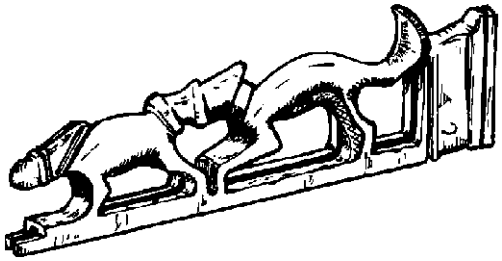
Ampthill & District Archaeological



& Local History Society

Results of an inspection and photographic survey of the cellars of Wrest Park Mansion
Silsoe
January 2002

Michael J B Turner

Kevan J Fadden



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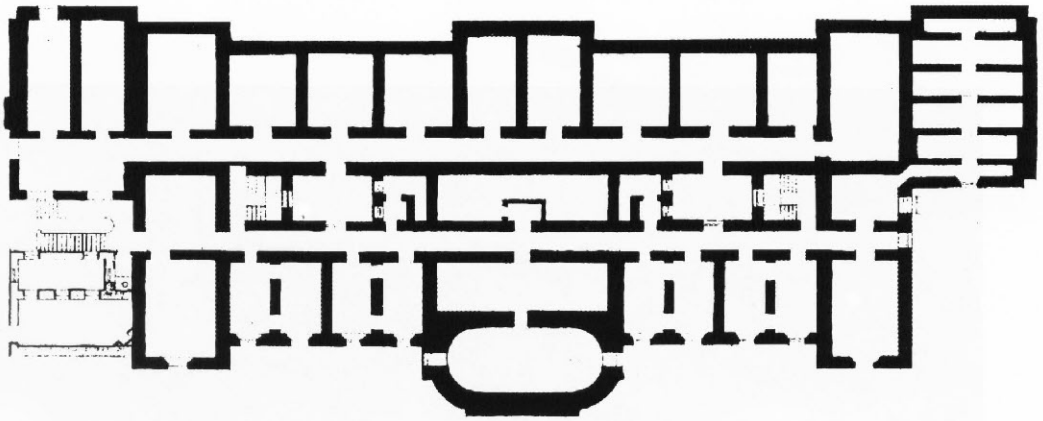


Fig 1. 1834

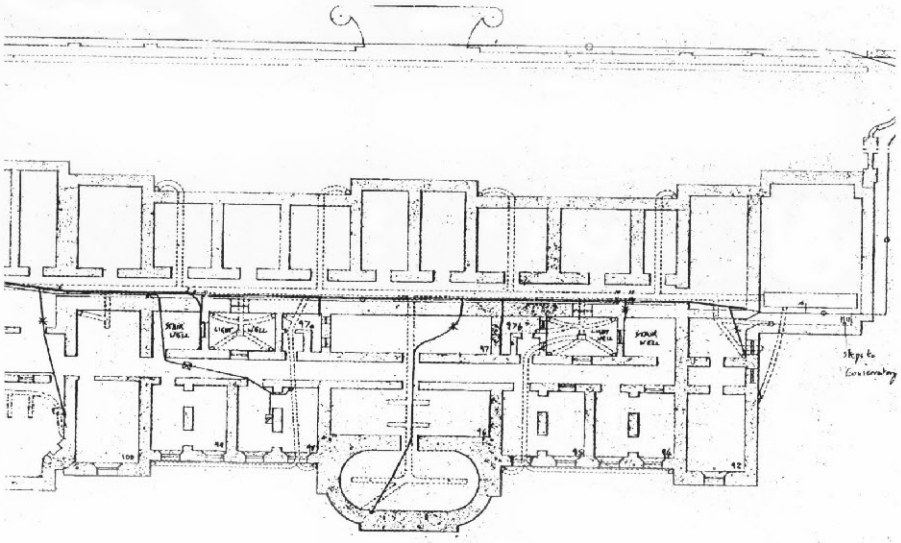


Fig 2. 1841

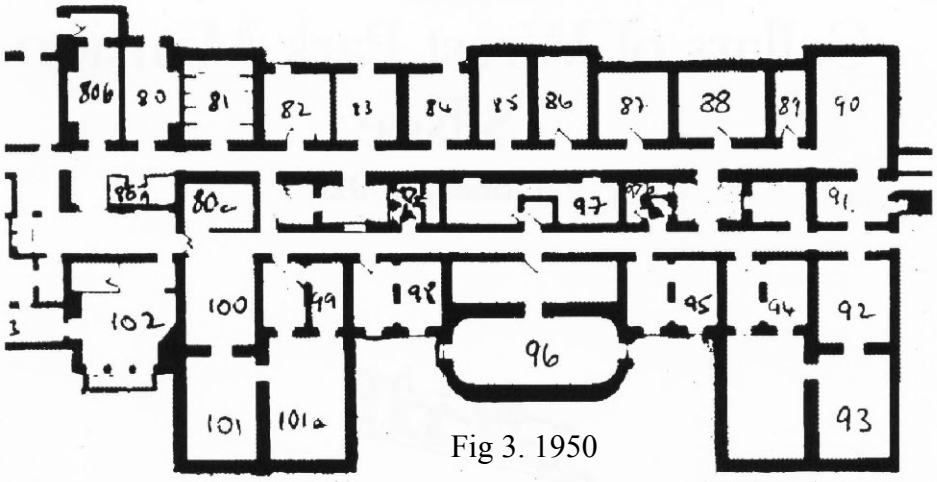


Fig 3. 1950

Cellars in the Basement of the Mansion at Wrest Park

Results of inspection and photographic survey 10th Jan 2002
by M J B Turner and K J Fadden,
Ampthill & District Archaeological & Local History Society

Introduction

In the course of preparing for a talk on the lesser-known side of stately homes, that is their construction, drainage, plumbing and heating, the opportunity was taken to investigate the cellars below the Mansion at Wrest Park. Many had recently been cleared out and thus provided us access to see their construction details. The report only encompasses the cellars below the main part of the Mansion, cellars 80c to 101, and the sub-terrace area.

Plans

Apart from recent plans prepared for the rewiring of the Mansion which are not strictly to scale as far as the cellars are concerned, there were three other sources. The Bedford Record Office holds what are presumed to be the Earl de Grey's original sketches for the house, drawn on paper watermarked 1832. The one of the cellars, Fig.1, contains some features which were clearly not incorporated in the final build but are generally very close to what is there today. The Record Office also holds the original drawing by James Clephan of the Pipes and Drains at Wrest, 1841. This drawing, Fig.2, also includes some anomalies when compared to the Earl de Grey's drawings and what exists today. The third set of plans, Fig.3, was obtained from the Silsoe Research Institute which show the basement as it was in about 1950 shortly after the Institute, then called the National Institute for Agricultural Engineering came to Silsoe. The cellars have been given numbers and these will be used for reference in this report.



Photo 1. Vault under terrace looking north



Photo 2. Terrace abutment

Terrace cellars

No plans exist for the sub terrace area as far as we are aware. There are only two usable cellars running east-west with brick floors used as rifle ranges in the 1950's. They are barrel vaulted and accessed from two doors at the eastern end. The adjoining walls have been broken through in places. The cellars are both damp. To the north of these are arched passageways built in brick, abutting the mansion foundation wall of sandstone. These passageways eventually lead to a series of barrel vaulted spaces running north-south along the whole of the rest of the terrace. Photo 1 shows the interior of one of these looking north. The ceiling height of these spaces gets lower and lower to the west until one has to squirm through access holes. This is strange because outside the terrace on the south side the ground has been levelled to produce the parterre. There does not appear to be any solid flooring in these areas, they mainly comprise earth and brick debris. The ceilings of all these cellars and vaults comprise roof tiles with nail holes visible fixed onto the vault proper but it was not possible in this brief inspection to determine what lay above the tiles. The walls were of brick.

It appears that the terrace was added to the mansion after the foundation walls of the latter were built. Photo 2 shows the tile vaulting of the terrace

butting up to the walls of the mansion and the downpipe from the terrace at the junction of cellars 81 and 82. The terrace appears to be substantially built and the supporting brickwork is generally in good condition. It is worth noting that the Earl de Grey wrote in *1846 "We are a little embarrassed as to the pavement, which is so much affected by the weather which makes the edge of one stone rise or fall from its neighbour as to prevent the wet running off clear and quick, and which I fear will compel me to take some future steps. Asphalt is of such an ugly vulgar colour that I am reluctant to adopt it, but we must see when we are driven to it."* The situation has hardly changed in 150 years!



Photo 3. Cellar 93

Mansion Cellars

The original cellars at either end of the north side, 92 and 100, appear to have been extended under the driveway at a later date. The original cellars built in 1834 have sandstone walls and brick, barrel vaulted ceilings. The extended cellars are a foot or so lower and have brick walls, floors and vaulted ceilings. Photo 3 shows the view from the extended cellar 93 back to the original. 92. They are very damp indeed with water lying over much of the floor. In the original part of these cellars the floor bricks are laid on edge, in the extensions they are laid flat. The access to each extension has been made under a window, Photo 4 and here the width of the foundation walls of the house can be observed. Inside the extension the top of the sandstone foundations of the house can be seen, Photo 5. Access to cellar 101a is via a doorway on the west side of the cellar 101. The extended cellar shown on the 1950 plan to the east of cellar 93 does not appear to have been built. There is no sign of a doorway from cellar 93 to it. It appears likely that the new cellar extensions and the water tanks for fire precautions under the driveway were installed some time after the house was built. None of them are shown on the Earl de Grey plan or the Clephan plan of 1841. It is thought that the cellar extensions were primarily fuel cellars for coal, or coke coming from the later gasworks on site. Fuel was needed in the mansion for the air-heating stove in cellar 97, the conservatory boiler and all the fireplaces in the house.

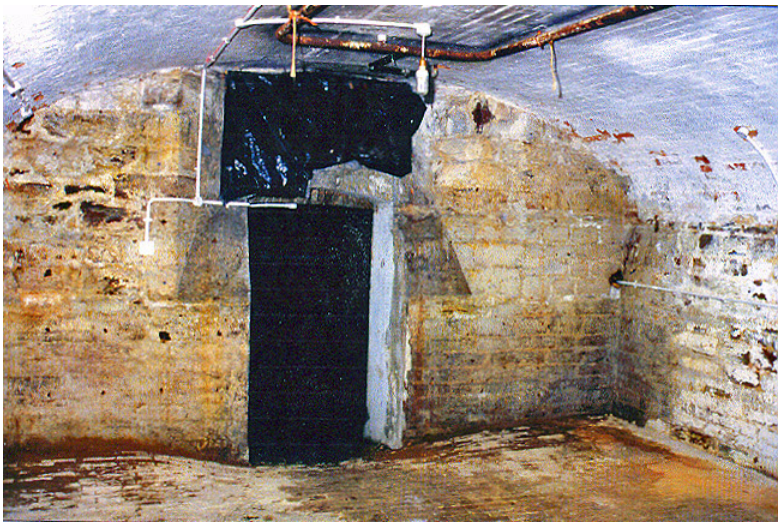


Photo 4. Cellar 92

There are narrow underground passages skirting the north side of the cellars to the east and centre of the north front of the Mansion. They are not shown on any plans. They are accessed externally and effectively provide damp-proofing for the cellars and rooms in those areas and access to the lanterns. They may also have been built at the time of the cellar extensions but this matter was not checked during this brief inspection.



Photo 5. Cellar 93 Foundations



Photo 6. Cellar 90

All the rest of the cellars had sandstone walls and brick vaulted ceilings some very wide, such as that in cellar 90,Photo 6, some narrow such as that in cellar 89, Photo 7, and some exhibiting a high degree of bricklaying skill. In particular the double cellar 96 has some beautiful brickwork in its ceiling as shown in Photo 8.

The cellars towards the east end have flagstone flooring, probably Yorkshire stone, and are those areas used for domestic purposes such as larders, stores, washrooms etc.

The cellars on the south side apart from 81 and 82, which have large flagstone floors and in-built stone shelving, appear to have screed floors and get damper towards the west end which coincides with the ground level under the terrace getting higher. It is likely that cellars 81 and 82 were wine cellars, the bottles being stacked on the concrete shelves. (Corfe Castle has a similar arrangement). Photo 9 shows the shelves in cellar 81.



Photo 7. Cellar 89

Cellar 95 contains a large brass stopcock fitted on an original lead pipe of about 3 inches diameter, Photo 10.

Cellar 98 which used to contain the discharge cock for the beer pipe has a similar wall fitting to cellar 95 but the pipe work has been removed.

Several of the cellars in the east end show signs of having had sinks in them.

Cellar 97 has a small entrance lobby with steps leading down to a solid fuel stove, Photo 11, which presumably heated a network of pipes in the larger cellar itself from where warm air could be vented up to the inner entrance hall above. It was not clear where the replacement air entered the "warm" room, or the combustion air entered the boiler area. The south wall of this cellar shows evidence of two blocked doorways leading into the south corridor. Only the 1950 plan shows them but they appear to have been an old feature. A more detailed study of this area will be reported later.

The tank under the Conservatory shown in the Clephan plan is still filled with water and the steps up into the conservatory are still there but the access itself has been blocked off. It is presumed that the conservatory boiler was actually in the conservatory but this not certain. In this brief inspection we did not see any sign of a flue or chimney in the west cellar area.



Photo 8. Cellar 96

Both the early plans show a solid wall between cellars 90 and 91 whereas the 1950 plan shows the existing doorway. There was evidently no damp course installed in the construction of the house and the cellars and passageways provide ample evaporative areas to prevent rising damp being a problem in the main house. In places damp penetration was evident at high levels in the cellar walls but this was primarily because of the external ground level. Rising damp given good evaporative conditions only rises about 700mm above the ground level. The majority of the cellars and passageways are well ventilated despite having fire doors and it is felt unlikely that damp from below will pose a problem to the main house above. The basement buildings on



Photo 9. Cellar 81

the east side of the Mansion abutting the Clocktower yard have suffered from damp and, as well illustrated in the eastern toilet corridor, the use of wall paints is best avoided in these areas. Any sealant on these walls will cut down the evaporation rate and drive the damp higher.

We would like to express our thanks to the Institute for allowing us access to the cellars, in particular to Alan Ely, Chris Slatcher and Roger Wakefield for searching out the keys for us and providing a copy of the 1841 Clephan plan and to James Collett-White for giving us assistance with the plans in the Bedford Record Office.

16th Jan 2002
updated 9th July2002

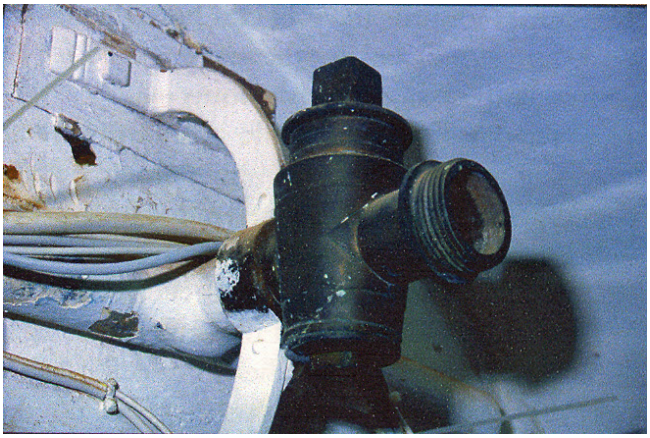


Photo 10.. Stopcock Cellar 95



Photo 11. Boiler

Addendum

Notes from Clephan drawing of Pipes and Drains at Wrest 1841

The hydraulic ram in the gardens supplied:

- West cistern in roof via west stairwell
- East cistern in roof via west stairwell
- Tank under conservatory via ballcock
- Tank near coach house
- Tank under Furniture Shop (Billiard Room) via bibcock
- There was a connection pipe along the roof from the east to west cistern.

The East Cistern supplied
The offices (old term for domestic areas such as kitchens, laundries etc)
East tier of water closets

The West Cistern supplied
Lord de Grey's water closet and Conservatory boiler
West tier of water closets

An engine and horse gear sucked water from a well in the Kitchen Yard (Clocktower Yard) and fed it to the rising main to the house.
The same engine and pump appears to have doubled as a fire pump sucking water from the tank under the furniture shop and feeding it to the fire pipes
Note the position of discharge cock No.6 is probably drawn in the wrong place and should be in the rising main.
The tank under the Furniture shop also supplied the brewhouse. The tank was filled primarily from local roofs ie B.17,18,19 etc and could be topped up from the ram

The East Stairwell contained the rising main and service

Two major storm drains leave the house on the south side, as far as can be ascertained both carrying storm and foul water.

Note the windows shown in the east wall of cellar 97, the most central cellar from where the mansion heating was provided, are incorrect. They are actually in the wall of the adjoining cellar to the east leading to the lightwell in a similar manner to those on the west side. Also the wall shown across the west end of the northern corridor does not appear on the Earl de Grey's original plan or the 1950 plan and may therefore be incorrect. It is somewhat surprising that this plan was drawn in 1841 some seven years after the building commenced and some two years after the building was occupied. The drains are usually the first things to be sorted out on a building site – perhaps a problem arose and no original drawings could be found.