

Shemmings Farm Buildings, Hardys Green, Birch, Essex. CO2 ONY. Recording and analysis of the farm buildings. Surveyed 08 05 2017.



2006 Google earth. Location of Shemmings Farm, Hardys Green.



2008 Google earth. Detail of the site showing the buildings under study.

### Location

Shemmings Farm Buildings, Hardys Green, Birch, Essex. CO2 ONY. The Barn is located at TL9242020463. The site was formerly called Claypit Farm and there are still extensive clay pits 400m to the south.



### Listing

None of the buildings are Listed. The Farmhouse which is not part of the site is Listed and this is included in Appendix 1 for completeness.

## Scope of this Report

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This report describes and analyses the buildings with a view to mitigating for and informing future development.

The report adheres to Historic England Level 2 as outlined in Historic England. Understanding Historic Buildings – A guide to good recording practice. 2016. Page 22.

## There are nine buildings. The full plans are shown in Appendix 2.

- 1. Sheds. Three conjoined buildings.
- 2. Garage.
- 3. Stables.
- 4. Carpenter's Shop.
- 5. Tractor Shed.
- 6. Workshop.
- 7. Barn.
- 8. Shelter.
- 9. Granary.

1. Sheds.



The Sheds for a narrow range on the north side of the farmyard. Looking SW





Southern elevation of the Sheds.



Eastern elevation of the narrow building.

The Sheds are three conjoined timber-framed buildings that have been highly altered in the LC20th. The primary braced interrupted studwork frames are clad with MC20th weatherboards, some hot tarred and some cold brushed, fixed with wrought iron and French nails. The southern, farmyard side, is equipped with narrow, stable like door openings that have often been blocked and others inserted.

The roof is clad with MC20th corrugated asbestos sheets and the form of the building is from this era. Historic mapping indicates that the western half was first erected between 1838 and 1875 while the eastern half first appeared between 1875 and 1897. There is very little difference in the construction details of the frame. The building is very narrow and it seems likely it was a poultry house rather than a stables. Deer stables and kennels are often narrow like this but there are no fittings to confirm any definite use.



# 2. Garage.



Southern and eastern elevations of the Garage.



Western elevation of the Garage.

The Garage has a timber-frame clad with M-LC20th weather-boards and a southern wall built of LBC Flettons. The roof is clad with corrugated asbestos. There is a pair of garage doors and to the rear a large pane window armoured with bars on the inside. The concrete ramp up to the doors suggests vehicle access for a small tractor or car.

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## 3. Stables.



The Stables from inside the farmyard.



The Stables from the west.

The Stables is a timber-framed building with nailed interrupted studwork on a brick plinth of EC19th bricks with large modern infill sections. The low pitched fully hipped roof would have been clad with grey slates but now has MC20th corrugated asbestos. The building has been altered into garages and the inward facing doorways closed off.





Looking SE in the northern room of the Stables.



Looking SW in the northern room of the Stables.

The interior of the Stables has been outfitted with elm kick boards of which only those on the partition wall remain. The walls have also been lined with corrugated iron which indicates they were used as pig sties in the M-LC20th.





Detail of the roof structure.



The collar has been cut through and supported on raking struts from the partiton wall.

The roof is made of machined pine rafters and plank collars, one of which has been sawn through to install a piece of machinery or water tank.





Looking W in the bay.



Looking E in the central bay.

The central and southern bays have been converted to garages and have MC20th gate and ledger doors. The two rooms have been outfitted with work benches for a workshop and letters dating to 1983 indicate that hydraulic jacks were being repaired.



4. Carpenter's Shop.



The western elevation of the Carpenter's Shop.



The eastern elevation of the Carpenter's Shop and the Tractor Shed.

The Carpenter's Shop is a small brick built building with two narrow stable doors and a larger pair of doors under a timber lintel. It has a corrugated asbestos roof on a machined pine MC20th roof. The brickwork is LC19th in style with beige sandy lime mortar but inside it can be seen it has been extensively rebuilt using grey cement in the MC20th. Historic mapping suggests there was a building in position between 1875 and 1896 but it is likely only the boundary wall is original.





Looking N in the Carpenter's Shop.



Looking S in the Carpenter's Shop.

The interior is outfitted as a carpenter's workshop for someone making bird tables. It appears to have been abandoned quite recently.



## 5. Tractor Shed



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The Tractor Shed looking E.



The southern wall of the Tractor Shed.

A building corresponding to the Tractor Shed is shown on the 1896 Ordnance Survey map as a closed building but the present structure was built in the MC20th. The walls are built of reclaimed bricks set in very buttered cement pointing with added buttresses to support the machined pine plank roof. The roof is clad with corrugated iron sheeting in very poor condition





Interior of the Tractor Shed looking N.



Roof structure of the Tractor Shed looking S.



### 6. Workshop.



Southern elevation of the Workshop.



Northern elevation of the Workshop.

The Workshop is a MC20th building with brick walls and timber panelled infill sections on the southern elevation. Originally the building was open on this side and has been converted in the LC20th, most probably the 1980's judging by the casement windows to form a large workshop.

The machined pine plank roof is clad with corrugated asbestos. The doors are made of marine ply.





Looking E inside the Workshop.



Looking W inside the Workshop.

The Workshop has been outfitted with power points for multiple workstations and a few storage racks and benches indicate a business was being run from here. There is a large barrel stove to heat the space. Paint samples on the doors and walls indicate something was being refinished. While the end walls are made of reused bricks parts of the back wall are painted and may possibly be older. One very heavy tethering ring remains indicating animals were once kept inside.



7. Barn.



The Barn from inside the farmyard. Looking W.



Detail of the porch.

The barn is a timber-framed building made from reassembled parts of other buildings and clad is weather-boarding which all appears to be C20th fixed with French nails. The barn is a typical c.1800 thrashing barn with a full height porch with tall doors above leap doors. The upper doors are C19th style gate and ledgera with edge-moulded boards hung on wrought iron pintles and the leap doors are formed in a chevron pattern distinctive of the EC19th and may well be original.





The northern and western elevation of the Barn.



Detail of the eastern doorway.

The exterior of the Barn is rather plain and the western side is very close to a large ditch would have rendered the western doors virtually useless in modern times.. The doors are MC20th and split 50/50 to allow easy pedestrian access and vehicular access when necessary. The roof is clad with corrugated asbestos and the rainwater goods are painted metal.

The frame is made of straight machine cut primary bracing with nailed interrupted studwork of varying sections and materials. Some are obviously reused from a much older frame.





Looking S inside the Barn.



Looking N inside the Barn.

The barn has some C20th repairs adding in contra braces on the northern wall. The walls are lined with corrugated metal and this usually indicates the space was used for keeping pigs in the MC20th.





Detail of the north wall.



Looking E into the porch.

The roof of the porch and of the barn is composed of king bolt trusses. These have a single wrought iron bolt that connects the tie beam to the apex and tensions the two raking struts to create a stiff support for the roof. The porch has a crudely built LC20th box made of old doors to act as a dovecot for which there are three holes over the main doors.





Detail of a king bolt truss. Note the reused timbers.



Detail of the hanging knee and tie-beam.

The king bolt has the further refinement of a bifurcated end such that it splits and bolts into both principal rafters. The trusses are further stiffened with bolted and nailed on hanging knees. The purlins are held on cleats and the roof is boarded with wide pine boards. The roof would have been clad with grey slates.





Originally the porch had doors on both sides.



The southern side of the porch. The braces have been designed to accommodate the doorway.

The porch originally has pedestrian doors on both sides but the northern one has been boarded over in the C20th.





Merchant's timber marks on the primary brace.



Possible apotropaic mark on the porch primary brace.

Some of the timbers bear merchant's marks made to identify the timber when being shipped in the C19th. The letter W has also been carved in the porch. This is very likely to be an apotropaic Marian mark for the Virgin of Virgins - calling for the protection of Mary. These marks resurged in the MC19th as a result of the practices of the 'Cunning Men'.





Barn Shelter looking NE.



Looking N in the Barn Shelter.

On the northern side of the Barn porch is a simple lean-to shelter with a MC20th machined timber roof supported on a C19th tie-beam and a C19th primary braced timber-framed wall. Half the front has been closed in with plywood and it seems have been uses as an animal shelter. The yard is divided up with blockwork pen which would indicate pigs as cows would easily push them over. Again the wooden structures are protected with corrugated iron. The 1897 OS map shows this shelter and another on the other side of the porch.





Northern side of the Shelter.



Looking E inside the Shelter.

The Shelter is a simple timber-framed building constructed in the same way as the Barn. It has a similar primary braced frame and identical king bolt trusses with the unusual bifurcated bolts. The purlins are again held on cleats and the trusses stiffened with bolted on hanging knees. The roof has been replaced with corrugated asbestos. The building would have been used to shelter and feed animals. The eastern wall has s plinth of shuttered concrete while the western wall is the weather-boarded frame of the Granary.





Looking at the Granary wall from inside the Shelter.



Detail of the hanging knees.

The hanging knees, fashioned from tree trunks, are fastened with carriage bolts and this would suggest the building was put up in the MC19th rather than the first 20 or so years of the century. EC19th bolts have square heads and nuts. Like the Barn some of the timbers have 'bracking' marks to denote where they came from.



# 9. Granary.



The south elevation of the Granary.



The northern end eastern elevations of the Granary.

The Granary is a purpose built timber-framed with a heavy duty grain floor. Like the other buildings is has been recalled with weather-boards and an asbestos roof in the MC20th. An office has been installed in the upper floor in the LC20th, most likely the 1970's and the building used as a store.





Looking W inside the Granary at the C21st staircase.



The framing of the Granary floor. Looking W.

The timber frame of the Granary walls has been hidden by modern finishes but the grain floor joists are exposed. These appear to be steam sawn elm joists laid on edge with massive transverse joists to take the weight of the grain that would have been stored above. A building of this size might store 30-60 tonnes of grain when full.





Additional support for the main joists.



Hatches in the floor allowed the grain to descend into grinding or cleaning machines.

The grain floor had some small hatches to allow the grain to be funnelled down into machines on the ground floor. Particularly after WW2 farmers were actively encouraged to glean their own grain on site to maximise its value and electrically driven seed gleaners like those made by Boby would be installed. The floor has additional MC20th softwood joists with marks showing that partitions were skew nailed in place creating smaller rooms and giving extra strength to the floor above.





Detail of the frame in the eastern wall.



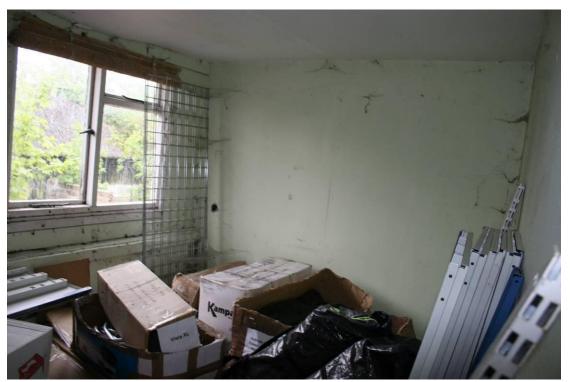
Looking E at the roof structure.

The Granary has a trussless roof with waney tie-beams and plank collars clasping the machined side purlins. The original rafters have been used to support the asbestos roof but most of the rafters were already second-hand when the building was put up.





Storage area in the eastern end of the Granary.



Small office at the front of the Granary.

A small office and workspace has been built in the eastern end of the upper floor and the details are all LC20th, most likely the 1980's. The work is of poor quality, cobbled together reusing old doors and cheap windows with aluminium fittings.





Power supply and meters are fixed to the original frame.



Nailed interrupted studwork in the partition wall.

Where the frame is visible it is very similar to that of the Barn and Granary and it must be assumed that all the buildings went up at the same time to form an early version of a Victorian High Farm. These three buildings are all shown in the same disposition on the 1841 Tithe Award Map for Birch.

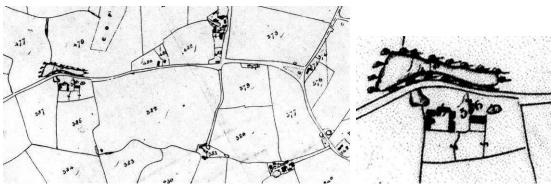


**Topographical Survey from Maps** 



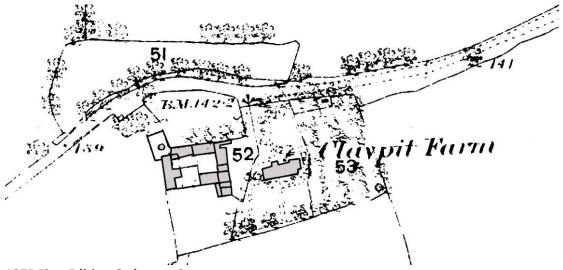
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1777 Chapman and Andre's Map of Essex.



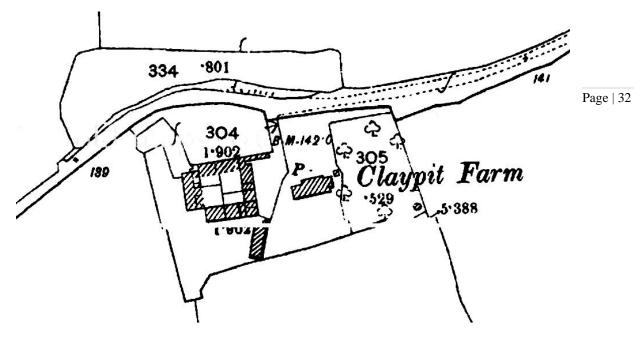
1841 Tithe Award for Birch (Great and Little). ERO D/CT 34 B.

The site does not appear on Chapman and Andre's map of 1777. The property is shown as Plot 386 on the 1841 Tithe Award Map for Birch. Plot 386, Homestead, was owned by John William Bridges and occupied by Joseph Norfolk who features in the 1848 and 1863 editions of White's Directory of Essex as a farmer. The sites of the Barn, Shelter, Granary, Garage and Stable can be identified.

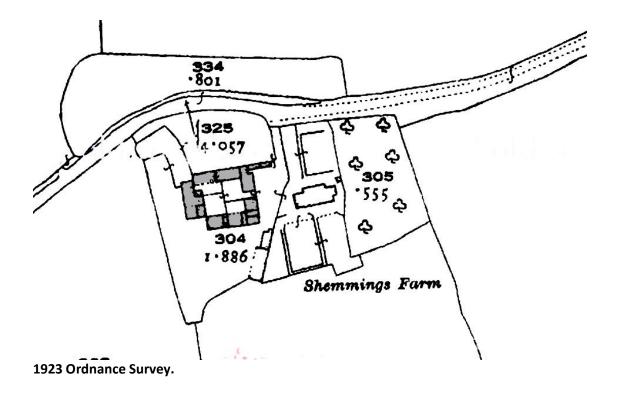


1875 First Edition Ordnance Survey.

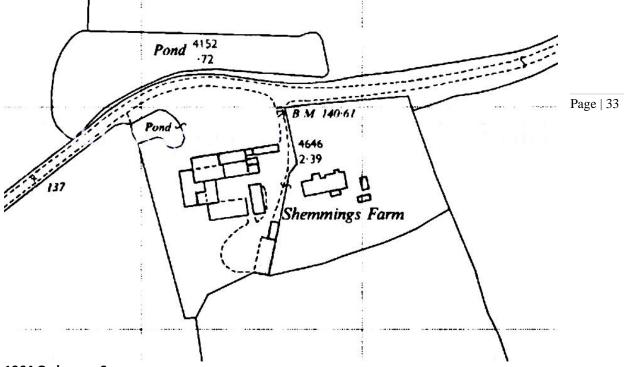




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1897 Ordnance Survey.
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1964 Ordnance Survey.



2000. Google earth.



## **Phasing and Discussion**



General phasing of the buildings at Shemmings Farm.

### Phase 1. Before 1843. Development of a High Farm.

The original buildings at Shemmings Farm were erected in a C shaped courtyard facing the Farmhouse in a configuration that would have been easily recognised by the Victorian High Farmers. The fabric, design and components of the remaining buildings – the Barn, Shelter, Granary and Stables all indicate a build date near the middle of the C19th.

The 1843 Tithe Award Map shows all these buildings but it could not have been many years before that they were built. Design features like the king bolt trusses in the Barn and Shelter and the regular steam sawn joists in the Granary would not have been available even 20 years before. As the Shelter was built off the Granary and the Barn it stands to reason that they all went up at the same time.

The Stables is more archaic in design (by 30-40 years only) but stand on a MC19th brick plinth. It is possible it was brought to the farm as part of the complex and re-erected. No farm buildings are shown on the 1777 map of Essex by Chapman and Andre.

By the 1840's the concept of Victorian High Farming emerged. According to G.E Mingay in Victorian Countryside (2000) High Farming ' was the achievement of high production by the widespread application of new knowledge and equipment. Land was drained to grow more grain and other food for more and fatter stock, yielding in turn more manure and heavier crops.'



## Phase 2. 1843 – 1876. Half of the Sheds.

The Ordnance Survey shows that half of the Sheds was built between 1843 and 1876. While the building does contain a nailed interrupted studwork frame it is difficult to note any significant differences to other half which the mapping shows was built later.

## Phase 3. 1876 – 1897. Other half of the Sheds and the Carpenter's Shop.

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The Ordnance Survey shows that the eastern half of the Sheds was added between 1876 and 1897. Because the Sheds have been significantly rebuilt and altered several times it is difficult to decide what they were for. Narrow buildings like this can be poultry houses, kennels or even deer stables (which is unlikely).

The Carpenter's Shop is a well built brick building away from the farmyard but governing a view of the entrance and backlands. It may have been a better quality stable or equally a site office.

### Phase 4. Post 1964 replacements.

All of the buildings on site underwent a huge renovation in the MC20th when they were reroofed with corrugated asbestos, the floors and yards laid to concrete and most of the weather-boarding replaced. Normally this would have been done in the 1950's or 1960's. No dates, often left in the concrete floors or on the roof trusses, could be found.

However the Workshop, which is shown open-sided and was definitely an animal shelter as tethering rings remain inside was completely rebuilt and converted into a workshop after 1964. It is most likely this was done in the 1970's or 1980's.

The Garage and Tractor Shed are new buildings of this period, replacing older ones that fell to disuse. The walls of the Tractor Shed look as if they were completely replaced with reclaimed bricks.

### Significance.

The buildings represent a fully formed Victorian High Farm with original period designs and fittings. Of this period only the Barn, Shelter, Granary and Stables have their original frames. The walls and roofs have been replaced in the MC20th. The other buildings are post 1964.

### Acknowledgements

I am indebted to the owners of Shemmings Farm for engraining me to record the buildings and to Nicola Bickerstaff of Strutt and Parker for recommending me. The architect's plans were also supplied by Strutt and Parker



Appendix 1 – Listing of the Farmhouse



The Farmhouse from the east.

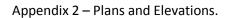
**BIRCH HARDYS GREEN** 

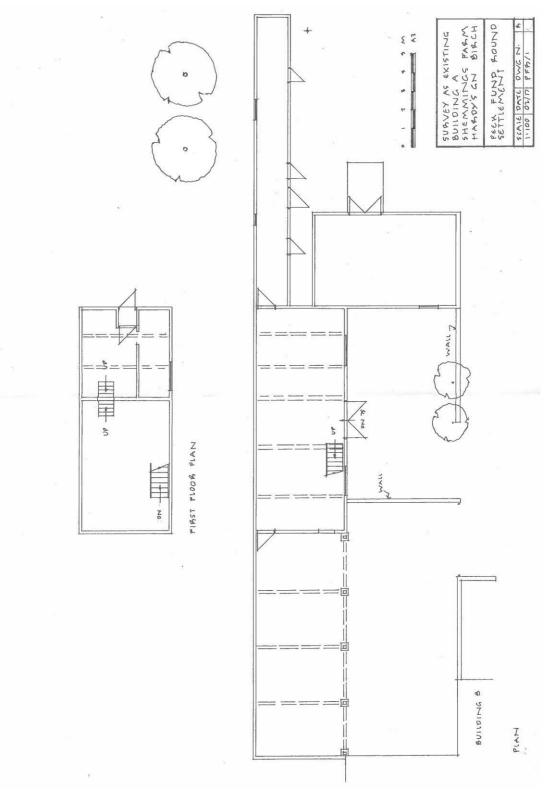
1. 5214. Shemmings Farmhouse. TL 92 SW 11/89. Grade II

2. C15 extensively altered in C16. Originally a hall house. Two gabled cross wings. Timber framed and plastered with red plain tile roof. Two storeys. Five window range C19 casements. Gabled 2 storey porch/staircase tower, with early C19 entrance door, with moulded architraves and simple flat head. C15 red brick chimney stack with 4 diagonal shafts.

Two storey cross wing type extension at west end. One window range C19 casements, and C19 red brick chimney stack. (RCHM 7). Listing NGR: TL9248420465



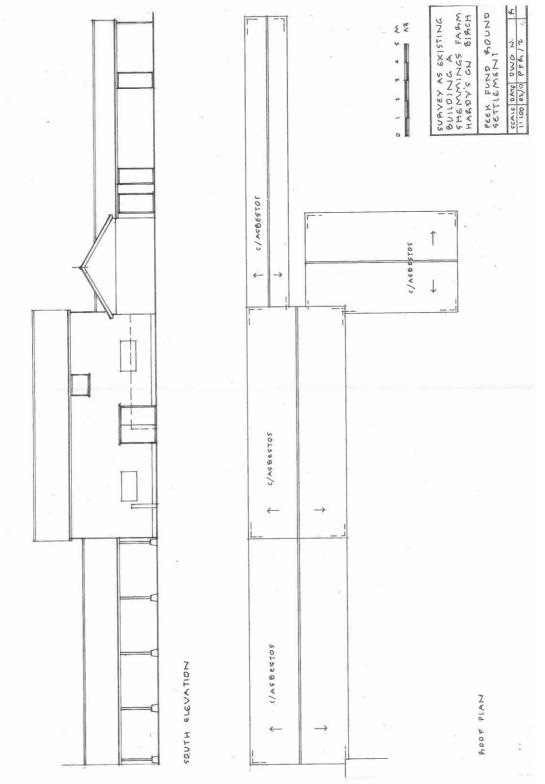




2017. Plans of the Granary, Shelter and Sheds.

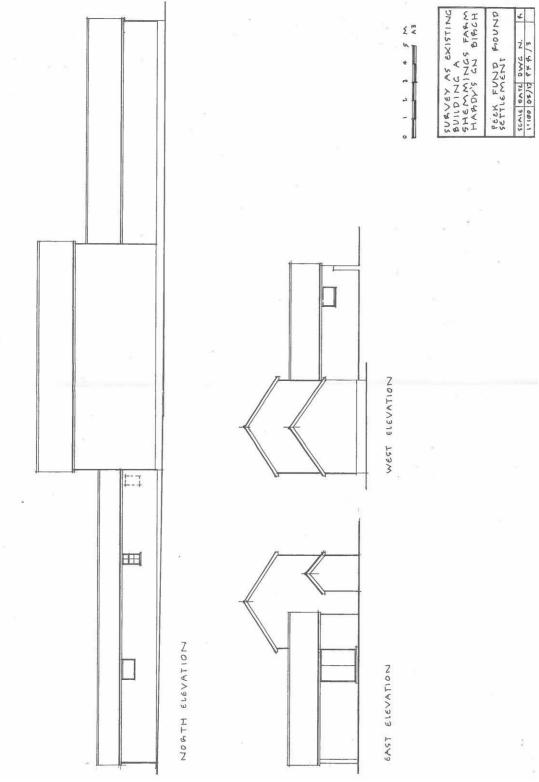
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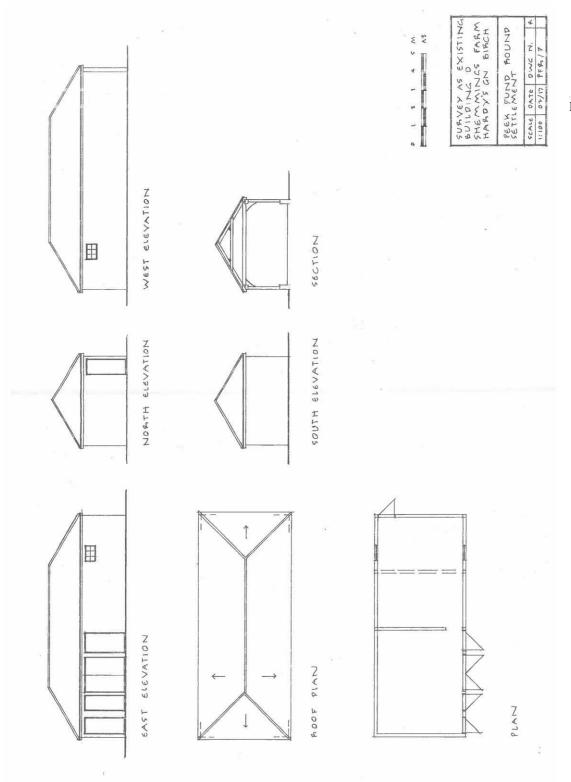
2017. Elevations of the Granary, Shelter and Sheds.





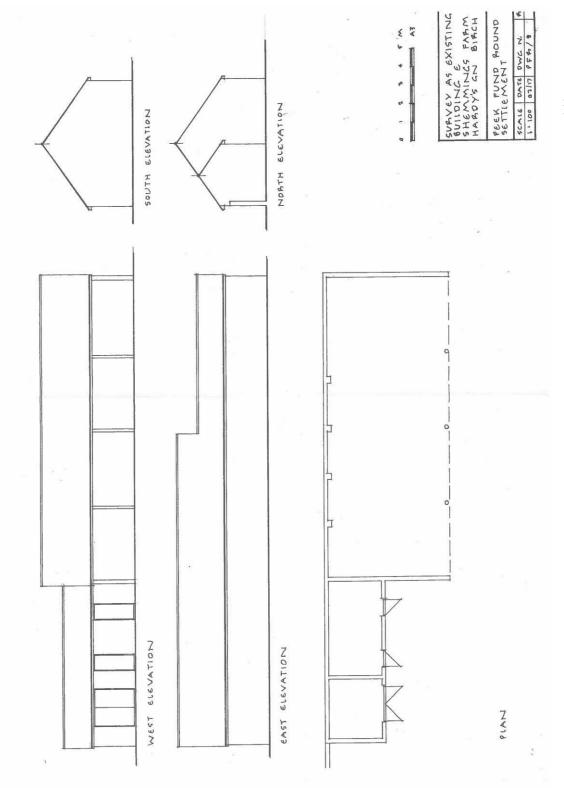
2017. Elevations of the Granary, Shelter and Sheds.





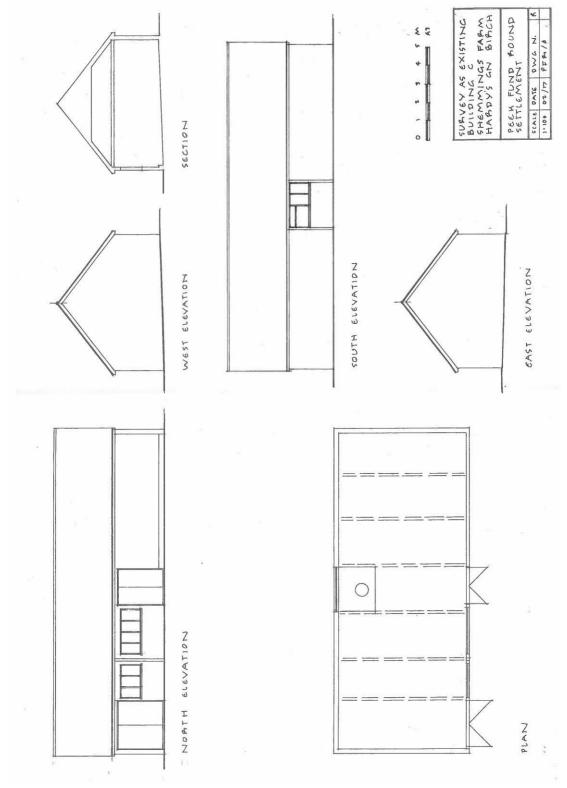
2017. Plans and elevations of the Stables.





2017. Plans and elevations of the Carpenter's Shop and Tractor Shed.

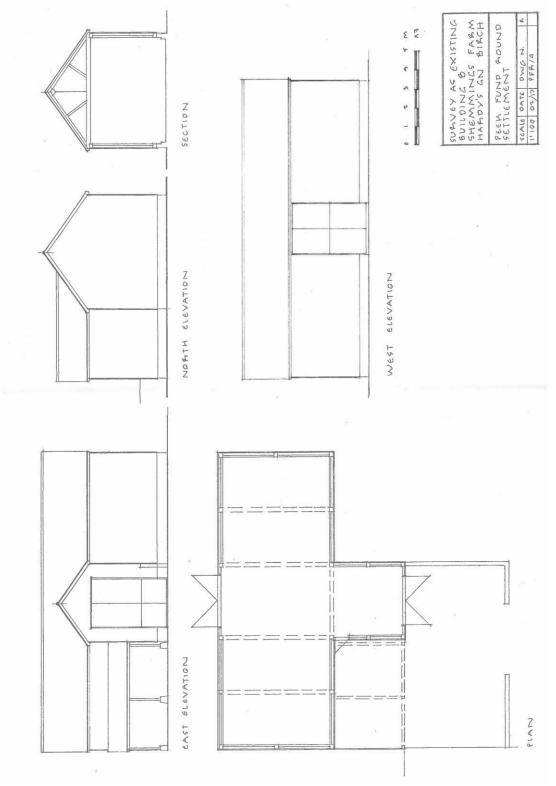




2017. Plans and elevations of the Workshop.

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2017. Plans and elevations of the Barn.