



**NATIONAL MARITIME MUSEUM
BRITISH GAS MILLENNIUM PARTY
CONDITION AND REINSTATEMENT
OF GROUNDS
JANUARY 2000**

PBA Consulting
Store & Secure Business Centre,
5 Yeomans Way,
Bournemouth BH8 0BL

01202 816134|

INDEX

Subject	Page Number
1 Introduction	2
2 The Brief	2
3 The Site	3
4 The Survey	3
5 Findings	4-5
6 Recommendations	5
7 Long Term Strategies	6
Appendix 1 Photographs	A1-12
Appendix 2 Drawing	A14

1. Introduction

1.1. The British Gas Millennium Party was held on the 31st December 1999/1st January 2000 at the National Maritime Museum at Greenwich. The outdoor event featured internationally known artists such as Eurythmics, Lesley Garrett, Martine McCutcheon and Simply Red. The event was shown on National Television and was extremely well supported.

1.2. The weather during the preparation period leading up to, and subsequent to the event, was extremely wet; fine rain also fell during the celebrations.

1.3. As a consequence of the weather, the lawns became extremely wet and soft. Therefore, the volume of visitors and the site clearance have caused damage.

2. The Brief

2.1. PBA Consulting was instructed to prepare a report on the condition of the grounds following the Millennium Party and make recommendations concerning reinstatement.

3. The Site

3.1. The National Maritime Museum, Greenwich, London, is a museum of maritime history. Model ships, navigational instruments and other artefacts are exhibited and preserved there. It is situated on the south bank of the River Thames and was established in 1934. The buildings date back to the 17th and 18th century.

3.2. The buildings are surrounded by extensive lawns; Plane and Lime trees grow along the boundaries with Romney Road and Park Row. The lawns are a feature of the site providing a dramatic setting for the historical buildings.

3.3. The British Gas Millennium Party was held on the lawns to the front (north) of the National Maritime Museum and the Queen's House. The lawns to the rear (south), being used for fire works and hospitality tents, from which the general public was excluded.

4. The Survey

4.1. Robin Middleton of PBA Consulting took photographs of the lawns during the break down of the event and Peter Barton carried out a full survey of the damage; recorded by video camera and photographs on the 10th January 2000. A photographic record is given at Appendix A, the video record will be provided under separate cover.

5. Findings

5.1. The wet weather before and after the event created extremely wet areas of turf and as a result the lawns have suffered damage in various forms as follows: -

- Trampling of the turf by the volume of partygoers attending the event, compacting the grass surface.
- Litter, including plastic glasses and party poppers being trampled into the turf surface.
- Rutting and damage to the lawns caused by vehicles during dismantling of the event.
- Protective tracking sinking under load into the soft turf.
- Water collected in low areas, particularly at the junction of lawns and roadways consequently passing vehicles reduced these areas to a sea of mud.

5.2. The majority of the damage has occurred to the lawns to the north of the main buildings. Due to the exclusion of members of the public, there has been limited rutting and damage to the lawns to the south. However, in this location, the setting up of fireworks caused some surface holes.

Approximately 30-40% of the grass areas have been severely damaged and will require re-turfing to bring the site up to condition. As the remainder of the grass areas have suffered from trampling by partygoers and or compaction by protective tracking etc, renovation will be required including the forking out of ruts etc. Given the weather conditions it is remarkable that a larger area of turf has not been damaged.

5.3. What is often not fully appreciated is the insidious effect compaction can have on the turf and trees. If compaction is not remedied, there will be a steady decline in their condition, due to the lack of oxygen in the root zone.

6. Recommendations

6.1. To bring the lawns up to the condition they were in prior to the event and to the level expected of the high prestige site, the following work is recommended: -

- Harrow the whole site to loosen debris trod into the surface and remove debris by mechanical and/or hand means.
- Cut out and remove severely damaged turf removing de-structured soil and replace it with approved topsoil and re-turf.
- Deep aerate the site using specialist equipment i.e. vertidrain which will penetrate the turf to the depth of 300mm and gently lift the turf and help restore levels. Light rolling should follow this operation.
- Inspect the site following the above works and by hand fork out any indentation and ruts, filling holes with approved fine topsoil.
- In March, carry out fertilising treatment to encourage re-establishment of existing turf, followed by over seeding 14 days later with approved grass seed mixture to thin and bare areas.

7. Long Term Strategies

7.1. Much of the damage to the edge of the lawns and roads would be reduced if ponding water were prevented. It is recommended that a survey is carried out of the falls and levels of these areas to enable the roads and path edges to be reconstructed to ensure water is shed effectively into the surface drainage system. This would drastically reduce the amount of mud developing adjacent to and on the road and path surfaces during future events.

7.2. Consideration should also be given to replacing the current fragile timber edging with a more permanent solution able to withstand vehicles used in setting up of major events. It is important that the finish to the roads and paths are compatible to the historic buildings and is approved by English Heritage.

7.3. If the number of events are liable to increase, consideration should be given to replacing the existing turf and growing medium with specialist turf growing on engineered free draining sand base that is able to withstand traffic.

APPENDIX 1

PHOTOGRAPHS

**British Gas Millennium Party – Ground Reinstatement
National Maritime Museum**



North West Main Lawn

An overview of damage

North East Main Lawn

An overview of damage



**British Gas Millennium Party – Ground Reinstatement
National Maritime Museum**



Main Lawns North of Queens House

Removal of main staging

Lawns in front of Queens House

General view of activities



**British Gas Millennium Party – Ground Reinstatement
National Maritime Museum**



Lawn adjacent to Anchor Display

View of damage and structure

Lawn East of entrance to Neptune Court

Wet conditions and the need to remove
units off of unprotected grass
- a cause of rutting etc.



**British Gas Millennium Party – Ground Reinstatement
National Maritime Museum**



Lawns adjacent to Romney Road

Rutting and compaction of soil
over the root zone of lime trees

North East Main Lawn

Damage adjacent to
protective trackway



**British Gas Millennium Party – Ground Reinstatement
National Maritime Museum**



Lawn, West of entrance to Neptune
Court

Ruts and litter

North West Main Lawn

Extensive rutting



**British Gas Millennium Party – Ground Reinstatement
National Maritime Museum**



North East Main Lawn

Mud at junction of lawn access road

View of Main Access Traversing the Site
Anchor Gate to Neptune Court

Ruts and Mud at junction of lawn



**British Gas Millennium Party – Ground Reinstatement
National Maritime Museum**



Lawn to the North of East Collinade

Damage to Lawn caused by tracking
sinking into the soft turf

Lawn adjacent to East Wing

Damage to Lawn caused by tracking
sinking into the soft turf





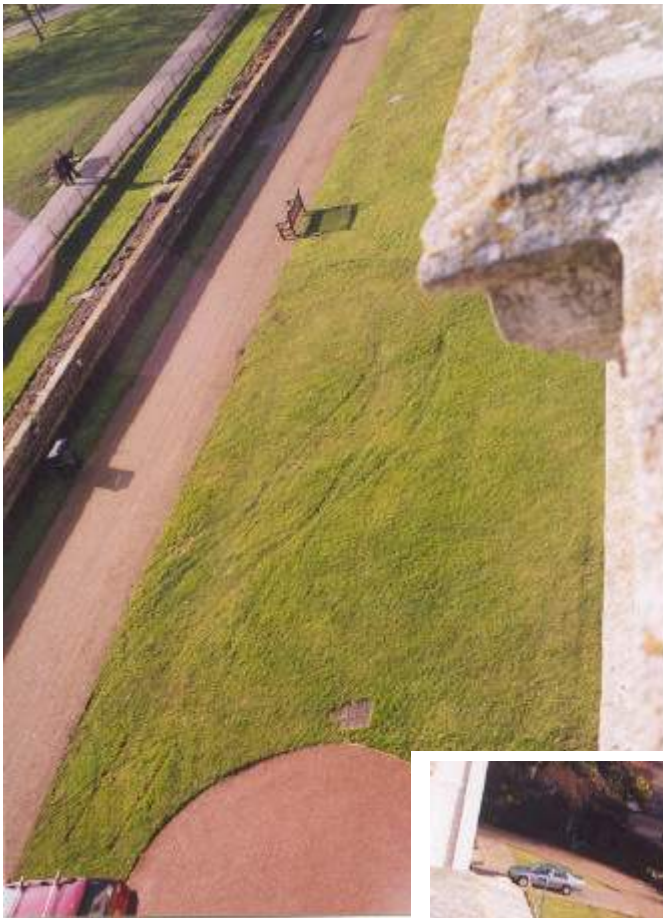
Whole Site North Side

Broken pieces of plastic beer glasses

Area adjacent to the Anchor Display

Rutting has caused roots to be exposed





South West Lawn

An overview of damage



South East Lawn

An overview of damage

**British Gas Millennium Party – Ground Reinstatement
National Maritime Museum**



South Side Lawn adjacent to Rose Bed

Minor rutting damage



Lawn on corner of East wing

Minor rutting and scuffing



South East Lawn

An overview of damage

South West Lawn

Damage caused by fireworks



APPENDIX 2

SITE DRAWING