

Citycare **Water** 

# Below Ground Wellheads Benchmark

**22/12/2017**



## 1. Summary

Works carried out at Main Pumps Station Well 2 as a part of the repairing of below ground wellhead project are:

1. External grouting
2. Internal sealing and lining of the well
3. Sealing of glands and ducts
4. Cable relocation
5. Installation of a new sump pump
6. Floor regrading and sump deepening
7. Installation of a secure, accessible well cover
8. Construction of a 2m apron around well cover

The work undertaken on each component is considered to be the benchmark level required to minimise or eliminate water contamination from ground water and rainfall (or both).

Following are pictures of the finished works corresponding to the above list at Well 2 Main Pumps:

1.External Grouting



2/3.Internal Sealing and Lining of the Well



4.Cable Relocation



5/6. Floor Regrading (in progress)



7. Installation of Secure, Accessible Well cover



9.Construction of a 2m Apron around Well



## 2. External Grouting

Ideal Well Picture (Main pumps Well 2)



### 3. Cable Relocation

Ideal Picture (Main Pumps Well 2)



## 5. Install Secure Accessible Well Cover

Ideal picture (Main Pumps Well 2)



## 6. Construction of 2m Apron around well cover

Ideal picture (Main Pumps Well 2)



## Timelines

The following high priority works will be completed by June 2018 – as these sites were assessed as having the highest potential risk of water contamination. There are 25 wells in this group. Of this, 16 wells require all eight (8) components of work to be undertaken. The remainder (nine) require lesser work in particular cable relocation.

In total 102 wells have been assessed, with the remainder (77) considered to be lower risk but still requiring remedial works. It is anticipated that this work will be completed by December 2018.

The table below identifies 25 wells, some with two work streams

<b>Part 1: Cable Relocation where non External Grouting Require</b>			
<b>Part 2: All other works</b>			
<b>Site</b>	<b>Well Number</b>	<b>Estimated Start Date</b>	<b>Estimated Finish Date</b>
<b>Main Pumps Station</b>	Well 1	26/10/2017	13/11/2017
	Well 2	12/09/2017	3/10/2017
	Well 4	7/11/2017	23/11/2017
	Well 5	15/01/2018	26/01/2018
	Well 6	29/01/2018	2/02/2018
<b>Grampian</b>	Well 5	5/02/2018	23/02/2018
<b>Farrington (Part 1)</b>	Well 4	17/11/2017	27/11/2017
<b>Grassmere (Part 1)</b>	Well 3	4/12/2018	15/12/2017
<b>Farrington (Part 2)</b>	Well 4	26/02/2018	9/03/2018
<b>Palantine</b>	Well 1	12/03/2018	30/03/2018
<b>Thompsons (Part 1)</b>	Well 2	15/01/2018	24/01/2018
<b>Sydenham (Part 1)</b>	Well 5	26/01/2018	2/02/2018
<b>Sydenham (Part 2)</b>	Well 5	2/04/2018	6/04/2018
	Well 6	20/04/2018	20/04/2018
<b>Thompsons (Part 2)</b>	Well 2	23/04/2018	27/04/2018
<b>Burnside (Part 1)</b>	Well 5	5/02/2018	14/02/2018
<b>Belfast (Part 1)</b>	Well 1	15/02/2018	22/02/2018
	Well 2	26/02/2018	6/03/2018
<b>Grassmere (Part 1)</b>	Well 2	12/03/2018	16/03/2018
<b>Mays (Part 1)</b>	Well 2	19/03/2018	27/03/2018
	Well 4	26/03/2018	3/04/2018
<b>Redwood (Part 1)</b>	Well 1	5/04/2018	12/04/2018
<b>Burnside (Part 2)</b>	Well 5	30/04/2018	9/05/2018
<b>Belfast (Part 2)</b>	Well 1	10/05/2018	18/05/2018
	Well 2	21/05/2018	29/05/2018
<b>Blighs</b>	Well 1	30/05/2018	13/06/2018
<b>Grassmere (Part 2)</b>	Well 1	14/06/2018	22/06/2018
	Well 2	25/06/2018	29/06/2018
	Well 3	2/06/2018	7/07/2018
<b>Thorrington (Part 1)</b>	Well 1	16/04/2018	24/04/2018
<b>Bexley (Part 1)</b>	Well 1	26/04/2018	2/05/2018
	Well 2	7/05/2018	15/05/2018
<b>Brooklands (Part 1)</b>	Well 1	16/05/2018	22/05/2018
<b>Montreal (Part 1)</b>	Well 1	23/05/2018	31/05/2018
	Well 2	4/06/2018	12/06/2018
<b>St John (Part 1)</b>	Well 1	14/06/2018	20/06/2018
<b>Trafalgar (Part 1)</b>	Well 1	21/06/2018	28/06/2018
	Well 2	29/06/2018	5/07/2018