



## **OPERATION & MAINTENANCE MANUAL**

### ***PP0100 / W5610 Ready Money Fountain, Regents Park***

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Photo plan of water pipe and SW drain installation at Trumpet fountain location.

Plan of water pipe and SW drainage installed for Trumpet Fountain.

Trumpet Fountain Detail Sheets 1-3 Moxon Architects

## **SECTION 1.0 GENERAL INFORMATION**

### **1.1 Background Information**

The Ready Money Fountain is a Grade II Listed drinking fountain (1896) located on the Broadwalk in Regents Park.

The gothic fountain is four sided and consists of a white marble central spire with four smaller pinnacles on pink granite shafts, on a white marble base with pink granite bowls served by bronze water spouts. There are two granite block/steps each on three sides, on the fourth side are 2 small marble dog bowls at low level. There are three octagonal steps around the fountain from the paving leading up to the podium level. There are four arched detailed faces, the north face has an inset clock replacing a former water clock, and the south face has a bronze plaque with a painted inscription.

In 1999-2000 the monument underwent some comprehensive repairs, and is in relatively good condition, however, the deterioration of the old stonework is now obvious against the more recent repairs and detailing in original carved detail is lost.

The 2014 quadrennial survey suggested the monument would benefit from some conservation and general maintenance and GHK were engaged to provide a schedule of works and specification for repairs and conservation.

Part of the recommendation provided by GHK was to turn off the water supply element of the fountain. This was based on a number of reasons, though primarily:

1. that a robust sanitary solution is not achievable without an unacceptable a level of intervention into the structure
2. that the plumbing system cannot be maintained without further unacceptable modification of the structure.
3. any means of serving water from above the basins will compromise the integrity of the structure to an unacceptable degree

To mitigate the effect of switching off the water supply to the ready Money Fountain, The Royal Parks commissioned the installation of a new 'Trumpet' drinking fountain to the side of the adjacent footpath, to provide drinking water and a dog bowl water supply.

## **SECTION 2: PROJECT PARTICULARS**

### **2.1 Description of project**

To Record areas of stone to be repaired and or replaced. Comprehensive Doff clean and then rake out joints and repoint flush. Various indents to be completed along with new carved marble indents.

Scaffolding: Designed access scaffolding to 2 elevations including lifting equipment.

### **Scope of Works**

All marble elements  
Remove trapped organic build up with spatulars brushes etc.  
Cleaning steam clean  
Poultice clean with Arte Mundit ECO  
Trial  
Granite steps & paving  
Rake out & repoint granite steps  
Doff clean steps & landings  
Granite basins  
Rake out & repoint all pedestal pink basins  
Micro abrasive cleaning to remove calcite staining on basins  
Provisional sum (Bronze basins etc.) OMIT  
Doff basins  
Frieze, point around indented slate stars' item 12  
Grey Granite facings item 25  
Lime water 40 coats  
shelter coat  
Marble plinths item 29  
flush out crack & lime grout  
Supply and install new trumpet fountain and water supply pipework within York stone surround (installation works carried out by T J Hunt)



GHK Schedule of  
repairs



**North Elevation works**

Pointing to marble elements

spire 100%

Min 50% of other joints

Treat surfaces with Ammonium Oxalate

pediment (7)

String mould (8)

Frieze (11)

Frieze corner (14)

Colonette Capital (16)

Marble spandrels (17)

Lancet Arches (18)

Lancet capitals (19)

Colonette bases (20)

Marble plinth (26)

Frieze corners

Cut out existing & renew in polished marble item 13 also see west elevation

Colonette capitals

Cut out existing & renew in polished marble item 15 also see west elevation (1 set of 3 capitals on NW corner)

Marble arch inset

Cut out & replace Zebu cow face item 30

Basins,

investigate leaking & report OMIT

Provisional sum for repairs OMIT

Dog Bowls

Flush out to allow water to flow

Repoint cracks

Clock

Carry out repairs & refurbish



**East elevation works**

Pointing to marble elements

spire 100%

Min 50% of other joints

Treat surfaces with Ammonium Oxalate

pediment (7)

String mould (8)

Frieze (11)

Frieze corner (14)

Colonette Capital (16)

Marble spandrels (17)

Lancet Arches (18)

Lancet capitals (19)

Colonette bases (20)

Marble plinth (26)

Frieze corners

Cut out existing & renew in polished marble item 14 also see west elevation

Marble plinth (30)

Cut out existing & renew in polished marble item 30 (Item 30 not on East Elevation Sketch) Not Priced)

Marble pediment insert (31)

Rake out & flush out cracks around slate stars

Marble arch inset

Cut out & replace lion face item (32)

Marble Pinnacle

renew in polished marble item

Carved face to pediment

Fit new carved face item 34

Indents

Check & repoint

spire

Fit new indent with ridge moulding item 5



### **West Elevation works**

Pointing to marble elements

spire 100%

Min 50% of other joints

Treat surfaces with Ammonium Oxalate

pediment (7)

String mould (8)

Frieze (11)

Frieze corner (14)

Colonette Capital (16)

Marble spandrels (17)

Lancet Arches (18)

Lancet capitals (19)

Colonette bases (20)

Marble plinth (26)

spire

Fit new indent with ridge moulding item 5

Spire lancet

Fit new indent to left hand side of roof ridge mouldings item 6

String mouldings

Fit new marble indent with mouldings to match existing item 9

Fit new marble indent with mouldings to match existing item 10

Frieze corners

Cut out existing & renew in polished marble item 13 also see west elevation

Colonette capitals

Cut out existing & renew in polished marble item 1 set of 3 capitals

Marble pediment Insert

Fit new carved marble face item 30

Basins,

investigate leaking & report OMIT

Provisional sum for repairs OMIT

Granite step

pin & point crack

Pediment

Fit new carved stone rosette indents to pediment, item 8

O&M

E/o as architect sketch

Fit new indent to both sides of roof ridge mouldings item 6

Gable Face mould

Additional maquette



### **South Elevation**

Pointing to marble elements

spire 100%

Min 60% of other joints

Treat surfaces with Ammonium Oxalate

pediment (7)

String mould (8)

Frieze (11)

Frieze corner (14)

Colonette Capital (16)

Marble spandrels (17)

Lancet Arches (18)

Lancet capitals (19)

Colonette bases (20)

Marble plinth (26)

spire

Fit new indent with ridge moulding item 5

Spire lancet

Fit new indent to left hand side of roof ridge mouldings item 6

String mouldings

Fit new marble indent with mouldings to match existing item 9

Fit new marble indent with mouldings to match existing item 10

Frieze corners

Cut out existing & renew in polished marble item 13 also see west elevation

Colonette capitals

Cut out existing & renew in polished marble item 15 also see west elevation (1 set of 3 capitals on SW corner

Indents

Check & repoint

Plaque



## 2.2 Project Address

Ready Money Fountain  
Regents Park  
London

## 2.3 Commencement and completion dates

Commencement Date: Sept 2016

Completion Date: Feb 2017

## 2.4 Project Directory

Company: Vinci Facilities  
Project manager: Ed Needham  
Email: [ed.needham@vincifacilities.com](mailto:ed.needham@vincifacilities.com)  
Tel: 0207 479 1020  
Mobile Number: 07816 517036

Company: CSW  
Contracts Manager: Russell Grace  
Email: [russellgrace@csworks.co.uk](mailto:russellgrace@csworks.co.uk)  
Tel: 01243 784225  
Mobile Number: 07711 593928

Company: CSW  
MD: Adam Stone  
Email: [adamstone@csworks.co.uk](mailto:adamstone@csworks.co.uk)  
Tel: 01243 784225  
Mobile Number: 07983 608436

Company: CSW  
QS: Liam Creighton  
Email: [liamcreighton@csworks.co.uk](mailto:liamcreighton@csworks.co.uk)  
Tel: 01243 784225  
Mobile Number: 07739633386

Company: Castle Fine Arts Foundry  
CM: Chris Weston  
Email: [info@bonzefoundry.co.uk](mailto:info@bonzefoundry.co.uk)  
Tel: 01691 780261

Company: T J Hunt  
Dir: Gary Macdonald  
Email: [gary@tjhunt.co.uk](mailto:gary@tjhunt.co.uk)  
Tel: 01483 232274  
Mobile Number: 07837 319819





## **SECTION 3.0 PROJECT RESIDUAL HAZARDS AND RISKS**

### Typical causes of decay in masonry

#### **Climatic Effects**

Climatic effects upon masonry structures are one of the principle causes of decay, effecting individual materials, which in turn can affect the whole the structure.

Solar radiation is one of the most significant causes of accelerated decay in masonry and different materials vary in their ability to absorb the long and short wavelengths of energy from the sun.

#### **Temperature and Thermal Expansion**

Building materials and in particular stone, are heated in three ways: by direct solar gain; indirect solar gain, (through windows) and by indirect heating of the air whose temperature is raised by the sun.

A building, which is in part exposed to the effects of solar radiation, can be greatly affected by thermal movement, whilst another façade, shaded from the direct sunlight may be subjected to differing levels of expansion. The repeated effects of such a process on the structure can result in accelerated decay. Stresses induced over time will depend upon the buildings ability to handle changes in dimension, caused by thermal expansion/contraction, degree of structural rigidity and tolerance to changes in moisture content.

#### **Moisture**

The presence of water in masonry in any form can cause accelerated decay. There are a number of ways water may come into contact with masonry, the most common, by direct rainfall. Indirect contact however can often lead to more severe damage as it collects soluble materials during its journey. The result is the depositing of destructive crystallised particles following evaporation, leading to accelerated decay. Disposal of rainfall away from the building at the earliest opportunity is key to increasing the longevity of masonry.

Capillary action is also a significant contributor to masonry decay over time; soluble salts are carried into the masonry where they become concentrated. When the water then evaporated from the surface, the resultant soluble salts in turn cause greater attraction of water. This pattern continues leading to increased capillary rise and accelerated decay. Common causes of such problems may arise due to poorly maintained down pipes, or the lack of adequate damp proofing during construction.

#### **Dissolved Salts**

The soluble salts discussed in the paragraph above have varying degrees of destructive and aesthetic influences upon masonry; the most destructive of which are sulphates of sodium, potassium, magnesium and calcium. This is due primarily to the way in which they crystallise within the masonry, causing serious disintegration and delamination.

Less aggressive salts present in water are nitrates of sodium, potassium and calcium. These soluble salts, which can remain from the production process, cause efflorescence, which may be simpler to eliminate.

Calcium carbonate is a principle component in limestone and has itself no disintegrating effects. It should be borne in mind however that the acidic nature of calcium in limestone accelerates the decay of alkaline sandstone. As such, the design, use and proximity of limestone and sandstones should be carefully considered during any design development process.

### **Frost Action**

The repeated process of freezing and thawing of water trapped in, or around porous masonry can result in significant damage over time. In a typical British Winter this process may take place twice a day and the ability of masonry to resist this action depends upon the size of the pores within the stone and the consistency of material. A good quality limestone and sandstone without imperfection will perform well over many years providing it is positioned and detailed to suit its application.

### **Wind**

Commonly wind effects masonry by rapid evaporation, causing salty crystallisation to take place within the material rather than on the surface as would normally be seen. The effect is to accelerate the weathering on the material and cause spalling of the surface, which in turn accelerates the evaporation and crystallisation.

Where wind-borne sea salts are present such as on coastal regions, these effects can be very dramatic and lead to devastating levels of decay.

Arguably the most serious and common form of wind damage can be caused by heavy rainfall driven by high winds. The combined effects of which can result in internal decay after the stone reaches a point of saturation, penetrating un-maintained cracks and fissures.

### **Lightning**

Lightning is perhaps the most frequent of natural causes of damage to masonry buildings, particularly those ecclesiastical in nature. In certain atmospheric conditions, electrical potentials of the earth and the atmosphere build up to such levels that often-tall objects are struck. If sufficient resistance exists within the object between the point of strike and the ground, then damage is inevitable.

Measures to overcome such events take the form of low-level resistance conductors positioned such that any possible strike passes directly to earth. Principle considerations when thinking of providing protection against lightning should be: the

cultural significance of the structure; the physical dimensions of the building; its location and surroundings; records of previous strikes; geographical location; ability to perform maintenance to the conductor at regular intervals.



### **Botanical Effects**

Ivy creepers and other forms of plant life can if left unchecked, cause significant damage to masonry. Often growing on, around and within cracks and crevices of structures, if allowed to mature, ivy for instance can lead to eventual partial or total collapse of a structure.

Masonry structures, wholly or partially covered with plant life may be subjected to greater levels of moisture due to the effects of trapped air between the surface of the masonry and the plant, possibly resulting in accelerated sulphate attack and the effects of frost action. Plant life growing on, or in a masonry structure is usually an indication of neglect and may be an indication that preventative maintenance is required.

### **Biological Effects**

Bacteria and Lichen can cause decay of some stones by producing acids, which react chemically with the limestone, sandstones and in some cases leadwork.

Red, brown and green algae's Algae, mosses and lichens grow on all types of masonry and can be quite attractive. Dependant on sun light for life, they can result in larger, more damaging plants getting a foothold over time and may accelerate the decay of the masonry by producing oxalic acids. They may also slow down the evaporation process following rainfall and increase the potential for frost damage.

### **Animals and Bird Effects**

Even the smallest of voids can be accessed by a number of animals and birds, many of which if left unchecked can cause damage by undermining footing, urinating, defecating, gnawing, disfiguring and even causing the increased likelihood of fire with the build-up of nesting materials.

Commonly birds cause much of the unsightly damage to masonry from the build-up of alkaline and acidic guano, which accelerates the decay of masonry, or more simply by blocking rainwater outlets causing the growth of vegetation and other related problems.

Effective prevention requires vigilance and a regular policy of inspection and maintenance.

### **Man-made Effects - Atmospheric Pollution**

A by-product of industrial and commercial activities, the effects of pollution on the ozone are more commonly documented today than ever before.

As previously stated, building stones have a wide range of durability as pollutants affect calcium; a component in limestone's, with calcareous sandstones suffering most. Natural weathering by rain, wind and frost is accelerated by pollution; in addition, the expansion of salts trapped within the pore structure crystallises and hydrates, causing damage.



The repeated dissolving and re-crystallisation of calcium sulphate in stone results in damage to the stone and can continue unabated even when pollutant levels have dropped. The rate of decay is dependent upon levels of air borne particulates, i.e. smoke and soot containing carbon, silicon, sulphur, aluminium, calcium and vanadium.

There is no satisfactory means of long term protection for a building structure, or any inexpensive way of preserving stone. Although for limestone sculptures and smaller areas of decorative features, shelter coating is used to good effect. Sandstones impregnation with silane/siloxane preservatives may also be considered.

Lime mortars are affected by pollution as well as rain, wind and frost. The lime is gradually eaten away, exposing the aggregate. Rendering tends to fail by cracking, admitting rain, which may cause sulphate attack in the substrate.

Preventative design related measures taken against the effects of air pollution typically take the form of lead coverings to weathering's, cornices, and stringcourses, which then shed acid-laden rain away from the building fabric. Regular maintenance in the form of light cleaning, re-pointing and other restorative techniques also form an essential part of ensuring the longevity of masonry structures.

It is highly recommended that to ensure the prolonged life of any masonry product/structure that regular planned and preventative maintenance is considered.

Specialist techniques performed by trained craftsmen are an integral part of this process and as such should not be undertaken by untrained person(s). To this end CSW would be happy to discuss the provision of routine inspections in order to ensure the best care of your masonry. Enquiries should be forwarded to:

Mr Russell Grace, Contracts Manager.

Chichester Stonework's (Chichester) Ltd  
Terminus Road  
Chichester  
West Sussex  
PO19 8TX

Tel: 01243 784225

Fax: 01243 813700

E-mail: [russellgrace@csworks.co.uk](mailto:russellgrace@csworks.co.uk)



## **SECTION 4.0 MANUFACTURES LITERATURE AND GENERAL INFORMATION**

### **4.1 Materials Used Index**

- Lime Putty
- West Health Washed Sand
- Hilti Resin
- Hydraulic Lime
- Marble Dust
- Casein Lime wash
- Carrara Marble
- SS Dowels

### **4.2 Materials Used**

#### Materials Used

##### **Location**

##### **Material**

All elevations Indents

SS Dowels

All elevations Marble pointing

Lime Putty / Marble dust

All elevations Granite pointing

Hydraulic Lime/West Health Sand

All elevations Indents/

Carrara Marble

All elevations Indents

Hilti Hit HY resin

All elevations Granite

Casein Lime wash

Trumpet Fountain

Bronze Casting

Trumpet Fountain

York Stone Surround

Trumpet Fountain

MDPE Pipework



#### 4.2.1 Suppliers/Subcontractor Details

##### Suppliers Details

<b>Product</b>	<b>Supplier</b>	<b>Contact Tel</b>
Dressed Stone	Chichester Stonework's Ltd Terminus Rd Chichester West Sussex PO19 8TX	Tel: 01243 784 225
Carrara Marble Block	Barham Stone Unit A Elkland's Business Park Desborough Rd Market Harborough Leicestershire LE 16 8HB	Tel: 01536 764 744
Hydraulic lime	Traditional Lime Church Farm Leckhampton Cheltenham Gloucestershire GL53 0QJ	Tel: 01242 525444
Hilti Resin	Hilti UK Grande Vitesse Ind Park 38 Great Suffolk St London SE1 0UE	Tel: 0844 815 6300
West Heath Sand	West Heath Common Sand Pit CEMEX UK Materials Ltd West Harting Petersfield	Tel: 0845 155 2410



<b>Product</b>	<b>Supplier</b>	<b>Contact Tel</b>
Marble Dust	L. Cornelissen & Son 105 Great Russell ST London WC1B 3RY	Tel: 020 7636 1045
Casein & Lime Putty	Rose of Jericho Holywell Dorchester Dorset DT2 0LL	Tel: 01935 83676
SS Dowels	Stainless Steel Fixings 10 Charlwood's Road East Grinstead West Sussex RH19 2HU	Tel: 0131 442 1777
Trumpet Fountain	Castle Fine Arts Foundry Tanat Foundry LlanrhaeadrymMochnant Nr Oswestry SY10 0AA10	Tel: 01691 780261
Scaffold	J Plackett Scaffolding Knole Kenilworth Close Banstead SM7 2BJ	Tel: 01737 360199



### **4.3 Maintenance of Stonework**

#### Cleaning

The DOFF system is generally appropriate for the removal of thermoplastic paints (oil based, acrylic, dispersion, etc.) and oil, grease, bitumen, chewing gum, organic growth, etc.

1. The objectives and scope of the project will be noted. This will determine the boundaries for the cleaning / removal process i.e. timescale, access, cost limitation, aesthetic requirement etc.
2. The areas to be worked will be examined by the Supervising Officer. The said officer will be assisted by the Contractor, or other participants having an understanding of the principle and possibilities of the system. Considerations will include safety, substrate condition, control of water and proximity of other works.
3. It should be normal practice before commencement of the cleaning operation that one or more sample areas are evaluated. Due merit should be given to the following:
  - (a) Areas should be representative of the substrate, soiling and detail of the main works.
  - (b) Test panels should be positioned discreetly.
  - (c) Location of the test areas must be recorded and protected from further alteration.
  - (d) The parameters by which the result is obtained must be recorded.
  - (e) An acceptable test area should be retained as a control panel for the main works.
  - (f) Measures adopted as a result of the tests must be attainable and controllable in the main works.
4. The cleaning of the building surface should be carried out by a capable operator who has received instruction from CSW trained into the proper use of the DOFF steam cleaning system. CSW maintains a record of the induction of each Operator.
5. If the Test Supervisor, the Client's nominated representative, is not familiar with the DOFF system, they should seek such information from CSW as to be able to correctly identify the origins of the principle components of the system, equipment serial numbers, nozzle type number.
6. Consideration should be given to protecting windows, doors, delicate features or any other areas not to be treated. For example, "Tank-tape" and polythene to reduce water ingress through openings. Isolation of vulnerable electrical apparatus, lighting, etc.
7. Gutters and down pipes leading to soakaways should be diverted by others in order that the removed solid matters do not impair drainage systems.





8. It is advised that work commences at the uppermost level and continues downward. This will (a) reduce the need for re-rinsing and (b) reduce the exposure of surfaces to residues and water when removing a coating.
9. In some instances, it may be necessary to use supplementary techniques to expedite the process (take heed of the requirements of 3(f)):
  - (a) Chemical paint removal e.g. solvent gel, may be beneficial when used in conjunction with DOFF for certain coatings and other unwanted matter. Problems may arise, however, in confined (poorly ventilated) areas or, conversely, in open areas where public access is difficult to control; if solvent based or other hazardous substances are used.
  - (b) Certain paints (e.g. lime based) and carbon deposits may require sympathetic mechanical assistance, such as the CSW JOS System.
  - (c) Where the paint/coating layers are thick and do not immediately peel away, it may be advantageous to have an assistant with a spatula or other implement to pull away such layers. It is recommended that heat resistant gloves be worn when such a task is undertaken.
10. Adjustment of the water volume, pressure and temperature controls should be made whilst maintaining an appropriate distance of the nozzle from the work. A balance should be achieved in order to obtain an effective cleaning result without abrading the substrate. Consideration may also be given to differing nozzle specification i.e. aperture and spray angle.
11. Where there may be a high risk of water damage to the adjacent fabric e.g. during internal usage, consideration should be given to vacuuming or channelling away unwanted water and steam.
12. Consideration should be given to all Health & Safety matters. These are:
  - (a) Protective Clothing and Equipment  
Normal will be: rubber-dipped cloth gloves, eye protection (visor), ear defenders (above 30 bar pressure), waterproof clothing (skin to be covered). Respiratory equipment will be advisable if toxic coatings are suspected or if bird/animal droppings are to be removed.
  - (b) Electrical Safety  
Appropriate electrical ancillaries and supply protection (see the Electrical Considerations screen, scraper and/or protection of electrical fittings).
  - (c) Location of DOFF Equipment  
Equipment should be placed in a well-ventilated area out of the reach of the lance or other water spray. The exhaust must not be covered or obscured. A purpose-made ventilation duct can be used if required in an enclosed area. It will reassure the Operator if he or an assistant can observe the unit, even from a distance.



(d) Storage and use of fuel

The normal fuel for the DOFF is light (35 second) gas oil (red diesel), or motor vehicle diesel (white) fuel or domestic central heating oil. The latter will not be suitable for diesel compressors, etc. This will be stored in suitable marked containers or drums away from heat or direct sunlight. Storage will normally be at least some metres from the DOFF heater unit.

Precautions should be made to avoid accidental or malicious spillage. If adjacent to drainage or water courses, containment may be appropriate. Avoid contact with skin, soil and vegetation. Transfer of fuel to the DOFF is ideally carried out using a 20 litre Jerry-can with "clip-on" spout. If storage on site is difficult, transfer to the site sufficient only to maintain continuity of working.

(e) Storage and use of acid descaler

In hard water areas, descaling of the boiler unit will be required in accordance with the Operator Instruction. The descaler will normally be inhibited hydrochloric acid (see product Health & Safety Data Sheet). This should be stored at ambient temperature with controlled access. Preliminary transfer (in a controlled location) into 1 or 2½ litre marked containers will reduce later handling. Protective waterproof clothing, eye protection and rubber gloves / gauntlets are required.

Supply of clean water should be readily accessible during usage. On completion neutralising of the residue may be accomplished using, for example, crushed limestone. Do not dispose of untreated residue into the drainage system.

(f) Education of Personnel

Whilst personnel working in the vicinity need not be inducted into the working of the system, they should be made aware of the potential hazards - heat, ventilation, the temperature of metal/rubber components, etc. Someone adjacent, other than the Operator, should be aware of how to safely shut down the system in circumstances unforeseen.

13. Following the completion of any repair work it is recommended that a final rinse be given to remove any residue.

#### 4.4 COSHH information and product data sheets



Superfine Lime  
Putty Product H&S [



NHL3.5\_Product\_Da  
ta



MSDS\_PGR\_Marble\_  
Dust\_Fine



Casin Lime Wash  
Product Data Sheet



Casein Lime wash  
H&S Data Sheet



Adobe Acrobat  
Document

**Hilti Hit MMPlus**



## 4.5 Maintenance of Bronzework

### Maintenance Procedure for Bronze Sculpture

To retain the existing patina it is advised that the sculpture should be lightly washed if there is a build-up of dust, soil or bird lime and re-waxed annually. If the sculpture is located in coastal conditions it could be needed once every six months.

- a. Wash down with a non-ionic detergent in cold water, using a soft natural bristle brush to clean any deep texture.
- b. Rinse off with clean water and dry with a clean cotton towel.
- c. Once clean and dry apply a thin even coat of '*Liberon Black Bison Patinating Fine Paste Wax - Clear*'. Apply this with a soft 2" natural bristle brush (it may be necessary to wrap the ferrule with tape to avoid scratching the bronze). To load the brush with wax drag it backwards and forwards across the surface of the wax several times and remove any excess by wiping on the side of the tin, then rub the wax onto the surface of the sculpture moving the brush in a circular motion and spreading it around as thinly as possible.
- d. Once the whole piece is waxed it can be buffed back. It should take around 20 minutes for the wax to set hard. Buff with a clean soft cotton cloth.
- e. Once the whole piece is buffed another coat of wax can be applied in the same way.

A minimum of two coats should be applied and buffed back each time the piece is cleaned. As well as giving the wax a shine buffing back the wax compacts it and the aim is to create a hard surface to protect the sculpture.

Caution - brushing the wax on too thick means that it will not harden properly and will not polish.

Any graffiti - such as permanent marker or spray paint - should be removed with Methylated Spirit prior to washing. If this does not remove the marks acetone could be used, but use sparingly as this will also remove the wax and possibly affect the patina.

Non-ionic detergent - a class of synthetic detergents in which the molecules do not ionize in aqueous solutions. These detergents do not leave salt traces on the bronze. For example *Simoniz Protection Car Wash* is a suitable product.

*Liberon Black Bison Patinating Fine Paste Wax Clear* - Liberon is the brand name of the product.



**CHICHESTER STONEWORKS**  
STONEWORK, RESTORATION, CONSERVATION

## **SECTION 5: AS BUILT INFORMATION**

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Photo plan of water pipe and SW drain installation at Trumpet fountain location.  
Plan of water pipe and SW drainage installed for Trumpet Fountain.  
Trumpet Fountain Detail Sheets 1-3 Moxon Architects



### **North Elevation**

1. Zebu cow head indent
2. Colonette capital replacement
3. Frieze corner replacement/String mould indent
4. Colonette capital replacement
5. Crockets replacement
6. Crockets replacement
7. Crockets replacement

### **East Elevation**

1. Frieze corner replacement/String mould indent
2. Colonette capital replacement
3. Colonette capital replacement/String mould indent
4. Half sphere replacement
5. lion Face indent
6. Prince Consort indent
7. Crockets replacement
8. Crockets replacement
9. Crockets replacement
10. Finial replacement
11. Spire lancet replacement

### **South Elevation**

1. Frieze corner replacement/String mould indent
2. Colonette capital replacement
3. Frieze corner replacement/String mould indent
4. Colonette capital replacement
5. Crockets replacement
6. Crockets replacement
7. Crockets replacement
8. Half sphere replacement
9. Spire lancet replacement
10. Spire indent

### **West Elevation**

1. Queen Victoria indent
2. Frieze corner replacement/String mould indent
3. Frieze corner replacement/String mould indent
4. Frieze corner replacement/String mould indent
5. Frieze corner replacement/String mould indent
6. Crockets replacement
7. Spire lancet indent
8. Crockets replacement
9. Crockets replacement



East Elevation 0



East Elevation 1,2



East Elevation 3



East Elevation 4&5



East Elevation  
6,7,8&9



East Elevation 10  
&11



East Elevation  
10&11



North Elevation 0



North Elevation 1



North Elevation 2



South Elevation 0



South Elevation  
1&2



South Elevation  
3&4



South Elevation  
5,6&7



South Elevation 8



South Elevation  
9&10



West Elevation 0



West Elevation 1



West Elevation 2&3



West Elevation 4&5



West Elevation  
6,7,8,9&10





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**Photo Plan 1**



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**Plan 2**



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**Trumpet Fountain Detail**