, at its meeting of 15 November 2004, adopted the following Notice of Motion:

"That a report be prepared and submitted to the Community and Environmental Committee detailing:

1. The process required for conversion of Woollahra Council's local roads to 40km/h speed zones;
2. The benefits and detriment in converting Woollahra Council's local roads to 40km/h speed zones including:

(a) as to the improved safety of motorists, pedestrians and cyclists; and
(b) as to the potential increase in overall travel time of motorists

3. Which areas of the municipality can be most readily and economically converted to 40km/h speed zones; and
4. A program for the timely conversion of all Woollahra Council's local roads to 40km/h speed zones."

Background:

Council is about to install a 40km/h zone within the Paddington Precinct with assistance from the Roads & Traffic Authority (RTA).

In August 2003, the RTA prepared a draft policy dealing with 40 km/h Speed Limits in high volume pedestrian areas. This policy was drafted for use in areas with a high number of vehicle/ pedestrian conflicts and especially applicable in the following locations:

- Central Business District (CBD)
- Suburban shopping strips
- Areas where land use or facilities generate pedestrian traffic (e.g. beach-side/park-side reserves
- Business areas generating traffic, especially those with:

  - elderly pedestrians,
  - medical centres,
  - hospitals, and/or
  - government service agencies.

The 40 km/h speed limit is appropriate in areas with high volumes of pedestrians. These areas are typically characterised by commercial and recreational land uses. In terms of identifying roads or road networks of high pedestrian traffic, to qualify for consideration of a 40 km/h speed limit, the RTA draft policy document has set out the criteria to be met as shown in Table 1 below:

Table 1: Criteria for determining areas of high pedestrian traffic

Criterion	
1	One item from Category A, **or**
2	Two items from Category B, **or**
3	Four or more items from Category C, **or**
4	One item from Category B and two items from Category C
Category	
A	♦ Services a business/commercial area ♦ Services a shopping strip 1 km
B	♦ Adjacent to a railway station (Shopping strip < 1 km) ♦ Adjacent to a bus interchange (Shopping strip < 1 km)
C	♦ Services a restaurant area ♦ Services a hotel/entertainment area ♦ Adjacent to a social security office or medical centre ♦ Adjacent to a retirement village ♦ Services a sporting complex ♦ Adjacent to recreational area/beach/park

In terms of consistency in signage, the implementation of a 40 km/h speed limit across all local areas in the Municipality would be preferred but the present RTA policy only considers areas that meet the requirements as set out in Table 1.

In addition, the RTA would give approval to the introduction of a 40 km/h zone only if appropriate traffic calming measures and/or treatments are implemented to ensure the travel speeds would be sufficiently reduced so that the proposed 40 km/h speed limit could be self enforcing.

To assist the development of an effective traffic-calming scheme the RTA is prepared to provide a one-off grant to Council (if required) for the preparation of such a scheme. The RTA will need to endorse civil engineering designs before installation commences.

Council will be required to maintain all facilities associated with 40 km/h zones on non-classified roads.

Benefits and Detriment of 40 km/h Speed Zones

Benefits

The major benefit of reduction in travel speed is the reduction in crash frequency and severity, particularly crashes involving pedestrians and cyclists.

The distance required to stop a vehicle travelling at 40 km/h at an emergency (desirable maximum) deceleration rate of 3.5 m /sec^2 is 23 metres, compared with 30 metres for speed of 50 km/h and 40 metres for speed of 60 km/h. A shorter stopping distance means many potential crashes can be avoided.

Crash statistics for Woollahra Local Government Area in 2003 indicated that there were only 3 reported crashes on unclassified roads involving speeds 40km/h and under, compared with 115 reported crashes involving speeds of up to 50 km/h, and 33 involving speeds of up to 60 km/h. Although there could have been more accidents involving speeds at less than 40 km/hr than those reported, the fact that these accidents were not reported indicates that these crashes were not casualty accidents and were most likely of minor nature.

Recent researches have indicated that, in general, the benefits of speed reduction in highly urbanised areas are:

- reduced risks to vulnerable road users,
- significant reduction in crash severity (up to 20% in areas below 50km/h), and
- many casualty accidents could be avoided.

Detriment

The benefits of a 40km/h speed limit on local roads are partially offset by the potential increase in travel time across the local network. The increase in travel time for an average journey through the local area is not great.

Given an average trip distance of 2-3 km across the local road networks within the Woollahra Municipality, a reduction of an average speed of 50 km/h to 40 km/h may increase the average journey time by an estimated range of 36-54 seconds (approximately 20%). On most local roads with heavy pedestrian usage, the current average travel speed may already be less than 50 km/h. Expected increase in travel time for an average local trip would therefore be less than the estimated 36-54 seconds. However, travel time becomes a major issue for longer trips such as journey-to-work trips and for trades and business people etc who travel larger distances as part of their employment.

Roads/Areas most likely to be considered for 40 km/h Zones

The draft RTA 40 km/h Zone Policy gives priority to high volume pedestrian areas or areas with high pedestrian and vehicle conflicts.

A review of the five-year (1999-2004(part)) crash data for the Municipality has identified the following roads/areas where concentration of pedestrians and frequency of crashes would likely meet the warrant for 40 km/h Zone consideration:

- Bellevue Road Shopping Centre in Bellevue Road, between Victoria Road and Riddell Street (Criterion 1, with 7 injury and 1 fatal crashes – 5 injury crashes occurred in 2004) – previously identified in the Bellevue Hill traffic and transport report recently submitted to Council.

- Double Bay Commercial Centre – area bounded by William Street, Ocean Ave and New South Head Road and the southern section between New South Head Road and Forest Road (Criterion 1, with 25 injury crashes (6 in 2004) – excluding NSH Road).
- Area surrounding Queen Street Shopping Centre - bounded by Jersey Road, Ocean Street and Oxford Street (Criterion 4, with 28 injury crashes, excluding Oxford Street but including Ocean Street and Jersey Road).
- Area incorporating Rose Bay and Rose Bay East Shopping centres - bounded by New South Head Road, Norwich Road, Norwich Lane, Newcastle Street Old South Head Road, Hamilton Street, Carlisle Street and Dover Road, including Caledonian Road and Collins Avenue - (Criteria 1 and 3, with 26 injury (10 in 2004) and 1 fatal crashes).

In determining the above areas, relevant adjoining streets have been included in the proposed zones to provide a continuing of speed restrictions throughout the commercial areas and linked streets. Plans of the above areas will be available at the meeting.

Implementation Procedure

As the RTA would only give approval to those road sections or local road network with high pedestrian concentration and evidence of conflicts between vehicles and pedestrians, not all Woollahra Council's local roads can be converted to the 40 km/h speed limit at this point of time.

The RTA will give priority consideration to those selected roads/areas where current or proposed traffic management measures will reduce traffic speed to 40 km/h.

Before a proposal can be submitted to the Local Traffic Committee for consideration, Council will need to undertake speed surveys to determine whether traffic management treatments are required to be implemented in conjunction with the introduction of the 40 km/h speed limit.

The following procedure for implementing a 40km/h Speed Limit Zone has been extracted from the RTA Draft Guide to identify the process required for the implementation of 40km/h speed limits in high volume pedestrian areas:

1 Council to assess whether the road or a local road network is suitable for 40km/h limit;
2 Council examines possible traffic calming treatment options;
3 Council submits proposal to Local Traffic Committee (LTC);
4 Stakeholder Consultation. The LTC endorses the proposal and submits a written proposal to the RTA's Regional Manager, Road Safety;
5 RTA approves proposal after assessing its impact on adjacent roads;
6 RTA and Council develop a Signage and Marking Plan and initiate action to install engineering works;
7 RTA and Council develop an implementation timetable for engineering works;
8 RTA and Council develop an implementation timetable for public education campaign and signage installation;
9 RTA and Council implement the public education campaign (2 weeks before installation of signs);
10 Regional RTA Road Safety Manager authorises a change to the speed limit signs;
11 Installation of signs and markings.

Implementation Program

Based on the time required to implement the 40km/h zone for the Paddington area, the time required to implement the 40km/h speed limit for all of the above selected areas is likely to take over 12 months, depending on the amount of traffic calming treatments required. It is proposed that each of the identified 40 km/h zones be separately considered for implementation, with the first priority given to the Bellevue Road section between Victoria Road and Rivers Street.
A proposed implementation program is shown in Table 2 following:

Table 2: Implementation Time Frame

Priority	Road Length or Area	Estimated Time
1	Bellevue Hill Shopping Centre	2 months
2	Double Bay Commercial Area	6 months
3	Area surrounding the Queen Street Shopping Precinct	4 months
4	Area incorporating Rose Bay and Rose Bay East Shopping Centres	4 months

Recommendation:

It is recommended that the following selected areas be separately considered (in order of priority) for implementation of 40 km/h Speed Zones:

1. Bellevue Hill Shopping Centre in Bellevue Road, between Victoria Road and Riddell Street (as previously reported).
2. The Double Bay Commercial Centre, being the area bounded by Sydney Harbour, Sherbrooke Avenue, New South Head Road, Kiaora Road, Forest Road, Manning Road, New South Head Road, once again, and Ocean Avenue.
3. Area surrounding the Queen Street Shopping Precinct, bounded by Jersey Road, Ocean Street and Oxford Street.
4. Area incorporating Rose Bay and Rose Bay East Shopping Centres, bounded by New South Head Road, Norwich Road, Norwich Lane, Newcastle Street Old South Head Road, Hamilton Street, Carlisle Street and Dover Road, Caledonian Road and Sydney Harbour.

Identification of Income and Expenditure:

Council hasn't allocated any funds for the implementation of 40km/h speed zones through the Municipality. It is possible that, if Council were to proceed as recommended, the RTA may fund all or part of the works.

Annexures:

Nil

Stan Mack
Consultant Traffic Engineer

Warwick Hatton
Director Technical Services

Item No: D3 Delegated to Committee

Subject: **Woollahra Oval No. 1 maintenance and use**

Author: David Sheils - Manager Public Open Space
File No: 219.G
Reason for Report: Management of Use of Woollahra Oval No.1

Recommendation:

A. That average weekly usage of Woollahra Oval No. 1 be limited to 14 hours in the winter season. This limit is to be monitored throughout the season and reviewed at the end of the winter Licence period.

Background:

Woollahra Oval is currently used, principally, for rugby during the winter season and girls' sports in summer. A Licence Agreement exists for the use of the Oval for the winter period by Eastern Suburbs District Rugby Union Football Club (ESDRUFC), whilst we hire the Oval during the summer period for activities such as girls' softball and pre-season rugby training.

The Licence Agreement with ESDRUFC includes year round use of the Clubhouse and the Pavilion. However, the Licence stipulates that the Oval may be used by ESDRUFC between the 1st day of April and the 30th day of September each year for the playing of rugby union football and associated training. Currently, there is no restriction in the Licence on the extent of use of the playing surface.

The ESDRUFC, this year, will field the following teams:

- Four senior teams (including Shute Shield, Tooheys New Cup) }
  }19 hours Club use
- Three colt teams (Sydney Colt Competition); and }

- 300 junior players from Wallaroos, Bays and McAuley clubs - 3 hours additional use by others invited by the Club

This use reflects the strong standing the code has in the area and it is acknowledged that the Eastern Suburbs maintains one of the highest supporter and participation bases for the sport in Sydney.

Historically, at the end of each winter season, the turf surface of Woollahra Oval has been severely worn. The field has often required extensive ground refurbishment to bring the playing surface back to an acceptable and safe level at the end of each season. The degradation of the turf surface illustrates that the use of the venue has exceeded its 'carrying capacity'. Rugby use is one of the highest impact sports of turf wear, with scrumming activities particularly damaging to turf and the soil profile. Wear on the ground is exacerbated when the field is used when wet.

The cost to repair the field each year, in readiness for summer use, often exceeds $10,000. This cost is often greater than the total fee received by Council as part of the Licence Agreement. This cost is in addition to the annual maintenance cost of the sportsground, including line marking prior to all events, which is approximately $60,000. The Licence Fee with ESDRUFC is $12,000.

In recognition of the need to upgrade the field to support good turf cover throughout the season and elevate the venue's carrying capacity, we have undertaken major works in recent years to improve the sportsground.

In **2001 / 2002** we commenced major drainage works on the field at a cost of $60,000. In **2002 / 2003** we finalised the drainage works at a cost of $86,000. This included 'sand slit' drainage across the field and amplification of drainage pipes surrounding the field. These works have greatly improved drainage which is essential for good turf management. We also installed new perimeter fencing at a cost of $15,000.

In **2003 / 2004** we removed the turf cricket wicket at a cost of $10,000. The reason for removing the cricket wicket was to:

- **provide for a wider range of sports**, in particular girls' sports. As a result, the venue is now used in summer for uses such as girls' softball. We are also investigating opportunities to introduce other girls' sports, such as touch football, next summer: and

- **improve the playing surface for rugby use**. Previously the clay wicket square would turn to mud in the wet and set like concrete when dry. We can also maintain the turf coverage at a greater height during summer in preparation for winter use.

Following the completion of the above works, the Oval was again severely damaged by winter use last year. In many parts, the Oval was largely denuded of grass cover (see photographs in Annexure). It is our strong view that the poor state of the field was principally attributed to the level of use during the licence period as in previous years. In other words, the Club's use of the field exceeds the ground's carrying capacity, even with the recent improvements carried out.

In reviewing the performance of the field last year, we acknowledge that the field also suffered from poor establishment of Rye Grass. Rye Grass (winter growing) is over sown into the existing Couch Grass (summer growing) each autumn to assist in providing winter grass coverage. This may be attributed to a combination of unauthorised use of the field after sowing and a damaged irrigation system.

The poor state of the field does not benefit the Club with reduced safety to players and reduced general amenity of the area. There has also been suggestion that NSW Rugby will not consider venues, which have poor playing surfaces, for future televised games.

A degraded sports surface has a financial and recreational cost to Council and the community whilst undertaking repairs to the field and the loss of the venue for summer use whilst repairs are being undertaken.

Improving the situation

Following the poor condition of the field, Council staff have been liaising with the ESDRUFC. In particular, the Club has secured the technical advice of John O'Dell and Duncan Fraser, Course Superintendent and Assistant Greenkeeper, respectively, of the Royal Sydney Golf Club, to assist Council staff in formulating a repair and maintenance specification for the venue. This process included undertaking detailed soil analysis to ensure the optimum nutrient and pH levels were in place. Subsequently, we have adopted and applied this specification this summer and repaired and maintained the ground in readiness for the forthcoming season. These works have been completed at a cost of $13,660.

However, despite this summer being one of the best years for ground preparation, if, once again, excessive use of the field occurs (ie use beyond the Oval's carrying capacity), the field will most likely degrade again.

With regard to the use of the Oval by the Club, the Licence Agreement states:

> *"9.3 Curator's directions. The Club must obey the directions of Council's park curator in relation to the Oval."*

Therefore, we propose to introduce, in consultation with the Club, some mechanisms to protect the field this year and into the future such as setting limits on the weekly use and reducing or preventing use if the ground deteriorates.

- **Setting hours of use limits on the field**.

  We propose to set a limit on the weekly hours of use on the field to 14 hours. This limit allows for the use of the field by the Club for its needs and has been discussed with the General Manager of ESDRUFC, Michael Doyle. As a comparison, we also intend to apply a 14 hours per week use limit on Woollahra Ovals 2 and 3 this year. These hours have been derived by reviewing past usage levels and wear experienced at the venue together with those of other fields.

  Mr Doyle has acknowledged the need for the Club to restrict use on the field. In particular he has indicated that the Club will train a reduced number of teams on the Oval compared to last season. We can accommodate additional hours required by the Club at Oval No. 3 and Lyne Park.

  It is generally acknowledged throughout the sportsground management industry that the use of premier sports venues for training should be restricted to preserve field quality for match days.

- **Reducing or preventing use of the field if the ground deteriorates or adverse ground conditions exist**

  Despite setting hours of use limits on the Oval, if turf wear reaches a point where further use will result in major repairs, we may need to close the field or reduce the hours of use (whichever is most appropriate after consulting with the Club).

  We are proposing to apply this approach across all our fields. Last season, we applied this procedure at Woollahra No. 2 where, towards the end of the season, we stopped use of the field and protected the turf from further damage. As a result, the field recovered successfully at no cost to Council and the venue was immediately available for summer use.

  We will also continue our current practice of closing grounds during wet weather or where the field has not sufficiently drained following rain.

Whilst the Woollahra Oval No.1 is maintained with an automated irrigation system utilising bore water, the system uses old technology and is susceptible to failure. Therefore, we also plan to update the system to an electric system next summer at a cost of $15,000.

Conclusion:

In the lead up to this rugby season, Woollahra Oval has been provided with the best preparation available. Our staff have worked with ESDRUFC to ensure the playing surface is of a standard that will allow it to sustain appropriate use throughout the winter season. We will continue to liaise with the Club to ensure the field does not further degrade.

Setting hours of use limits for the Oval, as recommended in the report, is in the best interest of Council and the Club as a means of ensuring that the Oval's turf surface is protected throughout the year and its carrying capacity is not exceeded.

David Sheils
Manager Public Open Space

Warwick Hatton
Director Technical Services

Annexures:

1.Photographs of Woollahra Oval No. 1 – August 2004.

Item No:	D4 Delegated to Committee
Subject:	**Solar Energy Use for Lighting and Traffic Signals**
Author:	Jacqui Hansen, Engineer- Policy and Projects
File No:	990.G
Reason for Report:	Adopted Notice of Motion, dated 12 November 2001, requested that a report be brought to the Community and Environment Committee to investigate areas where Council could possibly introduce solar energy use for lighting, traffic signals, etc throughout the Municipality

Recommendation:

That Council explore the possible increase in the purchase of *Green Power* (energy generated using a combination of solar, wind, hydro and landfill gas).

Executive Summary

In response to the Notice of Motion, we have undertaken discussions with a specialist lighting design consultant, other councils and a solar lighting supplier. We investigated the advantages and disadvantages of the different types of solar installations currently available in the marketplace. The advice provided by all the parties we consulted was, however, consistent – **solar energy is not economical on a pure cost basis where power is available in close proximity from the electricity grid.** The cost of installing the solar installation is not recouped over the life of the installation. Whilst energy from the sun may be free and unlimited, the cost of installing and maintaining the solar technology is much higher than conventional mains powered devices.

There are, however, many advantages associated with solar energy. It is quiet and clean and helps to reduce electricity charges from the electricity authority. It avoids the impact of fossil fuel power stations, such as greenhouse gas emissions and local air pollution. Energy from the sun is effectively limitless - unlike coal, the principal fuel source in Australia. Were Council to install a solar energy system, it would be symbolic to the community of our commitment to the environment.

The NSW Government Department of Energy, Utilities and Sustainability encourages the use of solar energy and advises that a 1kW rooftop solar power system generates 1,600 kilowatt hours of electricity a year. This would be enough energy to power five compact fluorescent light bulbs, a refrigerator, a washing machine a stereo and a medium television for a year. The system would cost approximately $20,000 for supply and installation. It would save 1.4 tonnes of greenhouse gases per year!

Other councils in Sydney are using solar power for some projects. Rockdale Council has installed solar power along a 2km length of Cook Park, adjacent to the foreshore of the Georges River, because the park is remote from the electricity grid. (As a rule of thumb, solar power is financially viable once the distance of the light from the grid is greater than 30m.) Strathfield Council has installed solar panels on the roof of their new Homebush Library to put into practice their principles of environmentally sustainable development. The solar panels supply approximately 13% of the power required by the Library.

Woollahra Municipality is an established area well served by the electricity grid. There is little opportunity to obtain the same benefits as Rockdale. Council could investigate the possibility of installing solar power for a special project (like Strathfield), however, another alternative that would obtain the same result is the purchase of Green Power.

1. Investigation

Firstly, we engaged a specialist lighting consultant, DJ Coalition, to provide advice on the types of solar installations available.

We then contacted a solar energy supplier, Solar Technology Australia.

To determine the feasibility of solar power for street lighting, we contacted Next Energy, a specialist energy consultant that has been engaged by SSROC to advise councils in contract negotiation with EnergyAustralia regarding street lighting.

With regard to the potential purchase of additional Green Power, we contacted EnergyAustralia, DEUS and Next Energy to obtain different perspectives.

2. 1 Advantages of Solar Energy

DEUS lists the following reasons for using solar power:

- It is clean, quiet and reduces power charges from the electricity authority
- It avoids the impact of fossil fuel power stations, such as greenhouse gas emissions and local air pollution
- It reduces the need for ugly and expensive power lines
- It demonstrates a commitment to environmentally sustainable development.

The Street Lighting Review prepared by Next Energy for SSROC lists the following advantages for solar powered lighting:

- It avoids the cost of digging trenches in the road and footpath area to reach the nearest connection to the electricity grid and the cost of reinstatement following works. There is less disruption during installation
- It avoids the cost of running cables and conduit to nearest grid connection point, and avoids the cost of transformers, relays, electrical boxes meters and any other devices involved in grid connection
- One contractor can install the complete unit in one step – no need to liaise with the electricity authority.
- It avoids electricity costs for the life of the unit – typically 20 years
- The lighting system is independent of the grid and keeps working even when there is a blackout, which often coincides with adverse weather conditions.

2.2 Disadvantages of Solar Energy

The cost of solar technology is high. A 1kW rooftop solar power system would not recoup the $20,000 supply and installation cost over twenty-five years of useful life in terms of savings in electricity charges. Solar energy systems are not economical on a pure cost basis.

Solar powered lighting has the following disadvantages:

- Unless the light is boosted by connection to the grid, the light may not have adequate power to run all night
- The light provided will be of inadequate intensity (luminescence) for conventional road lighting and will not meet the Australian Standard
- Batteries are required – high maintenance costs involved in replacement and contain heavy metals damaging to the environment

- The available designs of solar powered lighting units are not visually attractive and in high profile areas such as waterfront locations may be seen as intrusive.

The Street Lighting Review prepared by Next Energy for SSROC states that solar energy is still **an order of magnitude more expensive** than conventional electricity. It only becomes a financially viable alternative if a new light is to be located more than 30m from the existing infrastructure.

3. Types of Solar Installations

There are two types of solar installations:

1. Stand alone systems
2. Mains grid connected systems.

3.1 Stand-Alone Systems

A stand-alone system is not connected to the electricity grid. The power generated by the solar panels is stored in a battery unit and used later. In areas where there is no access to the electricity grid, using stand-alone solar power becomes financially viable. Where new mains would have to be trenched, cables laid and extensive capital works undertaken, a stand-alone solar light is a relatively simple installation.

Case Study 1 – Rockdale Council

In 1999, Rockdale Council installed solar powered lighting in stand-alone units in Cook Park, Sans Souci. Cook Park is located along a 2km stretch of the Georges River foreshore between the Georges River Sailing Club and the Captain Cook Bridge and incorporates a shared pedestrian/cycle track. Prior to the installation of solar powered lighting, the track had no lighting, only scattered lighting from the adjacent road. Lighting was required in order to increase the safety of the track and enhance night-time usage. Most of Cook Park is not connected to the electricity grid and the cost of connecting such a long park to the grid was expensive.

When comparing stand alone solar lighting units to mains grid connected lighting, Rockdale Council found solar had a number of advantages - installation was easier, there are no on-going electricity costs and capital costs were lower, as there was no need to trench and lay electricity cables to the nearest point of connection to the electricity grid. Rockdale Council could also stage installation over time with other beautification works. The solar powered lights, however, only function for six hours each night and the batteries require on-going specialist maintenance.

In this case, Rockdale made the decision to install solar powered lighting based on **economics**. The total investment over ten years for solar powered lighting was less than the investment required for mains grid connected lighting. Most significantly, connecting the full length of Cook Park to the grid would have required in excess of 2km of underground mains supply, trenching and backfilling. It was this cost that made solar powered lighting attractive. For Rockdale's specific need, solar was the most cost-effective option.

The Plans of Management for parks in Woollahra do not identify a park with similar needs to Cook Park, where the installation of multiple stand-alone solar lighting systems would be financially viable. Council does not, at present, have any proposals to install additional lighting fixtures in public parks. Residents adjacent to Council parks have expressed the view that excessive park lighting is intrusive. Proposals currently exist only to renew existing park lighting, not introduce new lights and replacement with solar powered lights is uneconomical given the existing investment in underground mains.

3.2 Mains Grid Connected Systems

If a solar panel is connected to the electricity grid it supplies energy generated by the sun to the electricity authority. Council receives a credit based on the amount of energy sold back to the electricity authority.

For example, a solar panel could be affixed to an existing street light. The solar panel may cost in the order of $5,000 (supply and installation). The annual income to Council from the energy authority for the energy generated by the solar panel would be approximately $30. It is, therefore, not logical to undertake such retrofits on purely economic grounds. Such an installation would, however, demonstrate that Council is in favour of renewable energy and is helping to reduce greenhouse gases.

Grid connected systems are not restricted to street lights. They can be installed anywhere where there is direct sunlight and the solar panels can be protected from vandalism. In 2004, Strathfield Council installed solar panels on the roof of their new library in a grid connected system. The panels meet part of the energy need of the library and are boosted by the electricity grid.

Case Study 2 – Strathfield Council

In 2004, Strathfield Council installed solar panels on the roof of their new Homebush Library as part of a mains grid connected system. Strathfield Council's *Development Control Plans* encourage new developments to include solar power (plan to make it compulsory for new multi-unit developments) and it was considered important by the elected Councillors that Council lead by example when it came time to design the new library. There was space on the roof of the new library to install even more solar panels and generate more energy, however, the budget did not permit such action.

Two arrays of solar panels, with a total area of 9.9m², have been placed on the roof of the Library. Strathfield Council has estimated that the solar panels will generate 13% of the electricity required to run the library. On days the library is not open, the power generated is supplied to the grid and a credit received from their energy authority. The completed solar system cost Strathfield Council more than $30,000. Strathfield Council received an $8,000 grant from the NSW Department of Energy, Utilities and Sustainability (DEUS) for the solar project.

As a demonstration of Strathfield Council's commitment to the environment, the design of the library implemented solar passive design (such as awnings on windows), energy and water efficiency as well as the solar electricity system.

As a condition of the grant, Strathfield Council was required to implement an educational program for school students. A computer, located inside the library, is electronically linked to the solar system. At any time during the day, it is possible to enter the specially designed software program on the computer and see how much electricity the solar system is generating and many other interesting facts. The program is designed to be enjoyed by children of all ages, from primary to high school age with corresponding levels of complexity. The solar electricity system has been incorporated into the Library's educational program with colouring competitions and science information.

Strathfield Council has had a very favourable experience with mains grid connected solar power. The opportunity arose for them to install their system with their new Library. If Woollahra Council was contemplating constructing a new public building, installing a comparable system could be considered. Alternatively, a solar electricity system could be placed on an existing building. The installation of solar panels on the roof of a building (provided it is not in the Foreshore Protection Area where stricter controls apply) is permitted in Council's *Exempt Development* DCP and does not require a development application.

Grants from DEUS for solar projects are still available and they are distributed as a rebate after the project is completed and are subject to a very strict criteria. Solar panels must be placed on the roof of a public building and used to provide power to that building. The maximum grant available is $8,000. The cost of installing a system that meets the criteria of DEUS would cost $20,000 to $30,000.

Solar Technology is a supplier and installer of solar products. Solar Technology supplied and installed the solar electricity system, including the educational software, to Strathfield Council. Strathfield Council has confirmed that, without the assistance of Solar Technology in meeting the requirements of DEUS, they would not have obtained the grant.

If Woollahra Council chose to proceed with a similar project to Strathfield Council, Solar Technology would be able to assist us in seeking the grant. Any quotes from Solar Technology for a solar electricity system would be contingent on Council obtaining the grant. Solar Technology advises that in order to be eligible for the grant Council must be willing to heavily promote solar energy on its website, in educational programs and in its development control plans, just like Strathfield Council.

4. Options for the Use of Solar Energy

4.1 Street Lighting

At present, Council pays an annual fee to Energy Australia to power and maintain street lights in Woollahra. Whilst street lighting may seem an obvious use for solar energy, the cost of electricity produced by solar energy is seven to eight times the cost of electricity produced by the grid. It is not economically viable for solar energy to be used for street lighting if the existing power infrastructure is within 30m, the light fixture is in good condition and does not require replacement, the wiring is above ground and high intensity light is required. (In accordance with Australian Standard AS 1158.0-1997 *Road Lighting: Introduction* high intensity light is required for street lighting).

SSROC (of which Woollahra Council is a member) engaged a consultant, Next Energy, to advise member councils, which are in negotiations with Energy Australia, about street lighting contracts. As part of comprehensive investigation into street lighting undertaken in 2002, Next Energy explored the use of solar power for street lighting. The report concluded that *solar lighting would not seem to have applicability to road lighting at present*. A copy of the extract on *Solar Powered Lighting* has been attached to this report as Annexure 1.

4.2 Park Lighting

Councils, generally, illuminate a number of public facilities such as parks and, depending on proximity to the electricity grid, a park lighting system could be stand-alone or mains grid connected. As noted earlier in this report, this Council does not, at present, have any proposals to install additional lighting fixtures in public parks. Residents adjacent to Council parks have expressed the view that excessive park lighting is intrusive. Proposals currently exist only to renew existing park lighting, not introduce new lights and replacement with solar powered lights is uneconomical given the existing investment in underground mains.

4.3 Lighting of Municipal Properties

All municipal properties in Woollahra are currently connected to the electricity grid. Consequently, stand-alone systems are not a financially viable option for the lighting of municipal properties in Woollahra.

Another option available to Council is a mains grid connected solar energy system. If a solar panel is connected to the electricity grid, it supplies excess energy generated by the sun to the energy authority. Council receives a credit based on the amount of energy sold back to the energy authority. Solar panels can be installed on and around public buildings such as amenity blocks, where power for lighting is presently obtained from the grid. During the day, the system generates power and supplies it to the grid. At night, the power required to illuminate the buildings is drawn from the grid. This is an import/export arrangement. The cost of running the lights at night is offset by the credit received for generated electricity. Consequently, the electricity costs to illuminate the building are reduced.

As well as a reduction in electricity charges, installing solar panels to generate energy will reduce the amount of greenhouse gases emitted in generating the electricity required to illuminate that building. It will also demonstrate that Council has made a commitment to environmentally sustainable development.

Unfortunately, the reduction in electricity charges is minimal when compared to the significant capital cost involved with installing the solar panels and their on-going maintenance costs.
A supplier of solar energy products has advised Council that, over the life of the solar panel, (approximately 25 years), savings in electricity charges will not cover the capital costs in installing such a system.

Council buildings in Woollahra generally have relatively small or complex roof areas, which do not lend themselves to a large solar installation which could generate power to be fed back into the grid. However, there may be scope for installation of rooftop solar powered water heating installations and this will be explored further.

4.4 Traffic Signals

The Notice of Motion requested that Council investigate the use of solar energy for traffic signals. Traffic signals are under the control of the RTA. The RTA, to date, has only used solar energy for powering flashing warning lights at pedestrian signals. Using solar energy to power pedestrian signals only becomes financially viable when they are remote from the electricity grid which is not the case in Woollahra. The RTA is, however, investigating the feasibility of using solar power on more of their infrastructure.

4.5 Parking Meters

Council has 76 solar powered parking meters which were installed in July 2002

The meters have an integrated solar panel on the top of the meter to recharge and top up the internal battery.

For two and half years since installation, the solar panels have proven to be robust and effective in recharging the batteries to provide power and illumination for the operation of Council's parking meters.

Solar power was adopted to avoid the significant costs involved in providing underground cable connections for power from street lights or mains power.

The battery life is 2-3 years depending on use and the replacement cost is $210. The Solar cells last the life of the meter, which is about 10 years, and no units have been replaced in Woollahra Council. The cost of the solar panels was $1720 each and they have only required replacement due to extreme vandal attack.

5. Green Power

As an alternative to installing a solar energy system, Council could investigate the purchase of more Green Power. Green Power is electricity derived from the following sources:

1. *Solar Power* – conversion of the sun's energy directly into electricity by the use of solar technologies
2. *Wind Power* – harnessing wind force to drive energy-producing turbines that are based on the designs of traditional windmills.
3. *Biomass* – using energy form sources such landfill gas, agricultural waste and wood waste. Only wood sourced from existing sustainably managed forestry plantations and clearing of specified noxious weeds are accepted.
4. *Mini-hydro Power* – using the force of water flowing from a river or existing dam to drive a generator.

The National Green Power Accreditation Program, a Federal Government steering group, monitors Green Power. There are stringent requirements and reporting documents for the providers of Green Power.

The energy industry in New South Wales has been deregulated. Electricity accounts are contestable. Council can now choose to purchase electricity from a multitude of providers. As a result, there are many different providers in the marketplace, all providing Green Power.

Green Power is not cheap. Next Energy advises that Council can expect to pay a premium of 30 to 40% for Green Power. As Green Power is substantially more expensive than regular power, it is possible to purchase packages containing, for example, 25% to 50% Green Power (the remaining % derived from traditional coal fired power stations). The profits for energy authorities are lower for Green Power so, consequently, some are reluctant to offer it or impose limitations as to how much can be purchased.

Woollahra Council currently purchases all of its power from EnergyAustralia. Our most recent contract with Energy Australia was signed in July 2003 and has a three-year duration. Council agreed to purchase up to 6% Green Power at this time. Council could negotiate with Energy Australia to increase this percentage. DEUS provides advice to local government on negotiating with their energy authorities to obtain good deals for green power. As negotiations with energy authorities regarding electricity contracts are very complex, to ensure we get the best deal, it would be advisable for Council to engage a consultant to assist in negotiations.

The benefits of Council purchasing more Green Power include:

1. It makes direct reductions in greenhouse gas emissions
2. It identifies Council as a responsible corporate citizen
3. It helps meet community expectations of Council's environmental performance
4. If Council purchases sufficient power, DEUS entitles us to use the Green Power logo on all of Council's marketing collateral. (Permission to use the logo is determined by a sliding scale based upon Council's annual energy usage. The more power Council uses, the smaller the required percentage of Green Power in order to use the logo.)
5. Council can be promoted on the DEUS Green Power website.

6. Comparing Solar Power and Green Power

When considering a municipal building such as a library, the options available for Council include: do nothing, install a solar electricity system similar to Strathfield Council, or purchase a proportion of Green Power.

	Existing Situation	**Solar Power**	**Green Power**
Daily electricity charge	$26.29	$25.14	$27.09
Daily electricity usage	238kW hour – grid	227.6kW hour - grid 10.4 kW hour - solar power	226.45 kW hour – grid 11.55 kW hour – Green Power
Capital outlay	Nil	$30,100 - $8000 rebate = $22,100	Nil
Payback period	Nil	53 years (Anticipated life of solar electricity system = 25 years)	Nil
Total cost over 25 years	$240,000	$252,000	$247,000
Reduction in emissions	Nil	3.8 tonnes/year	3.8 tonnes /year

Note:
1. Daily electricity charge and usage sourced from actual Energy Australia accounts for Double Bay Library - St Brigids.
2. Solar power data based on information supplied by Solar Technology about the solar electricity system installed for Strathfield Council at Homebush Library.
3. Green Power costs based on figures provided by EnergyAustralia.
4. Green Power emission reduction data based on information supplied by NSW Department of Energy, Utilities and Sustainability.

If Council is seeking to make the maximum positive contribution to the environment, Green Power offers the most economical opportunity to reduce the amount of carbon dioxide released into the atmosphere for the lowest cost.

Recommendation:

That Council further explore the possible increase in the purchase of *Green Power* (energy generated using a combination of solar, wind, hydro and landfill gas).

Jacqui Hansen
Engineer Policy and Projects

Warwick Hatton
Director Technical Services

Annexures:

1. Street Lighting Review - Extract from Final Report on *Solar Powered Lighting*, prepared by Next Energy for SSROC August 2002
2. Mathematical calculations comparing the conventional electricity, solar power and Green Power

ANNEXURE 1

Street Lighting Review

Final Report – Extract on Solar Powered Lighting

(Prepared by Next Energy for SSROC)

Solar powered lighting is a growing application of solar energy. As the price of solar lighting systems has declined and their robustness and efficiency improved, the application of solar lighting has steadily increased.

In terms of the cost of electricity produced, solar energy still is **an order of magnitude more expensive** than electricity for street lighting from the grid. However, in some situations off-grid solar lighting systems can also produce significant cost savings that can make it economically attractive relative to grid-connected lighting. Possible cost savings are highly site-specific, but can include the following:

1. Avoided cost of digging trenches in a sidewalk and/or street to reach nearest grid connection point. And, the avoided cost of replacing the sidewalk, street paving and any landscaping that was removed in the process.
2. Avoided cost of running cable and conduit to the nearest grid connection point. And, the avoided cost of transformers, relays, electrical boxes, meters and any other electrical devices involved in grid connection.
3. Avoided project management cost (e.g., one contractor can install complete unit in a one step operation and no interaction with the DNSP is required).
4. Avoided electricity costs for the life of the unit (typically 20 years).
5. Avoided maintenance costs (e.g., all electrical components are readily accessible and above ground).

In addition, there are a number of less tangible but important benefits and avoided costs with solar lighting including:

6. Environmental benefits including **no** associated greenhouse gas emissions. These may be partly manifest in the new federally mandated Renewable Energy Certificates (RECs). The Australian Greenhouse Office and SEDA have also provided funding for solar lighting projects in the past.
7. Less disruption to existing businesses, residents and traffic during installation.
8. Traffic and pedestrian safety benefits in being independent of the grid (e.g., solar lights keep working even when the electricity grid has suffered a blackout and this often coincides with adverse weather conditions).

Many of the potentially avoided costs relate closely to the distance between the light and the grid. As a general rule of thumb, if a new light is to be located more than a moderate distance (e.g., 30 meters) from existing infrastructure, solar lighting may be more economic than grid-connected lighting. It **may** be economic if the new light is to be located at a moderate distance (e.g., 10-30 meters) from existing infrastructure depending on the particular site conditions.

With the currently available technology, solar lighting is **unlikely** to be economic if:

- existing power infrastructure is within a few meters (e.g., 10m);
- the light is a replacement fixture;
- the wiring is to be above ground; or
- the lighting is of high intensity (e.g., road lighting).

Given the above, solar lighting would not seem to have applicability to road lighting at present. EnergyAustralia does not currently offer solar lighting systems and these have not been modeled as part of this project because they would not seem to have widespread applicability.

There may be good candidates for solar lighting in other areas of public lighting beyond the scope of this report. These include parks, bus shelters, parking lot lighting, billboards and a variety of other community facilities. There are a number of particular design considerations for solar lighting that must be taken into account including orientation, inclination, shadowing, guarding against storm damage and the potential for vandalism. In general, solar lighting systems are not made or supplied directly by the major manufacturers of solar cells. At least a dozen domestic and overseas specialist solar lighting companies supply this market niche.

ANNEXURE 2

Comparing Solar Power and Green Power

1. Existing Power Supply

Actual quarterly electricity account for Double Bay Library, St Brigids

Date: 18/10/02-16/1/03
Amount Paid to Energy Australia: $2 392
Electricity usage from the grid: 21 664 kW hours
Rate per kW hour: 11c

Assume 91 days per quarter.

Daily electricity charge: **$26.29**
Daily electricity usage: **238kW hours**

2. Solar Power

Installation of a system similar to Strathfield Council
Two arrays with a total solar panel area of 9.9 square metres

Cost of supply and installation: $30,100
Rebate from Government: $8000
Capital Outlay: $22,100
Daily electricity generated by the system 10.4kW hour
238-10.4=227.6kW hours of power still required from the grid

10.4/ 238 x100= 4.36% decrease in electricity charges
Daily electricity charge**=$25.14**
Daily electricity usage from the grid: **227.6 kW hours**

Payback period
Daily saving in electricity charges: $26.29-25.14=$1.15
Annual saving = 365 x $1.15 = $419.75
$22 100 / $419.75 = 53 **years**

Reduction in emissions from the system = **3.8 tonnes of carbon dioxide per year**

3.Green Power

3.8 tonnes of carbon dioxide = 3800 kg
3800/365= 10.4 kg/ per day
0.9kg reduction in carbon dioxide = 1kW hour of green power
10.4/0.9= 11.55 kW hours of Green Power

Rate per kW hour: 11c coal fired power
Rate per kW hour: 19c Green Power

238-11.55=226.45 x 11c = $24.90
11.55 x 19c = $2.19
Daily electricity charge = **$27.09**

Item No: R1 Recommendation to Council

Subject: **Royal Hospital for Women Park Plan of Management**

Author: Scot Hedge
File No: 1023.G POM
Reason for Report: To recommend to Council the adoption of the Royal Hospital for Women Park Plan of Management

Recommendation:

That the Royal Hospital for Women Park Plan of Management Version 2, February 2005, be adopted.

Background:

Council, at its meeting of Monday 1 November 2004, resolved to place the draft Royal Hospital for Women Park Plan of Management (PoM) on public exhibition for a period of 28 days. The exhibition commenced on Thursday 4 November 2004 and the timeframe for submissions extended for a period of not less than 42 days, in accordance with Section 38 of the *Local Government Act* 1993.

A total of six submissions were received raising a number of issues. Annexure 1 provides an outline of the comments received and responses provided. Annexure 2 contains copies of the submissions.

Discussion:

Key management issues within the PoM that have received a significant amount of attention include dog walking and faeces management, allowing the future provision of a children's playground, future construction of a memorial, and installation of lighting. These issues were again raised in a number of the submissions made on the draft PoM. Further information in relation to these issues and an explanation of the current intention of the PoM is provided below.

Dog Management Issues

There is support and opposition expressed in submissions, as well as petitions, in relation to allowing dog exercise to occur within the park. At Council's meeting of Tuesday 7 October 2003, a petition containing 203 signatures in support of dogs using the park was tabled. The petition, in part, read:

"Many local residents have used the new community park on the Royal Women's Hospital site as an off-leash area since the turf was laid. The park provides a large, safe area where dogs can run. Dog owners believe they were excluded from the poorly advertised public workshops that proposed the park be dog free.

The Companion Animals Act recognised the importance of pets in people's lives and the need for responsible pet ownership. The Act also imposes obligations on local councils to educate the community and provide off-leash areas. Inadequate response to these obligations results in avoidable conflict and unnecessary restrictions on pets.

The undersigned petitioners therefore ask the new community park at the Royal Women's Hospital site be retained as an off-leash area for dogs, with provision of dog waste disposal facilities, and signage to educate owners and the community."

At Council's meeting of Monday 24 November 2003, a petition containing 214 signatures against dogs using the park was tabled. The petition, in part, read:

"*We request the Royal Hospital for Women Park to be a dog free park. To be used by all members of the community especially children in keeping with the Heritage of the site and initial undertaking made by Council that this would be a dog free public park."*

At the Community and Environment Committee meeting of 1 November 2004 a petition containing approximately 425 signatures was tabled in support of dogs using the park. The petition stated:

"*We would like dogs to have full access to the park and be allowed to socialise off dog leads at all times. However, out of consideration to other park users, we would like to compromise and ask for full access to the park, with dogs off leads between 4pm and 10am and on leads for the remaining time. This would ensure fair use of the park for everyone."*

The PoM recommends a compromise position for a six-month trial period whereby dogs will be permitted unleashed between 4.30pm and 8.30am and leashed at all other times. These times are consistent with dog management in place at five other reserves within Woollahra and are recommended to ensure consistency and ease of management across the LGA. These times aim to minimise potential conflict between pre-school aged children using the park and unleashed dogs.

The PoM identified the installation of plastic bag dispensers for dog walkers. In response to this proposal the Manager Public Open Space has commented as follows:

"Section 20 of the Companion Animals Act 1998 requires dog owners to clean up after their dog when it defecates in a public place. Dog behavioural studies indicate that dog owners need to take a waste collection device when leaving home as dogs defecate soon after beginning a walk and often prior to reaching a park after a period of being immobile. If owners leave the house without a container to place dog waste in the waste will not be picked up.

By providing dispensers, dog owners could become reliant on the bags being available at the park at all times. If the dispenser runs out the dog owner could attempt to apportion blame on the Council for them not being able to clean up after their dog. Council needs to encourage dog owners to be responsible for their own supply of materials for the management of dog waste. This will be more beneficial to encouraging a long-term shift in behaviour of removing dog waste.

There are other concerns relating to the installation of plastic bag dispensers within the park. There are reports by other councils where dispensers are installed that they tend to be vandalised, either by damage to the installation itself or by the bags being spread around the parks contributing to litter. Also, retailers and the public are gaining greater access to plastic bag alternatives which provide more environmentally sustainable options for the removal and disposal of dog faeces than that of plastic bag usage."

As a result it is proposed not to install plastic bag dispensers, but rather monitor the site during the six-month trial period for dog walking and faeces management issues. Rubbish bins are to be located at the Flinton and Brown Street entrances of the park to assist dog owners to dispose of waste. Reference to the installation of plastic bag dispensers has therefore been deleted.

Playground

Several comments were received objecting to the future installation of a children's playground. The draft PoM does not recommend installing any equipment at this stage but rather allows for the possible provision of children's play equipment in the park in the long-term. This is subject to Council being satisfied a demand for the provision of equipment during the five-year term of the PoM can be demonstrated.

Currently, there are seven playgrounds with various pieces of play equipment within 1 km of the park. A playground in Spring Street reserve, approximately 250m from the park was upgraded in 2002. Should any future children's playground equipment be deemed appropriate it would be designed to retain the unique character and design of the park and not compromise existing uses. During any future investigation regarding selection of an appropriate playground design Council would undertake a community consultation program to obtain comment and feedback on potential options.

Therefore the PoM is not proposed to be altered.

Lighting

In community workshops undertaken late in 1997, one of the recommendations included installation of security lighting. The draft POM recognises that high light levels in the park at night may attract unsuitable night time use and proposes that a review be undertaken into the need for appropriate lighting that ensures night time use is discouraged and passive surveillance is maintained. It is recognised that a balance of safety issues versus inappropriate park use is required.

Therefore we plan not to install lighting in the park at this stage, but rather monitor the site and only install lighting if warranted. The recent park construction works have allowed for lighting if needed.

Memorial

There is a Deed of Agreement between Woollahra Municipal Council and the Benevolent Society of New South Wales dated 24 December 1996 that requires a memorial to children to be erected in the park. The relevant clause states, "The Society and the Council agrees to co-operate in facilitating a permanent memorial which is to be erected at no expense to the Society within the Public Open Space in memory of the many children who have died at the Royal Hospital for Women but who are not forgotten."

One submission was received objecting to the construction of a memorial in the park. The submission states that if it is to be constructed it should not reduce the amount of area available to be used as open space within the park. Council is bound by the terms of the Deed of Agreement to erect a memorial, however in the draft POM it is proposed that any memorial constructed would actually be incorporated into the existing sandstone feature wall of the park and therefore not reduce available open space.

Consequently we proposed not to delete reference to the need to install the children's memorial.

Park Opening

There have been some delays in the construction of the park. These delays are attributed to periods of wet weather and the stone mason contractor underestimating the time required to complete the detailed stonework. All costs associated with the delay are being borne by the contractor. Notwithstanding this the works are being undertaken to the required high standard and are programmed to be completed by the end of March 2005. A formal park opening has been scheduled for mid April and Councillors will be informed separately of this event.

Conclusion:

Annexure 1 outlines issues raised in submissions and where applicable proposed amendments to the advertised PoM. The PoM, with recommended amendments as identified in Annexure 1, is submitted to Council for adoption (Annexure 3).

The construction works in the park are anticipated to be completed March 2005. It is appropriate for Council to have an adopted PoM in place to assist with the management and operation of the park.

Scot Hedge
Parks and Recreation Coordinator

Warwick Hatton
Director Technical Services

Annexures:

1. Summary of submissions on draft Plan of Management and responses
2. Copies of submissions on draft Plan of Management
3. Royal Hospital for Women Park Plan of Management Version 2, February 2005 (distributed separately)