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# PRINCESS GARDENS FOUNTAIN TORQUAY

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**Condition Report – January 2018**



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# Introduction

This report has been prepared following the removal and disassembly of the Princess Gardens Fountain and the purpose is to inform the Client of the condition and recommended way forward for each of the components.

A logical tagging method has been adopted to ensure all of the components are returned to the original position at reinstatement. In the next section a general assembly diagram is included detailing the naming convention used in the tagging scheme followed by a more detailed breakdown of the tagging/numbering scheme.

There are some important general points to note when considering this report:

## General Notes

### 1. Condition

The condition of each component is indicated within the following sections of the report following disassembly and close inspection by Newton Forge operatives

### 2. Recommended Actions

The recommended action for each component is indicated using the following key:

	Newton Forge consider this repair <b>critical</b> for the strength and future safety of the fountain. Without this repair, it will be difficult, and in some cases impossible to reinstate the fountain to fully working order.
	Newton Forge consider that this repair is <b>required</b> . Failure to undertake this repair will not have any immediate safety or visual impact but the component may deteriorate at a faster rate in the future thus requiring further repairs in due course
	Newton Forge consider that this component is in a sound condition and only requires cleaning and re-painting

### 3. Comments

Additional comments for the attention of the reader have been added to each section where necessary.

### 4. General Pitting

On both Bowl No.1 and Bowl No.2 there is clear evidence of pitting (through the rust patches) which will probably have been caused by a fault in the casting process at the original foundry. Failure to fill the pitted surface of both bowls may mean that they will be prone to moisture ingress and rust patches may appear more quickly than if the surfaces are filled before painting

### 5. Fixing Bolts

The fixing bolts were drilled out owing to corrosion making it impossible to unscrew them. It will be necessary to remove the remaining stubs and re-tap the holes to attain an adequate thread for re-fixing.

## **6. Internal Pipework**

With the exception of the cast section situated within Pedestal 2, the internal pipework is not included within this report because it is assumed that the plumbing will be undertaken by others. However, there will need to be close liaison between Newton Forge and the plumber to ensure this work is coordinated. MW Benney are requested to advise.

## **7. Photographs**

Within this document, only photographs of Amber (Required) and Red (Critical) repairs are included.

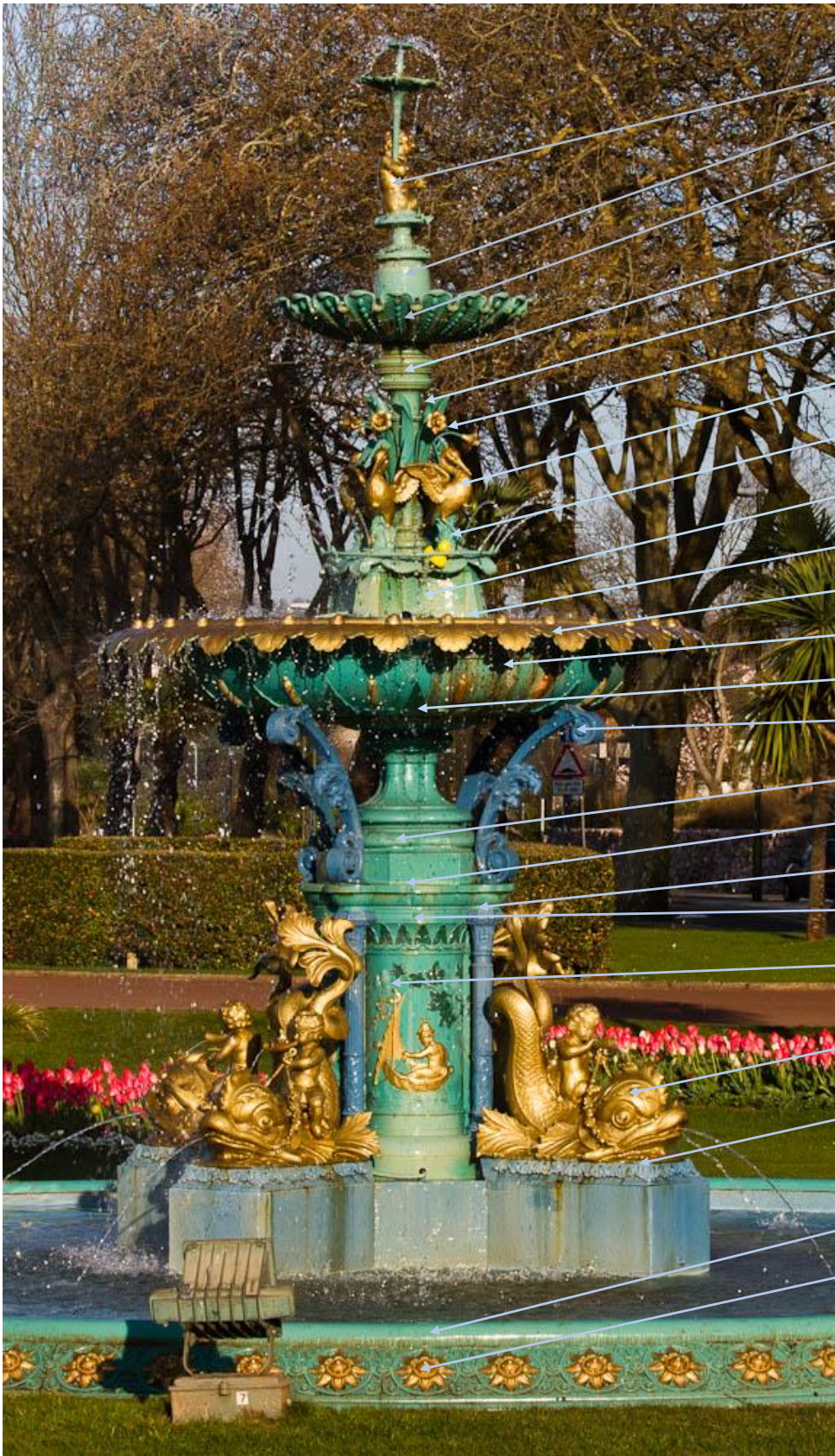
## **8. Shot Blasting**

It should be noted that this assessment has taken place before shot blasting. Once authorised, the repairs will be undertaken prior to blasting and the media used will be commensurate with the component but Newton Forge cannot guarantee that further repairs may be uncovered. Newton Forge will inform MW Benney as soon as possible if this does happen.

A summary of the number of critical and required repairs can be seen at the end of the report.

# General Assembly Diagram

The diagram below illustrates the naming convention that has been used to describe each component of the fountain for the purpose of tagging and compiling this report.



- Cherub & Upper Spray
- Pedestal 2
- Bowl 2
- Upper Central Column
- Daffodil Leaf
- Daffodil
- Heron
- Heron Leaves
- Pedestal 1
- Internal Repair Ring Plate
- Leaf Strip
- Bowl 1 complete with 4 Stays
- Bowl Cover Plate
- Scroll
- Central Pillar Top
- Central Pillar Cap
- Post
- Central Pillar
- Central Pillar Screen
- Koi Carp
- Plinth complete with Decorative Edging
- Outer Ring Cap
- Outer Ring Plate



## Tagging Scheme

The tagging scheme is further detailed in the tables below. All components have been tagged with metal tags in line with the scheme described and the report uses the same descriptions from this point forward.

<b>Level 2 - Second Bowl</b>					
<b>Bowl 2</b>					
<b>Pedestal 2</b>					
<b>Cherub &amp; Upper Spray</b>		Cherub Faces North			
<b>Level 1 - First Bowl</b>					
<b>Bowl Cover Plate</b>	2 parts at base of bowl on the outside				
<b>Bowl 1</b>	4 x Stay/Brace	1 - 4			
<b>Central Column</b>					
<b>Internal Repair Ring Plate</b>	At base of bowl on inside, covering up cracks				
<b>Pedestal 1</b>					
<b>Bowl - North East Section</b>					
Heron 1	Heron Leaf 1	Daff Leaf 1 & 2	Daff 1.5 & 2.5	Stay 1	Leaf Strip 1 & 2
<b>Bowl - South East Section</b>					
Heron 2	Heron Leaf 2	Daff Leaf 3 & 4	Daff 3.5 & 4.5	Stay 2	Leaf Strip 3 & 4
<b>Bowl - South West Section</b>					
Heron 3	Heron Leaf 3	Daff Leaf 5 & 6	Daff 5.5 & 6.5	Stay 3	Leaf Strip 5 & 6
<b>Bowl - North West Section</b>					
Heron 4	Heron Leaf 4	Daff Leaf 7 & 8	Daff 7.5 & 8.5	Stay 4	Leaf Strip 7 & 8
<b>Lower Fountain at Ground Level</b>					
<b>Inner Plinth - North East Section</b>					
Koi Carp 1	Decorative Plinth 1	Post 1	Scroll 1	Screen 1	
<b>Inner Plinth - South East Section</b>					
Koi Carp 2	Decorative Plinth 2	Post 2	Scroll 2	Screen 2	
<b>Inner Plinth - South West Section</b>					
Koi Carp 3	Decorative Plinth 3	Post 3	Scroll 3	Screen 3	
<b>Inner Plinth - North West Section</b>					
Koi Carp 4	Decorative Plinth 4	Post 4	Scroll 4	Screen 4	
<b>Central Pillar</b>	N, E, S, W				
<b>Central Pillar Cap</b>	N, E, S, W				
<b>Central Pillar Top</b>	N, E, S, W				
<b>Pool at Ground Level</b>					
<b>Outer Ring</b>					
<b>Pool Capping</b>	1 - 20	Clockwise from North Datum			
<b>Pool Plate</b>	1 - 23	Clockwise from North Datum			

## Level 2 Second Bowl

Level 2 - Second Bowl				
Bowl 2		Good	Cleaning & repainting only	See General Note 4. General Pitting
Pedestal 2		Good	Cleaning & repainting only	
Cherub & Upper Spray		Part of Thumb missing on flower stem. Flower stem is bent. Otherwise in good condition	Replace missing pieces and straighten out stem	



Cherub & Upper Spray

## Level 1 First Bowl

Component Name	Component ID No.	Condition	Recommended Action	Comments
<b>Level 1 - First Bowl</b>				
<b>Bowl 1</b>		Crack on inside of bowl where cover plate is situated - about 800mm long, full penetration	Repair crack	
<b>Stay</b>	1	Good	Cleaning & repainting only	
<b>Stay</b>	2	Good	Cleaning & repainting only	
<b>Stay</b>	3	Good	Cleaning & repainting only	
<b>Stay</b>	4	Good	Cleaning & repainting only	
<b>Leaf Strip</b>	1	Joint Sleeve to be extended	Extension Piece Req'd	
<b>Leaf Strip</b>	2	Joint Sleeve to be extended	Extension Piece Req'd	
<b>Leaf Strip</b>	3	Good	Cleaning & repainting only	
<b>Leaf Strip</b>	4	Joint Sleeve to be extended	Extension Piece Req'd	
<b>Leaf Strip</b>	5	Joint Sleeve to be extended	Extension Piece Req'd	
<b>Leaf Strip</b>	6	Joint Sleeve to be extended	Extension Piece Req'd	
<b>Leaf Strip</b>	7	Joint Sleeve to be extended	Extension Piece Req'd	
<b>Leaf Strip</b>	8	Joint Sleeve to be extended	Extension Piece Req'd	
<b>Internal Repair Ring Plate</b>		Very thin in places and very corroded	Replace	
<b>Pedestal 1</b>				
<b>Upper Central Column</b>				Newton Forge recommend that the upper central pillar and pedestal remains intact because further disassembly may cause irreparable damage on an otherwise sound structure.
<b>Heron Leaf</b>	1	Good	Cleaning & repainting only	
<b>Heron Leaf</b>	2	Good	Cleaning & repainting only	
<b>Heron Leaf</b>	3	Good	Cleaning & repainting only	
<b>Heron Leaf</b>	4	Good	Cleaning & repainting only	
<b>Heron</b>	1	Threaded stud on base is corroded	Repair stud	
<b>Heron</b>	2	Threaded stud on base is corroded	Repair stud	

Component Name	Component ID No.	Condition	Recommended Action	Comments
Heron	3	Foot missing	Replace Crane's Foot	
Heron	3	Threaded stud on base is corroded.	Repair stud	
Heron	4	Threaded stud on base is corroded	Repair stud	
Daffodil	1.5	Stem Broken	Repair Stem	
Daffodil	2.5	Intact but thinning at bolt holes	Repair Stem	
Daffodil	3.5	Stem Broken	Repair Stem	
Daffodil	4.5	Intact but thinning at bolt holes	Repair Stem	
Daffodil	5.5	Intact but thinning at bolt holes	Repair Stem	
Daffodil	6.5	Stem Broken	Repair Stem	
Daffodil	7.5	Stem Broken	Repair Stem	
Daffodil	8.5	Stem Broken	Repair Stem	
Daffodil Leaf	1	Good	Cleaning & repainting only	
Daffodil Leaf	2	Good	Cleaning & repainting only	
Daffodil Leaf	3	Good	Cleaning & repainting only	
Daffodil Leaf	4	Good	Cleaning & repainting only	
Daffodil Leaf	5	Good	Cleaning & repainting only	
Daffodil Leaf	6	Good	Cleaning & repainting only	
Daffodil Leaf	7	Good	Cleaning & repainting only	
Daffodil Leaf	8	Good	Cleaning & repainting only	



Bowl 1





Leaf Strip No.1





Leaf Strip No.2





Leaf Strip No.4





Leaf Strip No.5





Leaf Strip No.6





Leaf Strip No.7





Leaf Strip No.8





Internal Ring Plate





Heron No.1





Heron No.2





Heron No.3





Heron No.4





Daffodil No.1.5





Daffodil No. 2.5





Daffodil No.3.5





Daffodil No. 4.5





Daffodil No.5.5





Daffodil No.6.5





Daffodil No.7.5





Daffodil No.8.5



## Lower Fountain at Ground Level

Component Name	Component ID No.	Condition	Recommended Action	Comments
<b>Lower Fountain at Ground Level</b>				
Decorative Plinth	1	Decoration is broken into multiple pieces, small pieces missing	Replace broken decoration	Although there is possibly further corrosion on the plinths under the decorative castings, Newton Forge recommend that they are left in tact because further disassembly may cause irreparable damage to an otherwise sound structure
Decorative Plinth	1	Plinth is broken into several pieces along front edge	Repair broken plinth	
Decorative Plinth	2	Good	Cleaning & repainting only	
Decorative Plinth	3	Plinth is broken along back side	Repair plinth	Slight wear of location point for Koi Carp 3 but this should not prevent reinstatement
Decorative Plinth	3	Decoration is broken on one side of plinth	Repair decoration	
Decorative Plinth	3	Small piece missing from opposite side	Build up missing piece	
Decorative Plinth	4	Good	Cleaning & repainting only	
Koi Carp	1	Good	Cleaning & repainting only	
Koi Carp	2	Koi in good condition but internal pipework is loose or broken in the horn decoration	Cleaning & repainting only	See general note No.6 Internal Pipework
Koi Carp	3	Missing Reins completely	Replace Reins	
Koi Carp	4	Missing Bottom part of one rein. Crack on underside of Cherub.	Replace Reins	
Koi Carp	4	Crack on underside of Cherub	Repair crack	
Central Pillar		Lugs were removed in order to remove pillar from granite	Reinstate lugs	
Central Pillar Screen	1	Good	Cleaning & repainting only	Apart from the removal of the curved access door, the central Pillar remains intact. Newton Forge recommend that the central pillar remains intact because further disassembly may cause irreparable damage to an
Central Pillar Screen	2	Good	Cleaning & repainting only	
Central Pillar Screen	3	Good	Cleaning & repainting only	
Central Pillar Screen	4	Good	Cleaning & repainting only	



Component Name	Component ID No.	Condition	Recommended Action	Comments
Scroll	1	Good	Cleaning & repainting only	
Scroll	2	Good	Cleaning & repainting only	
Scroll	3	Good	Cleaning & repainting only	
Scroll	4	Good	Cleaning & repainting only	
Post	1	Good	Cleaning & repainting only	
Post	2	Good	Cleaning & repainting only	
Post	3	Good	Cleaning & repainting only	
Post	4	Good	Cleaning & repainting only	
Central Pillar Cap		Good	Cleaning & repainting only	
Central Pillar Top		Good	Cleaning & repainting only	
Bowl Cover Plate		Reasonable	Very pitted	See General Note 4. General Pitting

Decorative Plinth No.1





Decorative Plinth No.3





Koi Carp No.3





Koi Carp No.4



## Pool at Ground Level

Component Name	Component ID No.	Condition	Recommended Action	Comments
<b>Pool at Ground Level</b>				
Outer Ring Plate	1	Left hand top corner; underlap - piece missing	Replace missing piece to make good	
Outer Ring Plate	2	Good	Cleaning & repainting only	
Outer Ring Plate	3	Left hand top corner; underlap - piece missing	Replace missing piece to make good	
Outer Ring Plate	4	Good	Cleaning & repainting only	
Outer Ring Plate	5	Good	Cleaning & repainting only	
Outer Ring Plate	6	Good	Cleaning & repainting only	
Outer Ring Plate	7	Good	Cleaning & repainting only	
Outer Ring Plate	8	Good	Cleaning & repainting only	
Outer Ring Plate	9	Good	Cleaning & repainting only	
Outer Ring Plate	10	Crack on Inside	Repair of Crack	
Outer Ring Plate	11	Large crack running through middle of casting	Repair of Crack	
Outer Ring Plate	12	Top left Corner Missing	Replace missing piece	
Outer Ring Plate	13	Good	Cleaning & repainting only	
Outer Ring Plate	14	Good	Cleaning & repainting only	
Outer Ring Plate	15	Good	Cleaning & repainting only	
Outer Ring Plate	16	Top Left corner underlap- piece missing	Replace missing piece and Repair hole	
Outer Ring Plate	17	Good	Cleaning & repainting only	
Outer Ring Plate	18	Good	Cleaning & repainting only	
Outer Ring Plate	19	Lug missing on bottom. Lug was cut off onsite to remove	Replace Lug	
Outer Ring Plate	20	Top Left corner underlap- piece missing	Replace missing piece and Repair hole	
Outer Ring Plate	21	Large crack running through middle of casting - Full penetration	Repair Crack	
Outer Ring Plate	22	Good	Cleaning & repainting only	



Component Name	Component ID No.	Condition	Recommended Action	Comments
Outer Ring Plate	23	Top Right corner Overlap-piece broken off - Extensive enough to include a portion of the decoration	Replace Corner and reinstate decoration	
Outer Ring Cap	1	2 Large Cracks - Left hand side Foundry Plate intact	Repair of Crack	
Outer Ring Cap	2	Good	Cleaning & repainting only	
Outer Ring Cap	3	Good	Cleaning & repainting only	
Outer Ring Cap	4	Good	Cleaning & repainting only	
Outer Ring Cap	5	Good	Cleaning & repainting only	
Outer Ring Cap	6	Good	Cleaning & repainting only	
Outer Ring Cap	7	Good	Cleaning & repainting only	
Outer Ring Cap	8	Foundry Plate broken in 2 places	Replace Foundry Plate	
Outer Ring Cap	9	Good	Cleaning & repainting only	
Outer Ring Cap	10	Good	Cleaning & repainting only	
Outer Ring Cap	11	Good	Cleaning & repainting only	
Outer Ring Cap	12	Good	Cleaning & repainting only	
Outer Ring Cap	13	Good	Cleaning & repainting only	
Outer Ring Cap	14	Good	Cleaning & repainting only	
Outer Ring Cap	15	Foundry Plate broken in 2 places	Replace Foundry Plate	
Outer Ring Cap	16	Good	Cleaning & repainting only	
Outer Ring Cap	17	Underlap Joint broken and piece is missing	Replace missing piece and Repair hole	
Outer Ring Cap	18	Good	Cleaning & repainting only	
Outer Ring Cap	19	Good	Cleaning & repainting only	
Outer Ring Cap	20	Good	Cleaning & repainting only	

Outer Ring Plate No.1





Outer Ring Plate No.3





Outer Ring Plate No.10





Outer Ring Plate No.11





Outer Ring Plate No.12





Outer Ring Plate No.16





Outer Ring Plate No.19





Outer Ring Plate No.20





Outer Ring No.21





Outer Ring Plate No.23





Outer Ring Cap No.1





Outer Ring Cap No.8





Outer Ring Cap No.15



Outer Ring Cap No.17





## Conclusion

The Princess Gardens Fountain is in a reasonable condition overall with many of the components needing only to be cleaned (blasted) and repainted with hot zinc spray followed by primer and top coat with the colours yet to be specified.

However, the price accepted clearly stated that Newton Forge allowed for **20 repairs** only as it was difficult to assess fully prior to disassembly. In addition to the specific repairs noted, Newton Forge recommend that the pitting that can be seen in both bowls should be filled at this stage to increase the longevity of the hot zinc spray and paint and prevent rust patches coming through in years to come; this would require additional time within the workshop. A summary of the number of the critical and required repairs along with filling can be seen below along with the associated costs:

Type of Repair	Quantity	
Critical	35	
Required	12	
Clean & Repaint Only	66	
Filling of pitted bowls	N/A	
	<b>Total</b>	