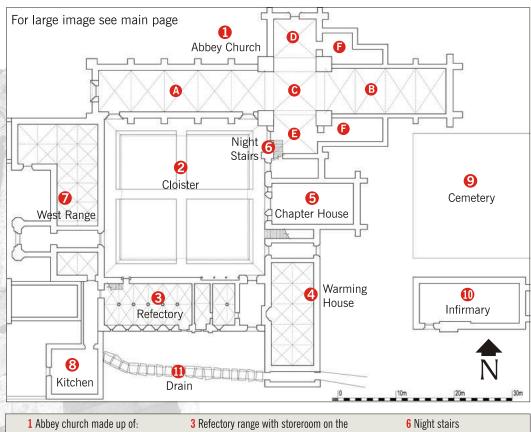
What did Tupholme Abbey look like?

This is what we think the abbey might have looked like. How do we know this when there is so little still to see at Tupholme today?





- A) Nave, B) Presbytery,
- C) Crossing (with tower over)
- D) North Transept
- E) South Transept
- F) Side Chapels
- 2 Cloister The central area with covered walkway around.
- **3** Refectory range with storeroom on the ground floor and the canons' dining (refectory) upstairs.
- 4 Warming house on the ground floor with the canons' sleeping accommodation (dormitory) and toilet (reredorter) upstairs.
- **5** Chapter House where the canons held their meetings to discuss the running of the abbey
- **7** West range including the Abbot's lodgings
- 8 Kitchen
- 9 Cemetery
- 10 Infirmary
- 11 Drain

What did Tupholme Abbey look like?

Because so little of Tupholme Abbey remains today it is not easy to tell what it would have looked like in the medieval period. To try to do this we have to collect information from lots of different sources and use them to build up a picture, rather like doing a jigsaw puzzle.

The sources we can use are:

- The remains of Tupholme Abbey
- Archaeological investigation
- Old drawings and documents etc
 Earthwork surveys
- Other abbey sites

- Aerial photographs
- Archaeological finds
- The loose abbey stone

But we have to remember that the picture we end up with may not be accurate because a lot of the pieces are missing and we have to try to fill in the gaps as best we can. We also have to remember that the abbey was in existence for around 370 years and the original buildings were probably altered and added to over that time. The reconstruction shows what Tupholme might have looked like in about 1390.

The edges of the jigsaw puzzle: How far did Tupholme Abbey extend?

Although Tupholme Abbey owned quite a lot of land, the abbey itself would have been contained within an enclosed area called a precinct. The abbey field today is roughly rectangular in shape. The modern boundaries of the road to the north, and the dyke along the south of the site are thought to be about where the north and south edges of the abbey precinct were. (The southern boundary may not have been as straight as the modern dyke).

On the west side, however, we know that the precinct went further than the present field boundary. By looking at aerial photographs we can tell that it extended into the arable field to the west. As we can see, these two photographs were taken at different times. In one of the photographs the field has been ploughed and in the other it has a crop growing in it. The edge of the precinct shows up as different colours in the ploughed soil, and also in the growing crops.



The abbey field today



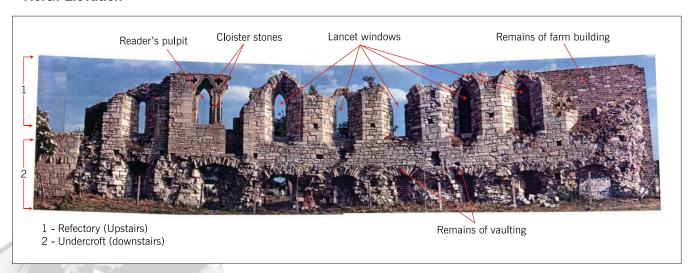


The east side of the precinct is more difficult to pinpoint. We are almost certain that it extended further than it does today, but there are no clear features surviving to show exactly where the boundary was. The field next to the abbey site has been ploughed regularly over a long period and this will have destroyed a lot of evidence that may have been there.

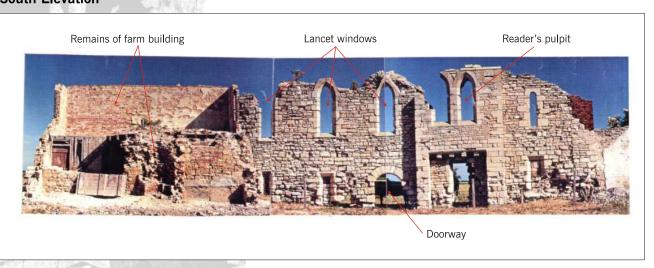
Starting to fill in the puzzle: How much of the abbey can we still see?

When we visit Tupholme today, the most obvious surviving part of the abbey is the wall that stands in the middle of the abbey field. This is the south wall of what was once the abbey's refectory range, where the canons ate their meals. Because it is still there and we can actually see it, it is a good place to start to fill in the jigsaw.

North Elevation



South Elevation



Why has this part of the abbey survived?

It is unlikely that the wall would still be here if it had not carried on being used after the abbey was dissolved in 1536. It first formed part of the Willoughby family's Tudor mansion, and then an ornamental ruin in the parkland surrounding the Vyner family's early 18^{th} century house. It finally became part of the 18^{th} and 19^{th} century farm buildings that were built on the site.

The wall gives a lot of information about what this part of the abbey was like. We can see that it is made of stone. The stone is Lincolnshire oolitic limestone. It probably came from quarries around Lincoln and was almost certainly transported to the site by boat. In medieval times this would have been much easier and cheaper than moving it by road, and we know that in the 13^{th} century Henry II gave permission for the abbey to build a canal linking it with the river Witham.

The wall survives almost to its original height. It shows that the building had two storeys, a storeroom on the ground floor with the refectory (sometimes called the **frater**) above it. The refectory was on the first floor because the canons connected their mealtimes with the Upper Room of Christ's Last Supper. The style of its architecture shows that it was built between the end of the 1100s (the very late 12th)

century) and about 1250 (the first half of the 13th century). At this time the Gothic style, which was characterised by pointed windows and doorways, was beginning to be used instead of the earlier round-arched Norman style. The pointed **lancet windows** to the upper floor are in this early Gothic style. We know that they probably had decorated glass in them because fragments of it were found when some archaeological excavation was carried out near the wall.



Decorated glass fragments

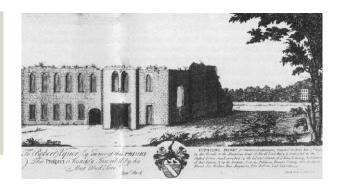
A reader's pulpit is built into the wall at the upper level. Lessons were read to the canons from here while they ate their meals. The pulpit itself is part of the original building but it is quite possible that the decorative pair of columns and the carved stones above them were built into it when the Vyners demolished most of the remaining buildings and laid out their parkland in the early 18th century. It is thought that they used these pieces of worked stone from the original abbey to make their 'ruin' more attractive. The pieces they chose are believed to have been part of the abbey cloister.



The downstairs storeroom of the range (the undercroft) had a vaulted ceiling. A vaulted ceiling is one that is supported on arches. The style of vaulting used at Tupholme is called quadripartite rib vaulting. This computergenerated picture shows how the undercroft would have been divided into sections (bays) with each bay having pairs of diagonal arches (ribs) supported by columns. The ribs divided each bay into four sections. We know this because the remains of the vaulting can still be

seen on the north side of the wall, and Samuel Buck's 1726 engraving of the abbey gives a glimpse of one of the columns through the south door of the range.

Samuel Buck's engraving was made at a time when it was very fashionable for wealthy people to have an eye-catching ruin like this in their grounds. Buck made this picture for the owners, the Vyner family, and in order to make the ruin look as attractive as possible, he may not have depicted it completely accurately.

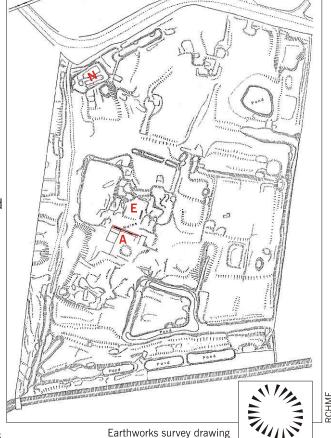


How do we fill in the rest of the puzzle?

The refectory wall at Tupholme is only one small part of the abbey buildings, and there is nothing else remaining above ground to show what else was there. If we look around the field, though, we can see that it is covered by a lot of humps and hollows. These are **earthworks** and they are the remains of buildings and other features that have been present on the site in the past. The problem with them is that they are the remains not just of the abbey itself but also of all the things that have happened on the site since it was dissolved in 1536.

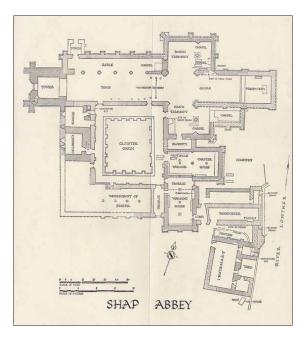
In 1989 an earthwork survey was carried out that measured the relative heights and exact positions of the humps and hollows across the site. The measurements taken were used to produce a plan of the earthworks on the site. The humps and hollows are shown by shading made up of a series of marks called hachures. The hachures show which way the ground slopes, with their wide ends being the top of the slope and their pointed ends being the bottom of the slope.

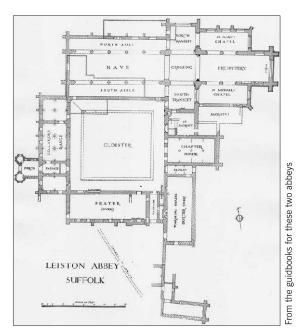
When the results of the earthworks survey were studied it became clear that most of the humps and hollows are the remains of the Willoughby family's Tudor mansion and its formal gardens, which came after the Reformation, and that there is not very much evidence of the abbey buildings left. The earthworks include a collection of ponds in the south-east part of the abbey site. The area to the south of them is called the Abandoned Garden. We are not sure whether these ponds date from the medieval period or whether they were created as part of the Tudor garden. It could be that the Willoughbys adapted some monastic fishponds and made them part of their garden.



One feature that can be picked out quite clearly, however, is a rectangular-shaped sunken area ('E' on the earthwork survey plan) just to the north of the refectory wall ('A'). It measures 18m x 13m.

If we look at the layouts of other monastic houses we can see that they tended to follow a standard pattern with the buildings around a central cloister.





They were nearly always arranged with their churches to the north of the cloister and their refectories to the south of it. Because of this pattern, and because we know that what still stands at Tupholme is the south wall of the refectory, we can be fairly sure that the square-shaped sunken area is the remains of the abbey cloister. Its outline may have survived because it was retained as part of the Willoughbys' mansion.

If we now work on the likelihood that the layout of the buildings at Tupholme was similar to the other sites that we have looked at, piecing the abbey jigsaw together becomes easier. We can arrange what we believe should be there around this central cloister to produce a possible floor plan for Tupholme. The size of the existing wall and the cloister even allows us to make an estimate of the likely scale of the abbey buildings.

Although nothing remains of the church today, we can locate it on the north side of the cloister and we can put in a warming house, chapter house and sacristy with the canons' dormitory and toilet (reredorter) above them on the east side. This range would have included the night staircase that gave the canons access to the church from the communal dormitory for their 2.00am prayers. The main entrance into the abbey and accommodation for the abbot and guests can be put in on the west side. We already have the refectory to the south.

Filling in the detail

Now that we have built up a layout for Tupholme Abbey, we have to try to decide what the buildings might have looked like.

The cloister formed an open space or garden in the middle of the abbey buildings. It would have had a roofed walkway around its perimeter. If we are right in thinking that the pieces of stone that are now in the reader's pulpit came from the original cloister, we can put them back into position to help us reconstruct the cloister. But reconstructing the other abbey buildings is not quite as straightforward. We have to look for other clues to help us.



Computer-generated image of the cloister

Because the refectory wall is made of stone we can be fairly certain that most of the other main abbey



buildings would have been as well. We know from looking at the refectory wall that the stone was quarried locally. When the abbey was gradually demolished after the Reformation, some of the stone was reused and has remained on the site until today. Many of the remaining stones were pieces that had been carved to build particular features of the abbey. A project was recently carried out to gather together all the loose stones at Tupholme, and to record the information that could be discovered from them.

Studying the abbey stones

Nearly all the stones studied were of the same local oolitic limestone that was used to build the refectory wall, but there were two very large carved stones that were made of a different type of limestone called Lower Magnesian Limestone that is found in Yorkshire.



Capital stone

We can tell from the shape of these two stones that they are **capitals.** A capital is a stone that sits on top of a column and supports an arch above it. The stones are of very good quality and would have been very expensive. Because of this we think that they were used in the most important abbey building, which was, of course, the church. We know from looking at the remains of other Premonstratensian abbey churches that they tended to be very similar in their design and layout and that they were usually cross-shaped with a tower over the crossing. Egglestone Abbey in County Durham is thought to be a typical example. Many of them did not have rows of arches (**arcades**) and aisles at the sides of their naves, and if this was the case at Tupholme, the big capital stones probably supported the arches under the tower.

The church would certainly have had a **presbytery** at its east end, north and south **transepts** in the arms of the cross, and small side chapels to the east of the transepts. We can put in the details of the outside of the church and also of the east and west ranges using what we know about the architectural style of the period. Looking at other Premonstratensian abbeys where there are more standing remains than at Tupholme helps us to do this more accurately.

Finishing off the puzzle

Now that we have a reconstruction of the main abbey buildings, we can add in the other things that we know it would have needed in order to function. There would have been a kitchen and the most convenient place for this would be near to the refectory. Monasteries and abbeys had a water supply and drainage. We do not know exactly where Tupholme's was located, but in our reconstruction it is logical to have it across the southern edge of the abbey buildings where it can most easily serve the kitchen and the toilets. A bakehouse and brewery would have been needed and we know from other abbeys that these were probably



William Stukeley's drawing of the gatehouse

situated along the western side near the abbot's lodgings. We can also put in an infirmary for the sick and elderly canons and a cemetery, because we know that abbeys had these too. There would also have been kitchen gardens within the precinct.

The last thing we have to put into the picture is a gatehouse for letting people in to and out of the abbey. We actually know what this looked like because William Stukeley made a drawing of it when it was still standing, and we can be fairly certain that it was located close to the present entrance to the site. In 2003 a **geophysical survey** of the earthworks here showed that there were buried building remains ('N' on the earthworks survey plan).

| Glossary |
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| |

Precinct The enclosed area containing the abbey buildings

Refectory The abbey's dining room

Frater Another word for the refectory

Lancet window A narrow pointed window

Undercroft A vaulted room below a main upper room

Rib vaulting A series of intersecting arches supporting a roof

Earthworks The humps and hollows that show where buildings and other features have been

Hachures Shading made up of small lines to show a hill or a slope on a map

Cloister The central space and the covered walkway surrounding it

that the abbey buildings are grouped around.

Reredorter The canons' toilet

Capital The carved stone that sits on the top of a column

Arcade A row of arches supported by columns

Presbytery The part of the church at the east end where the altar is placed

Geophysical Survey Techniques that use scientific equipment to identify buried archaeology





