

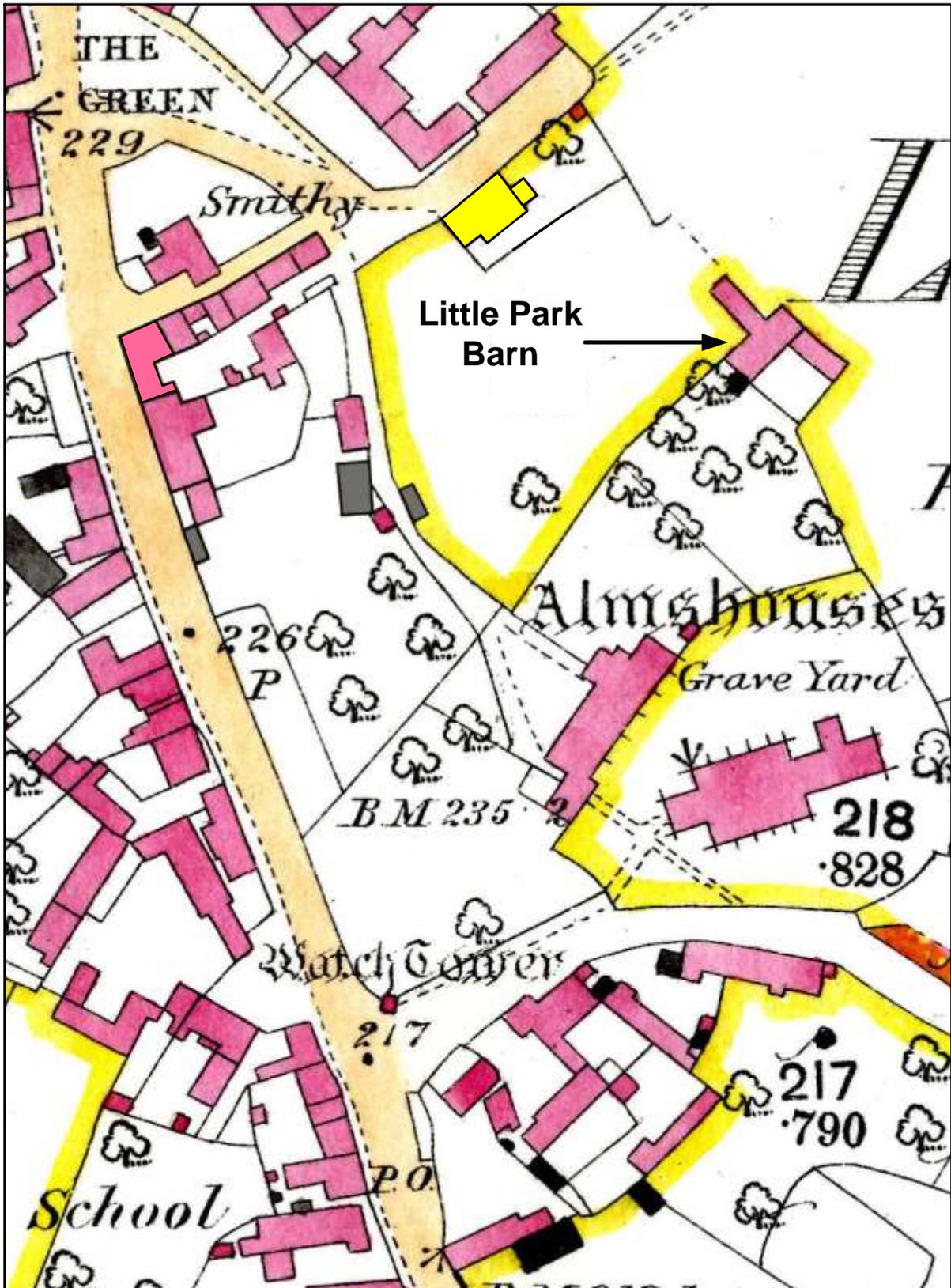
**Lyddington Manor History Society
Historic Building Survey**

**Little Park Barn
Lyddington, Rutland**



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Location Map – Little Park Barn, Lyddington
(OS First Edition 1886)

HISTORIC BUILDING SURVEY REPORT

LITTLE PARK BARN, LYDDINGTON

Summary

Tree-ring dating has shown that this stone barn was constructed in 1726-51, probably for the use of a local tenant farmer, Thomas Pretty, who leased it from the Burghley Estate. The barn is well built with four bays and a roof of Collyweston slate. A lease of 1757 refers to it as the 'slate barn', indicating that it was always roofed in Collyweston, not thatched like most farm buildings of the period.

The principal interest of the barn, however, lies in the timbers of its roof structure, re-used from a much earlier building. These timbers originally formed a major aisled barn, of which several aisle posts, as well as various rafters, survive. Tree-ring dating indicates that this building was constructed in 1347-72, presumably as part of the palace of the Bishops of Lincoln. The original barn would have been a very large, multi-bay structure, no doubt forming the principal farm building of the palace precinct. It is unclear whether the original walls were built of stone (like most local medieval buildings) or of timber. Although a number of barns of this type and date survive nationally, no other examples are known in Rutland or Leicestershire.

Site

OS Ref: SP870880

Orientation: For report purposes, the main front is taken as facing S.

The building is described as 'Barn circa 50m to NE of the Bede House' in the listing description, but it is referred to as 'Little Park Barn' in this report. The barn now stands on the edge of the village, at the W boundary of a large grass field, formerly the 'Little Park', with fishponds to the E, beside the stream. The barn's W gable and much of its N side are set against what is now a separate property, the gardens to the rear of 3 The Green.

Materials

Coursed ironstone, with roof of Collyweston slates.

External features

The S front has walling of well squared and coursed ironstone, with a few blocks of limestone. Good quality chamfered plinth, which returns onto the W gable, but not to the E gable. Large full-height barn door opening with good quality quoins, leading into bay 2 ie offset from centre. The doorway lintel, of fairly thin timber, has circular drilled holes at each end to receive doors on harr-hung hinges. Small window opening to bay 4, with timber lintel and plain rubble jambs.

The E gable has walling as to the S front, but with no plinth. Gable parapet with plain ogee corbels and kneelers, plain apex to coping. The lack of deep upstand to the gable parapet indicates that the roof was always of Collyweston, not thatch. Tall 1st floor level doorway with timber lintel and good quoins including four of limestone.

The masonry coursing both externally and internally indicates that this was an original opening – a loading door, before the insertion of the first floor. C19/20 softwood door and frame. At the apex is a slit opening, with unusual arched stone lintel, formed of a single very long block of stone.

On the N side a long low range abuts, with a long blank stone wall to E, timber boarding to N gable and W side, and metal sheet roofing. E of this is a blocked doorway, more readily visible inside than externally. W of the attached range is a blocked pedestrian size doorway, opposite the main barn S door. At the W end there is an odd large timber lintel at high level, and some evidence of a small rectangular opening near the corner – but no evidence of jambs of a large opening under the lintel (and no evidence of an opening inside). Small square-cut rubble plinth, projecting only c.15mm.

The W gable has a vent slit at ground level and another at the apex. Like that to the E gable, the apex opening is of unusual design, with a deep limestone lintel with unusual ogee arched head. Gable parapet and ogee corbels as to N gable, but here there is a good quality chamfered plinth, like the S front.

Internal features

Ground and first floor

The barn has an inserted brick crosswall on the line of truss T2, near the E jamb of the main door. The brickwork has a cant angle to meet the barn doorway, which enables it to follow the line of truss T2 at upper level, the brickwork forming infill to the truss. Bricks of c.1850-90 date, 225mm long x 70mm high. Ground floor doorway opening with pine lintel but no door; 1st floor boarded door and frame of late C19 date, with the tie-beam of truss T2 serving as the lintel. The N door is blocked with bricks of similar type, with C20 bricks for some repairs to the jambs. The walls have several original timber plates built into them, including two butted timbers running right across the W gable at eaves level. The ground floor to the W retains a few large, irregular blocks of early thick stone paving.

The brick crosswall supports a long spine beam, running W-E from the E gable, but offset to the N, to bear onto the brick partition N of its doorway. The beam is of old pine and has chamfers with stops near the centre, but none to the W end – so is clearly re-used in this context. It carries fairly modern softwood joists and a boarded 1st floor. Much of the N wall retains early thin plaster, with some compass-drawn circular designs. On the N wall of bay 3 ground floor is an unusually elaborate one, with multiple arcs – many more than the normal 6-petal daisy wheel. The plaster post-dates the blocking of the NE doorway, as it runs over this, but is earlier than the brick crosswall and inserted floor, as it is disrupted by this. It is interesting to note that plaster was only applied to the N wall – the other three walls are pointed in lime mortar, but never received any plaster finish.

Roof structure

The roof, all of oak, has 3 trusses with tie-beams, principal rafters and tenoned collars. Tenoned purlins and heavy rafters (mostly in one length, running from eaves to ridge), now meeting at a ridge board – but there would have been no ridge originally. Much of the roof timber is re-used, as detailed below. But some of the timbers (some principals, purlins and rafters) are probably new-cut for the C18 roof, often rather crudely, and of cleaner timber. A number of chisel-cut carpenter's marks are visible, on both new and re-used timber, clearly related to the construction of the C18 roof: T1 N principal/tie joint is marked 'I'; bay 1 N purlin/T1 principal joint is marked 'II', with 'III' to bay 2 S purlin and 'IIII' to bay 2 N purlin. T2 N principal/tie has a square-cut 'X'; T2/bay 3 N purlin has a shallow cut 'V', with an 'I' alongside; T2/bay 3 S purlin has 'X' again. On T3 principal W face a knife-cut 'W' is visible, with an 'X' type 'face' mark further up. There are probably other marks to be found. Although only part of the sequence follows a clear logic, the pattern is enough to confirm that the roof was probably framed in a single operation, using both new and old timber.

By far the most interesting feature of the barn is the presence of re-used timber, in particular the three tie-beams. Detailed examination reveals a clear and regular pattern to all three of these, and shows that they were formerly large aisle posts in a timber-framed roof structure, with large raking braces. Truss T3 to the E has the most accessible beam, and has been examined in detail. The tie-beam to T2 is partly embedded in the brick partition wall, but the long mortices can still be inspected. Truss T1 is set at high level, so has not been measured at this time, though the mortices are clearly visible from below. Each beam has three long, pegged mortices (c750mm long x c75mm wide – dimensions vary somewhat), set rather to one side of the tie-beam centre point. One end of the mortices is splayed, showing that it held a raking brace. On the fourth side, each beam (c290mm wide x 310mm deep) has evidence for two mortices, one straight-sided (c250mm x 85mm) for a horizontal timber, the other (c.290mm x 85mm) splayed to one side, indicating a raking brace running towards the horizontal timber. At least three of the four lengths of heavy wall-plate to the barn have the same mortice features, the original beams having been cut in half to form wall plates of c.300mm x 150mm in section. With the three wall-plates, there is evidence for five original beams.

Another particularly important feature survives on the E face near the N end of tie-beam T2. This is the empty matrix of a notch-lapped joint, with some slightly curving sides and a single peg-hole. Such joints typically date from the 13th or earlier 14th century. No similar joint matrix can be seen on T3, but the relevant location is probably now hidden by the wall-plate or principal rafter.

The tie-beam of T3 has multiple burn marks near its S end to the W face, and there are similar burn marks near the E end of the N wall-plate of bays 3-4 and to the W end of the N wall-plate of bays 1-2. Recent study has proved that burn marks are made by deliberate ritual marking, and are not accidental. The burn marks provide several vital clues. First, the marks (of normal bulb-shape) show that the beams were upright posts, with the burn marks at the lower end. The location of the marks, at from c600mm to 1500mm from the end of beam T2, suggests that it was previously around 300mm longer, as burn marks are typically set at between c900mm and 1800mm from

the floor (at convenient working height when standing). The burn marks to all three beams are placed on the face opposite to the one with smaller mortices, with no marks noted to other faces. This face was clearly internal and readily accessible, as burn marks are always located inside a building, not on the outside face. The marks to T2 show that they were applied after this lower face of the post had been subject to some erosion, as they are applied over an irregular surface – unlike the marks to the NE wall-plate. The post of T2 was probably therefore in a location where it received considerable wear and tear – perhaps near a main doorway. The marks on both of the wall-plates appear to have been made prior to the timbers being cut in half, as the marks run over the edge of the timber. Finally, the burn marks (whose date range appears typically to be late C16 to mid C18) were probably applied over a period of some years to an older structure. So it seems that this earlier structure was still standing in the 17th century and was later dismantled, with the timbers re-used in the current building.

Besides the tie-beams and wall-plates, there is much other re-used timber in the roof. This includes some of the principal rafters (with peg-holes or joint matrices), at least one collar and many of the rafters. Two rafters (Bay 3 N, rafter 6 from W; Bay 4 N, rafter 4 from W) have features of special importance. There is a plain dovetail lap joint matrix near the current foot of each rafter, which has the normal face peg-hole, but also has a peg driven vertically upwards, which would have passed through the collar and into the rafter. The end of the vertical peg, embedded (not passing through) the rafter is still in situ to the rafter of bay 3. The upper section of both rafters also has an empty matrix for a dovetail-lapped joint, but this upper collar had only one face peg. The double-pegged lap joint is another early feature, found in other buildings in the area of 13-14th century date. Its presence provides not only additional evidence of early date, but also suggests that considerable parts of the early structure (not just the tie-beams) survive in the current barn. Unfortunately, the remaining re-used timbers do not have clear features to identify their original use. But the N principal rafter of T3 does have a cut-down mortice for a raking brace, and beside it on the W face is a light, long scribed carpenter's mark: 'III'. This could well be a carpenter's mark from the original structure.

A convincing reconstruction of the original structure can be assembled from this evidence. The beams were originally aisle posts. A large brace rose to a tie-beam, and two other braces rose to the arcade plates. The lower horizontal mortice was for a horizontal aisle tie, extending out to the aisle wall-plate. A brace above angled down from the post to meet the aisle tie. The angle of the braces can be measured from the splayed mortices. The notch-lap joint housed a passing brace, which rose from near the head of the post and crossed over the tie-beam. The angle of the passing brace would have followed the roof pitch, and was similar (though not necessarily identical) to the lower raking line of the joint matrix. The passing braces would probably have crossed over each other near the apex, in the usual scissors pattern. The foot of the post can be estimated from the location of the burn marks, as noted above. The top of the post can be judged from the length of the surviving timbers (max.5.9m to the NW wall-plate) and the space needed above the passing brace (which could be more than drawn, though could hardly be less). A roof pitch of 50-55° is indicated by the angle of the dovetail joint across the rafter (for a horizontal collar) – which would be typical for any traditional building in the area. There were probably two horizontal collars providing extra bracing to the rafters, though the location of these is unclear. The aisle

rafters may also have required an extra bracing strut. There is no evidence for the details of the tie-beam, arcade plate or the jointing at the head of the aisle posts (including any jowls). The span of the barn can only be guessed at from the likely arrangement of the large braces from post to tie-beam. It may have been wider than the 6m span from aisle post to aisle post, as drawn. All the observed joints fit with this reconstruction as an aisled structure, and no other configuration seems possible.

Site history

The 1804 enclosure map shows the building as a single range set at the western edge of a large field (plot 13) and against the east edge of another field (plot 12). The plot 13 field, known as the 'Little Park', was over 9 acres in area. The plot 12 field was just over one acre. Both fields were held directly by the Marquis of Exeter, along with the nearby Bede House. The Marquis of Exeter had extensive other land holdings in the parish, with approaching 300 acres, as well as the whole of the Park (over 200 acres).

A document recording a lease of the barn in 1757 survives in the Burghley Estate archives (Ex D29/19). Samuel Pretty took on a lease from the Estate for 'half of the slate barn', together with over 100 acres of farm land. The barn was previously leased by his brother, Joseph Pretty, who retained the other half of the barn. James was 'to pay to the said Joseph Pretty fifteen shillings a year for the half of the barn as aforesaid'. The whole property was 'lately in the tenure of Mr Thos Pretty deceased', presumably the father of Samuel and Joseph. As the barn was built in 1726-51, it may well have been constructed for the use of Thomas Pretty.

On the 1848 title map the barn is shown with an attached range to the N (much as existing) and another to the S (now lost). The 1st edition OS map of 1886 shows the barn still with attached ranges to N and S, and a further small extension to the W gable. On the S side of the barn is an enclosed yard, with the attached range along its E side. The 2nd edition OS map of 1904 shows the same buildings as in 1886. The yard to the S was until recent times largely covered by a 20th century Dutch barn, with a curved roof of corrugated iron.

Tree-ring dating

Tree-ring dating was carried out by Robert Howard of Nottingham Tree-Ring Dating Laboratory. Two samples, from the collar of truss T3 and a common rafter, gave a felling date of 1347-72. Another common rafter (of different type, not re-used timber) gave a felling date of 1726-51. A number of other timbers were sampled, but none produced a date. The earlier date clearly represents the construction of the original aisled barn, with the later date being the 18th century rebuilding.

Date and development

The large re-used posts and other timbers clearly came from a major building of aisled form, dating from 1347-72. It seems unlikely that such timbers could have come from the great hall of the Bishop's Palace, as this was lost around 1550-1600, well before the current barn was constructed. The surviving aisle posts are also much too plain to have been good enough for the bishop's hall. Paul and Charmian Woodfield

concluded from the excavations of the 1970s that the bishop's hall was built in the early 14th century, replacing an earlier, smaller hall. It therefore seems likely that the posts come from a large aisled barn, which no doubt served the Bishop's Palace establishment.

This original barn was an impressive structure, of considerable size for its date. The height to the underside of the arcade plates must have been at least 6.4m, and may have been more. It seems likely that the span between the aisle posts was 6m or more, giving an overall width externally, including the aisles, of at least 12.5m. There is evidence for at least five aisle posts, all of which seem to have been internal (not end gable) trusses, with 3-way bracing. This would give a building of at least 4 bays. If the bay spacing was (as is typical) around 4.5m, a 4-bay building would have a footprint of 12.5m x 18m. Large barns of this type were typically much longer than this in relation to their span, so it is more likely that the barn had at least 6 or 8 bays, quite possibly more. If the barn had 8 bays, the overall footprint would have been in the order of 12.5m x 36m – a very large structure indeed. For comparison, the early 14th century hall postulated by the Woodfields had an external footprint (with thick stone walls) of c15m x 18m. Such large, high-status barns often had two doorways in the front wall, rather than only one. It would have been the dominant feature in the farmyard of the bishop's demesne farm. It seems likely that it originally stood near its current location, to the rear E of the main palace complex, and perhaps bordering the Little Park. The barn would have been the principal crop storage structure for the demesne estate, which extended to over 600 acres (Thornton, 2009, p.47).

One element of the original barn design is unexpected. In early roof structures of this type, timbers were usually of fairly square dimensions, and straight. The wide, thin section of the braces (c450mm x 75mm) to the original barn is unusual for such a structure. Such wide, thin timbers also imply that the braces were curved, not straight.

There is no evidence for the wall construction of the original barn, so it is unclear whether the external walls were of stone (as is found in other high-status buildings of this date in the area) or of timber. Nor is there any indication as to whether the ends had straight gables or hipped roofs. No other medieval aisled barns are known in the area, though there is fragmentary evidence for a few aisled halls. The only surviving medieval aisled barn in Leicestershire or Rutland is at New House Grange, far away near the Warwickshire border, a grange of Merevale Abbey. It dates from 1506 (tree-ring date, *Vernacular Architecture* 34) with 14 bays and timber-framed walls. It has a footprint of 11.3m x 43.6m, with a height to the underside of the arcade plate of c6.5m. The closest example of an aisled barn yet identified was one at Peterborough, demolished many years ago.

The medieval barn survived the eclipse of the bishops, though it may have been used less intensively in the post-medieval period, when the extent of the demesne lands which it served, held by the Cecils of Burghley, was reduced. The barn may have been reduced in size during this period, though substantial sections of it were retained. The extensive burn marks were probably applied to the aisle posts during the course of the 17th century. By the 18th century, the huge medieval barn must have been far too large for the estate requirements, and it had no doubt become a maintenance liability. The old barn was taken down, and some of its timbers re-used in its

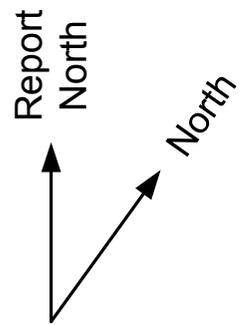
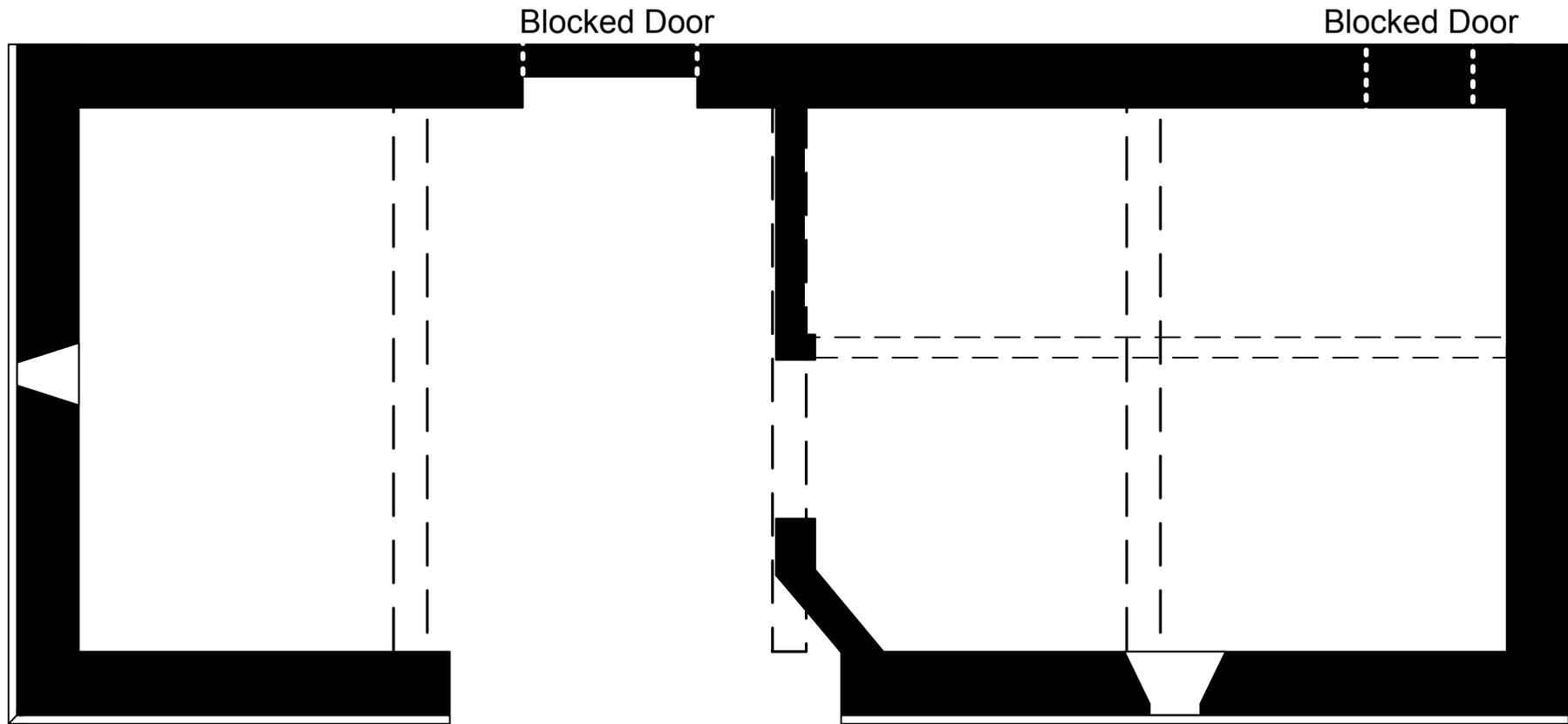
replacement building of 1726-51. It may have been built for the use of Thomas Pretty, a substantial Lyddington farmer, and was certainly in use by the Pretty family in the 1750s. It is likely that the dismantling and re-erection were carried out as a single operation, as a large number of re-used timbers survive. There would also have been pressure to ensure the new barn was ready to receive the next season's crops or hay. When the barn at Lyddington's Prebendal Farm was rebuilt, a building agreement made in November 1738 stated that the existing 'Tythe barn at Liddington' was to be pulled down, and that its replacement was to be completed before next season's harvest, so that John Larratt 'may inbarn his corn therein.'

Although much smaller than the original structure, the new barn was well-built, with good quality masonry and a Collyweston slate roof. The two arched slit openings to the gable apices add an unusual level of sophistication for a farm building. It had the typical large double front doors, with a single door in the rear wall opposite, to create a threshing floor. The original additional doorway to the rear NE corner is an unusual feature, suggesting that the two bays to the E of the main doors were not only used for corn storage. There was also a higher level loading door in the E gable. The E part of the barn was also quite well lit by its front window, instead of having only the usual ventilation slits. The NE door was however blocked up before the end of the 18th century, with thin lime plaster applied internally to the north wall. Daisy wheel patterns were subsequently scribed into the plaster.

It is interesting to note that the barn has a chamfered plinth only on the S front and W gable, demonstrating that these were the two most visible sides. The new barn clearly still faced towards the Bede House, and no doubt was approached from the W, not via the main eastern field in which it now sits.

By 1848, the two low ranges had been added to N and S, probably associated with use by animals. In the later half of the 19th century, the brick cross wall was inserted, together with a first floor. The ground floor may now have been used to house animals, with hay storage above. In recent years, the barn has stood empty and disused, but its condition has been secured by the replacement of the Collyweston roof.

Nick Hill
Rose Cottage, Bringhurst
August 2015

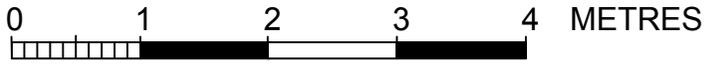


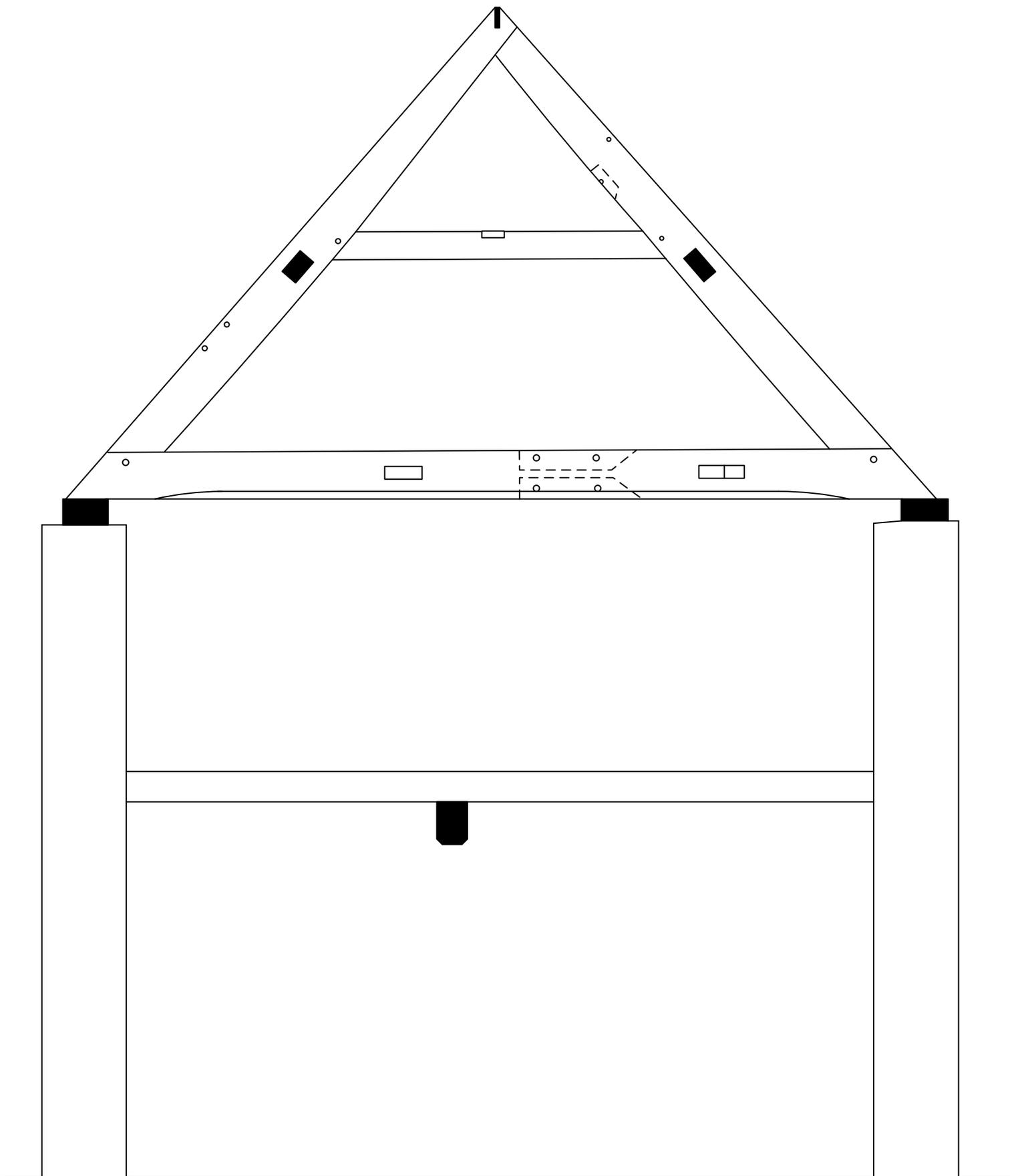
T1

T2

T3

LITTLE PARK BARN, LYDDINGTON

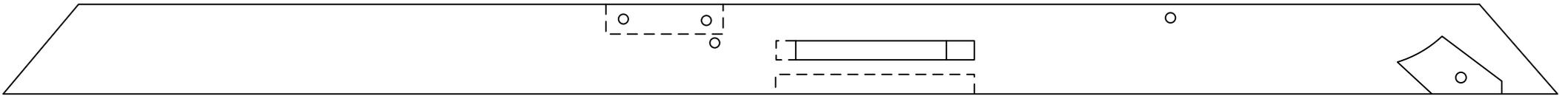




SECTION – TRUSS T3 EAST FACE

LITTLE PARK BARN, LYDDINGTON



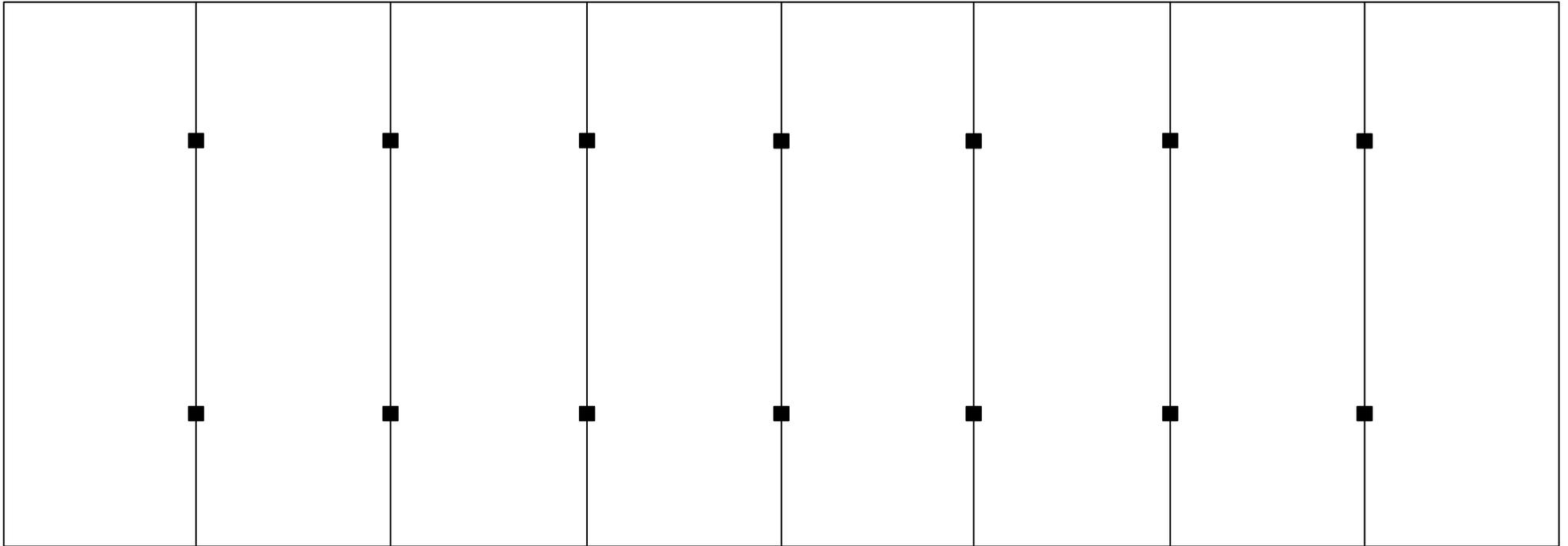


TIEBEAM – TRUSS T2 EAST FACE

LITTLE PARK BARN, LYDDINGTON

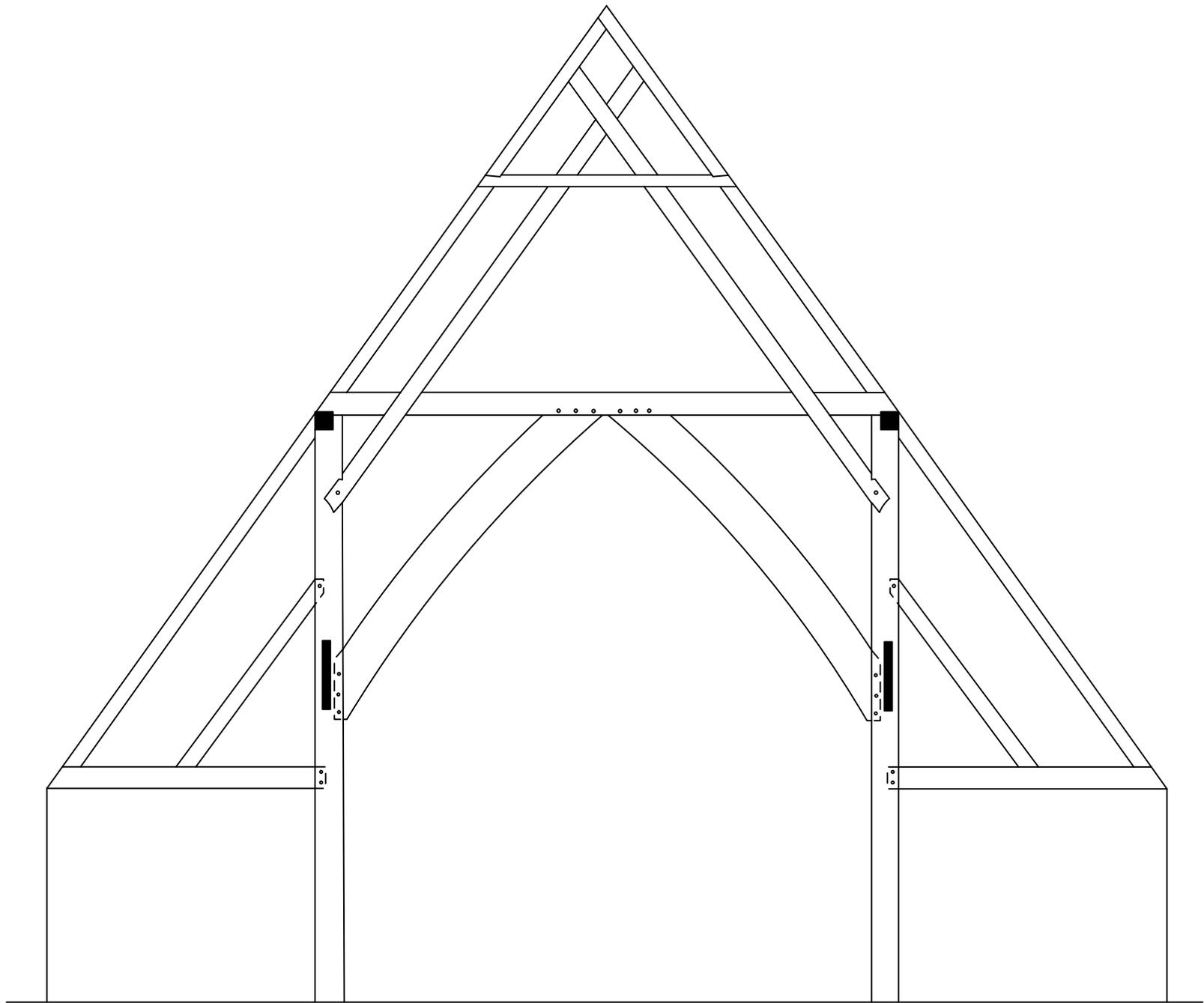


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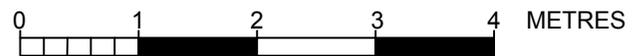


LITTLE PARK BARN – POSSIBLE PLAN OF ORIGINAL BARN

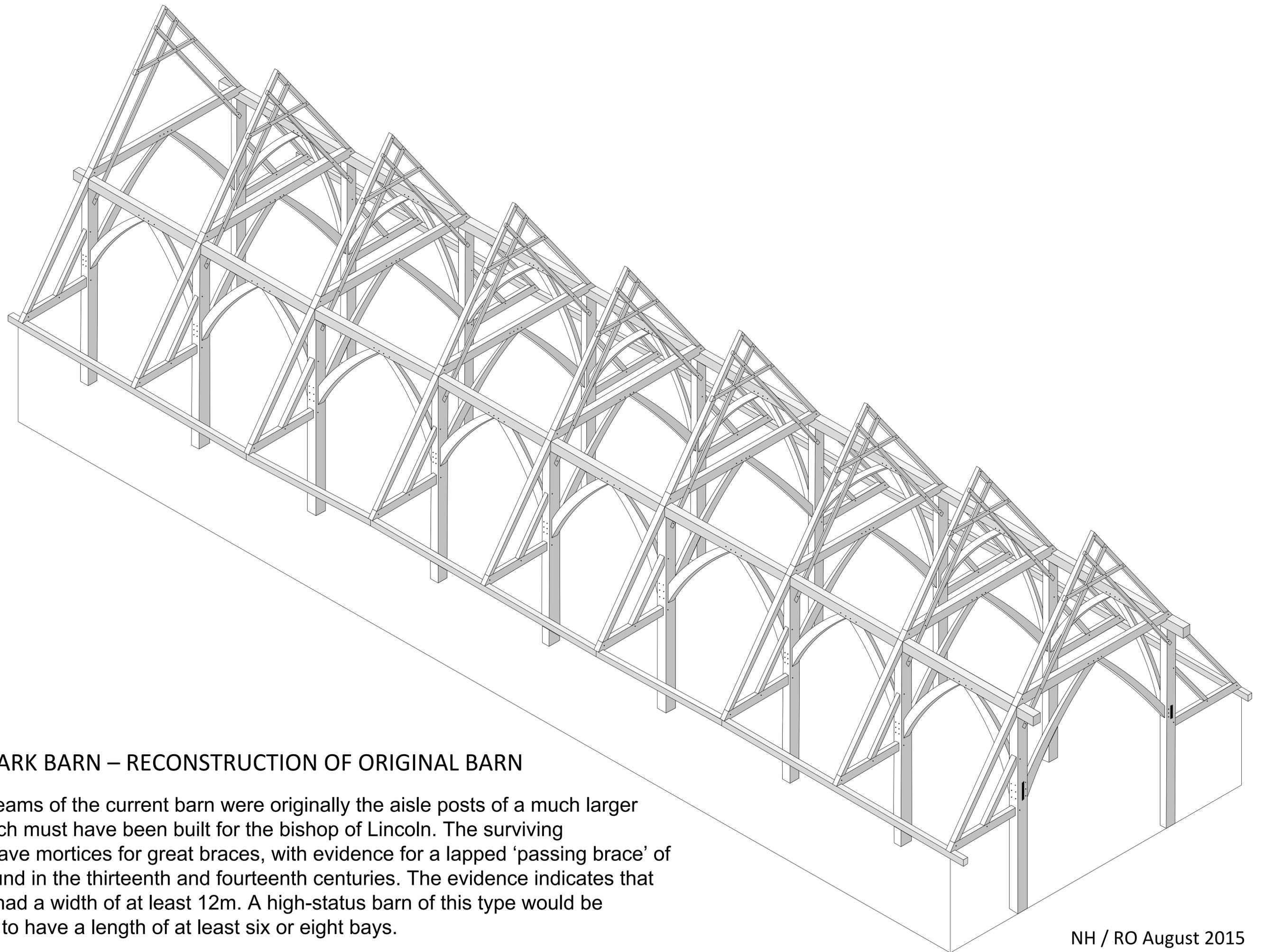




LITTLE PARK BARN – RECONSTRUCTION OF ORIGINAL BARN



NH / RO August 2015



LITTLE PARK BARN – RECONSTRUCTION OF ORIGINAL BARN

The tie-beams of the current barn were originally the aisle posts of a much larger barn, which must have been built for the bishop of Lincoln. The surviving timbers have mortices for great braces, with evidence for a lapped 'passing brace' of a type found in the thirteenth and fourteenth centuries. The evidence indicates that the barn had a width of at least 12m. A high-status barn of this type would be expected to have a length of at least six or eight bays.



The south front



View from the north-east



The west end of the north wall



View from the south-west



East gable apex



West gable apex



The inserted brick cross wall



The blocked north door



View towards west gable



Daisy wheel pattern scribed on plaster wall to ground floor north-west



Truss T1 in the foreground, with T2 in brick cross-wall



Truss T3, east face



Multiple burn marks to south end of truss T3 tie-beam



Mortices to tie-beam of truss T3 – a former aisle post



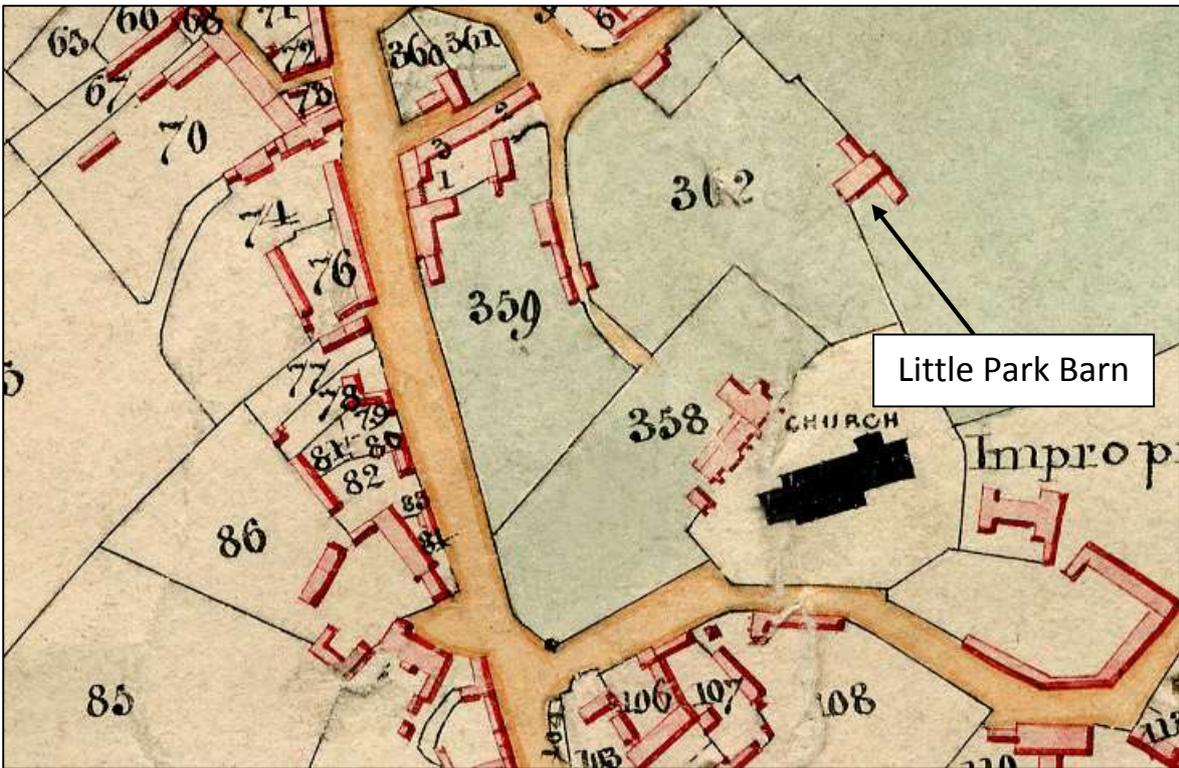
Notch lap joint matrix to north end of truss T2



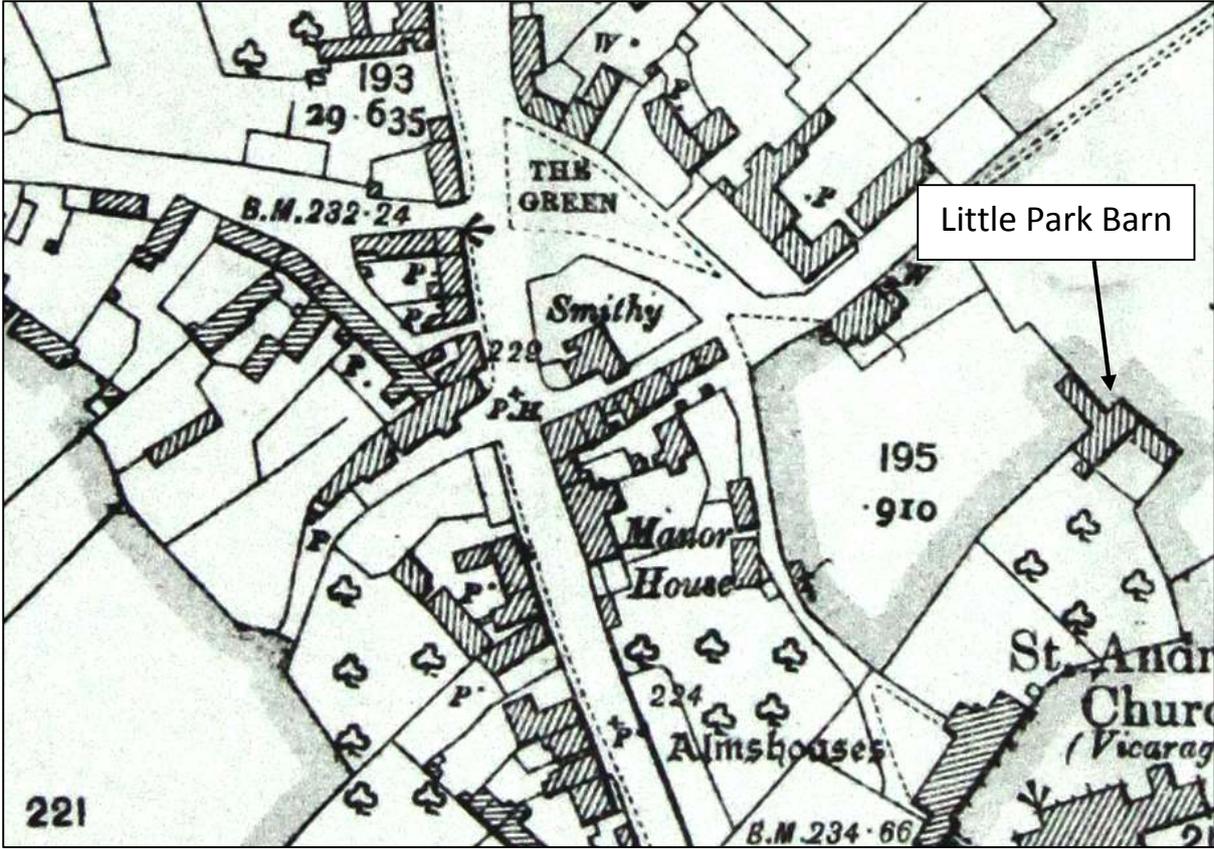
Dovetail lap matrix to a common rafter, with horizontal and vertical pegs



Lyddington Enclosure Map - 1804



Lyddington Estate Map, 1848 (Burghley Archives)



Ordnance Survey 2nd Series, 1904