

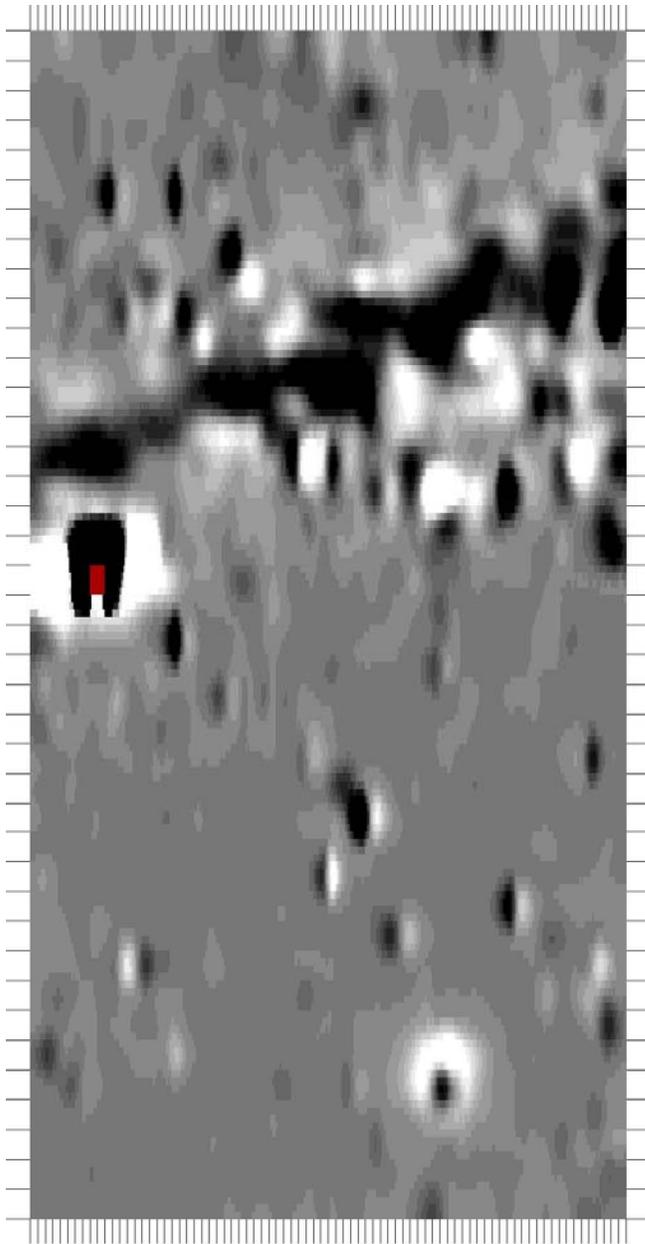
Trentham Gardens Ice House Survey

It was decided to use magnetometry for the survey. English History (English heritage) kindly loaned us an RM36 reflux gradiometer for this work.

An area 40 by 20 metres was set out. This was positioned with several questions in mind as follows:

1. The ice house is partially covered by a walking track (formally the route of a light railway). It is intended to move the track to the West and it was a requirement to make sure it wasn't moved on to another sensitive area;
2. The two available estate maps show the possible development of the ice house. This suggests that a building was built over the ice house. We wanted to see how much of the ice house complex is still buried under ground;
3. Normally there is a drain associated with the ice house to remove the melt water. This should be found to the East of the ice house heading down to the lake.

The survey went quite smoothly thanks to the staff at the gardens preparing the area prior to the survey. We had finished by lunch time. John Winch, our most experienced magnetometer operator did the walking in his own inimitable style. The support team moving the tapes managed to keep John busy.



Document: TTrentham12View2

Grid Width: 320 (20 m)

Grid Height: 160 (40 m)

Orig. Sample Size: 0.25 x 1.00m

New Sample Size: 0.06 x 0.25m

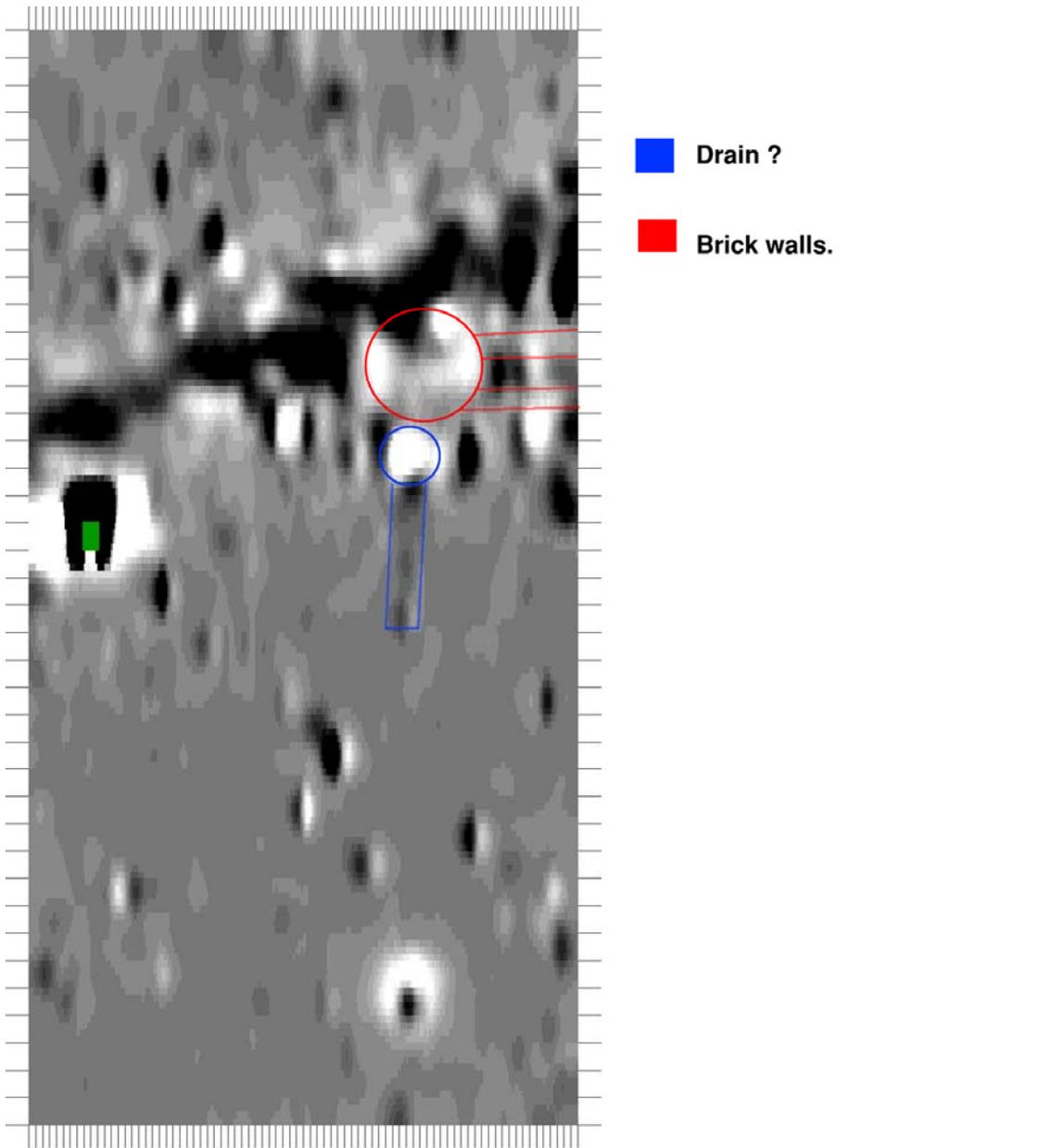


-49.99

49.99

20.00m

Figure 1: The magnetometry survey



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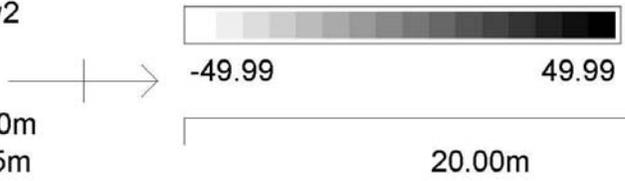


Figure 2: The magnetometer results with annotations.

The results.

1. The path would have to be moved at least 5 metres West to avoid the ice house, thus positioning the path to an area which isn't archaeologically sensitive.
2. It is clear that in addition to the chamber of the ice house the two parallel walls (the approach to the ice house from the North) survive to some extent. It is unclear whether there are any remnants of the enclosing building. This might be still there but possibly hidden by demolition debris and the railway track. Certainly the area to the east of the chamber has many anomalies.
3. There is a long linear anomaly to the East of the ice house which probably indicates the position of the drain.

Proposed archaeological dig.

It is clear that the remains are not limited to just the chamber of the ice house. We would like to expose the full footprint of the ice house. This would require an excavation of size 9 X 8 metres. Most of the excavation would be quite shallow (less than 50 cms.). It would be necessary to remove the railway path quite carefully to avoid damage to the underlying archaeology. We normally work 4 days a week Saturday, Sunday, Tuesday and Thursday. It is expected to take 4 weeks to perform the excavation.