DESIGN & ACCESS STATEMENT

OAKS FARM, OAKS WOOD DRIVE
DARTON, BARNSLEY

CONTENTS

1.0 Introduction

This statement has been prepared in support of an application for Detailed Planning Permission for the residential development of land and buildings at Oaks Farm, Oaks Wood Drive, Darton, Barnsley S75 5PT.

The works have been carried out on behalf of the Executors of K Birkinshaw Dec'd.

2.0 Location

The site is located on the outskirts of Darton, between Darton and Mapplewell, some 2.7 miles north of the centre of Barnsley. A site location plan is provided at Appendix 1.

3.0 Assessment

3.1 General

Oaks Farm is the site of an original farmstead which became redundant to agricultural use some years ago following the sale of adjacent land for development. It currently comprises a range of two storey barns, one of which is Grade II Listed, and a single storey dwelling constructed in the nineteen sixties to replace an earlier two storey farmhouse which was demolished.

A series of historic Ordnance Survey Plans are contained within the Phase 1 Environmental Assessment and catalogue the development of the site from the late nineteenth century onwards.

The most significant alterations to the site occurred during the early nineteen nineties when residential development of the adjoining land was carried out and abutting the site to the south, east and west. An area of open space and woodland was retained to the north and west.

The site has a total area of 0.46Ha (1.14 acres). It has frontage with Oaks Wood Drive at the south eastern corner from which vehicular access is taken. There is a fall of approximately 5.0m from north to the access point at the south; full details are provided on the topographical survey.

3.2 Existing Buildings

Bungalow

The land is currently occupied by a single storey bungalow, constructed in the late nineteen fifties to early nineteen sixties, which replaced an earlier farmhouse. The 1961-1962 Ordnance Survey Plan included within the Phase 1 Environmental Assessment shows the bungalow for the first time.

Fig 1 South and east elevation of bungalow

Fig 2 North elevation of bungalow

Barns

There are 2 No two storey detached stone barns which enclose a central courtyard.

Barn A to the north is seventeenth century Grade II Listed with a later nineteenth century engine house addition to the rear. It includes relatively recent flat roof brick and block additions which detract from its appearance. There is a small, single storey building attached at the south western corner which is worthy of retention historically but is in poor structural condition.

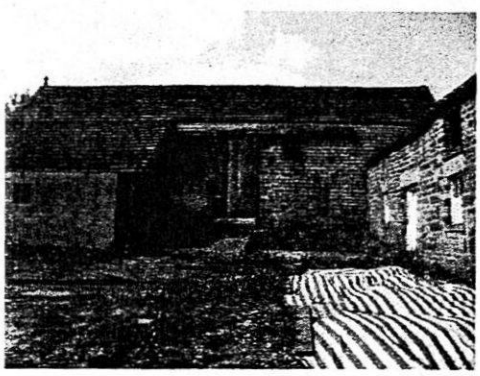


Fig 3 South elevation – Barn A

Fig 4 North and west elevation – Barn A

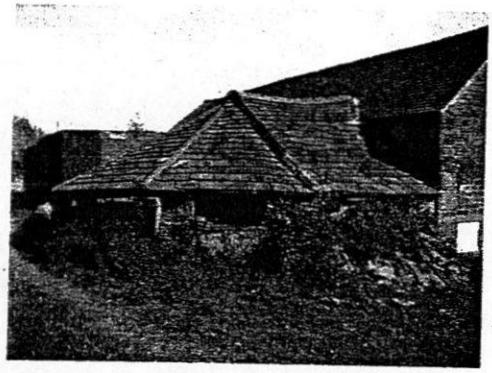


Fig 5 Engine House

Fig 6 Brick extension to NE corner - Barn A

Barn B is a two storey stone barn with a number of small, single storey buildings attached at the southern end. The building has had a number of minor alterations to the fenestration, although very few of these are recent. It has a large number of door and window openings, particularly on the west elevation.

Fig 7 West elevation – Barn B

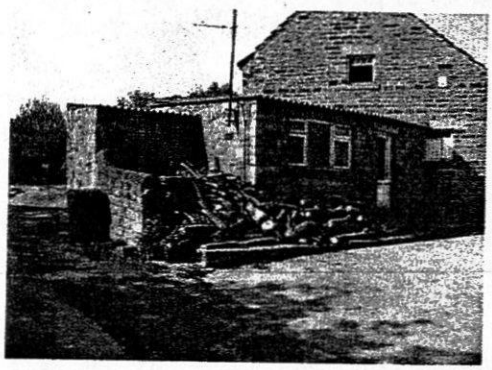


Fig 8 Outbuilding to south of Barn B

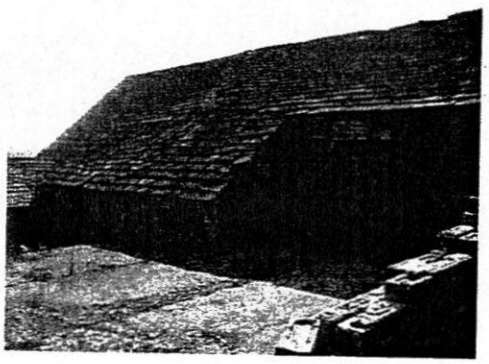


Fig 9 East elevation – Barn B

Fig 10 Single storey building – south east corner – Barn B

Fig 11 Rear catslide – Barn B

Fig 12 North and east elevation – Barn B

3.3 Structural Appraisal

A structural appraisal to assess the suitability of the existing barns for conversion to residential use has been carried out.

3.3.1 Barn A

A two storey barn of regularly coursed rubble stone walling with quoins to corners, with a mix of blue slate (north) and stone slate (south) roof having "cat slide" to south elevation, and later rear engine house extension to rear. The principal barn has five equal bays sub-divided by trusses and the two bays at the west extend to form an aisle with a timber post and half truss supporting the lower roof. The ground floors are generally level and partly covered by stone flags. The roof structure is generally of oak trusses and purlins with oak wall plates supporting oak rafters as shown in Figs 13 and 14.

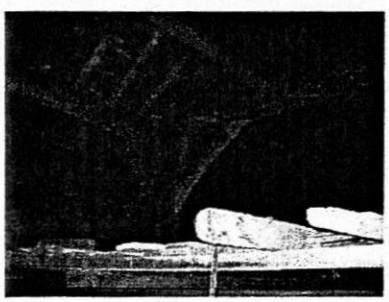


Fig 13 Barn A roof structure

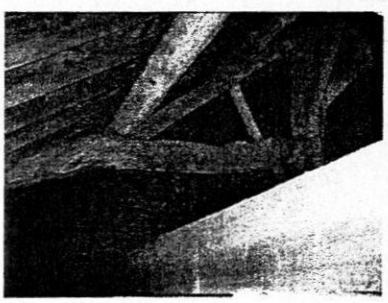


Fig 14 Half truss from timber post

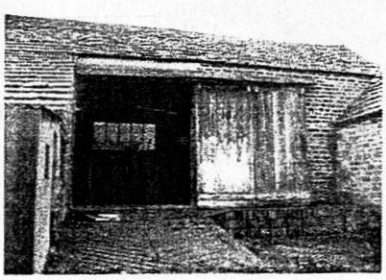


Fig 15 Typical storey height – barn door opening

The south pitch is in stone slates but the north pitch has been replaced in blue slate. There is a small, single storey building which appears to have been a later addition from the appearance of the stonework on the south elevation which also has a stone slate roof. The roof structure of this building has failed due to deflection of inadequate timber purlins, causing displacement of the north facing rear wall.

The external walls of the principal barn are in good condition and show no signs of settlement or weathering. There is a small area of partial collapse at ground floor level within the western gable wall around the site of an earlier door opening. The remainder of the external walls remain straight and true without significant defect.

To the rear (north) is a single storey later extension referred to as "the engine house". Constructed originally of monolithic stone piers, it forms a four sided, semi-octagonal structure supporting a timber roof structure with a single queen post truss and radiating hip rafters with purlins. The roof is of stone slates. The principal truss is of large span and shows signs of deflection.

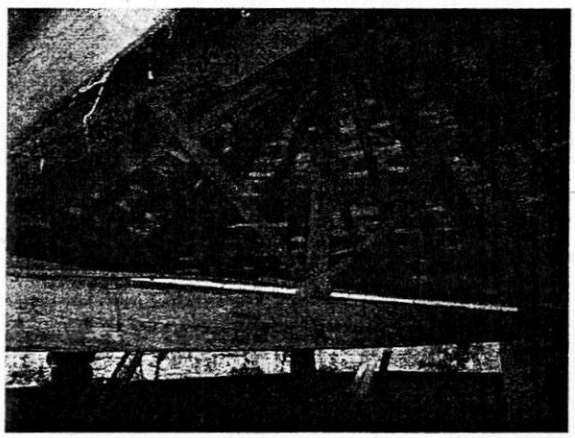


Fig 16 Internal view of roof structure to engine house

Some attempt to reduce the span and overcome the rot at the bearing ends has been made by the addition of brick piers at both bearing ends of the truss. Rot has occurred within the ends of the timber purlins and to the wall plate. The roof structure will require significant repair/replacement of structural members and it would be advisable to consider introducing mid-point support to the principal truss. The monolithic capped stone columns will need to be re-set. Some have been damaged or badly weathered and need to be replaced. It is anticipated that the later addition of infill brickwork between the piers has helped to stabilise the building and a greater degree of reconstruction may be necessary following removal of the brickwork. This could involve re-setting the stone piers onto new foundations to ensure that the structure is stable.

Internally the barn is open, although there is a structure within the two bays to the east that forms a first floor. This is not original and should be removed as part of the conversion.

3.3.2 Barn B

A two storey stone barn of regularly coursed rubble stone walling with stone quoins to external corners. Window and door openings have stone lintels and sills. Some have stone jambs or quoins. The building includes a number of changes in floor level, reducing by approximately 1.2m from north to south. There is a cat slide roof to the east elevation extending to approximately two thirds the overall length of the building.

The building has a structural wall sub-dividing the north and south ends slightly to the south of the mid-point.

The northern end is sub-divided into three bays by two oak trusses. Some of the ridge and slates over this section of roof have slipped allowing water ingress. The most southerly of the two trusses at the north end has failed and temporary support has been provided to prop the tie beam. The most northerly truss appears to be in good condition, although some rot at the bearing ends cannot be discounted. Large sections of this truss would need to be replaced if it is to be retained or, alternatively, the timber roof purlin could be supported by a new structural wall to replace the truss. There is a first floor structure which is of sub-standard timber beams spanning east to west supporting timber joists throughout the two storey barn. There is a stone staircase supported by a half brick wall giving access to the first floor. This is in poor condition and should be removed or replaced.

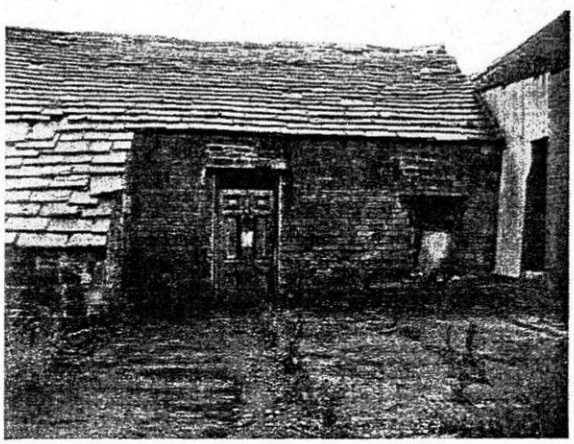


Fig 17 East elevation – Barn B – north end

At the southern end, the two storey barn is divided into two bays by a single truss, which is in good condition. The eastern bearing end of the truss is supported onto a timber post, at which point the roof sweeps down to form the cat slide. A half truss supports the lower roof of similar design to Barn A.

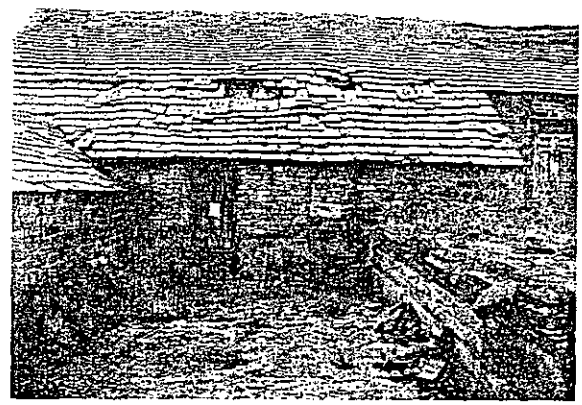


Fig 18 Cat slide roof to the rear of Barn B

The external walls of Barn B are generally in good condition. There is a minor amount of partial collapse and loosening of stonework on the east elevation where an opening in the external wall has been poorly formed; see Fig 17. In addition, there is a crack and some displacement of a section of stone walling above first floor level at the north end of the west elevation. It is likely that this has been caused by the failure of the roof truss previously mentioned.

At the south eastern corner of Barn B there is a single storey wing running east with overall measurements of 12m x 5m. It is of similar rubble walling to the main barn but a later addition and sub-divided into four bays by 3 No queen post trusses. The trusses are in squared pine, some with reclaimed oak ties as shown on Figs 19 and 20.

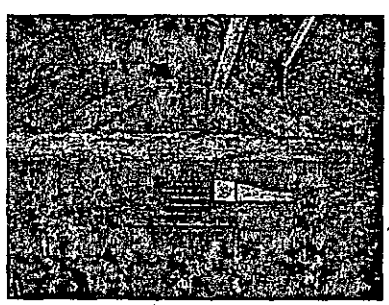


Fig 19 End truss looking west

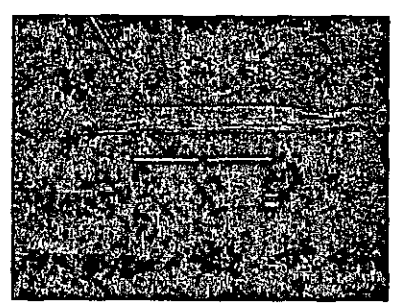
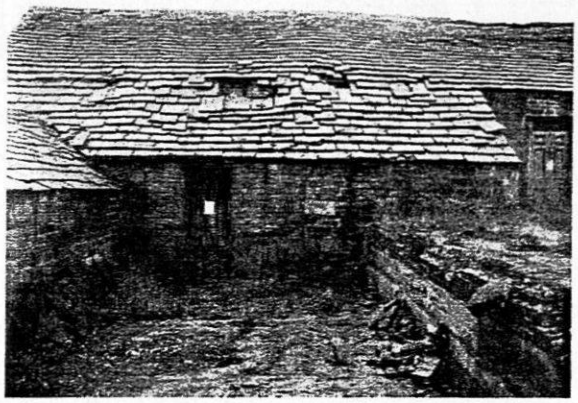


Fig 20 End truss looking east

Fig 21 South elevation

At the southern end, the two storey barn is divided into two bays by a single truss, which is in good condition. The eastern bearing end of the truss is supported onto a timber post, at which point the roof sweeps down to form the cat slide. A half truss supports the lower roof of similar design to Barn A.



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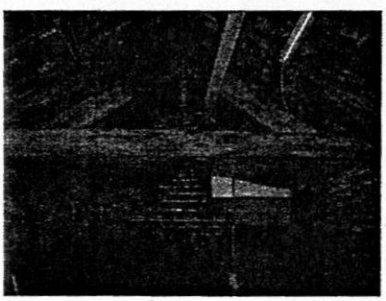

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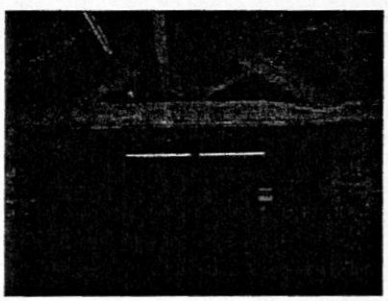

Fig 20 End truss looking east

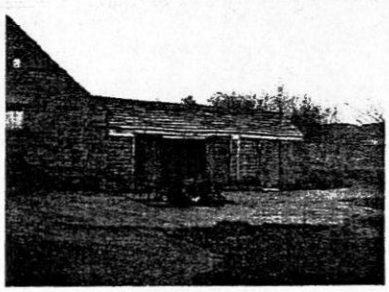

Fig 21 South elevation

The gable wall (east) was re-built in cavity construction (see Fig 20) when the land was released for residential development and is constructed at an oblique angle. The south elevation, as shown in Fig 21, has two large openings with sliding doors.

At the south western corner of Barn B is a small, single storey outbuilding with a very low pitched fibre cement roof. It appears to be a later addition to the original buildings and shows no visible signs of defect.

3.3.3 Summary

The existing bungalow was, until fairly recently, occupied and is of modern cavity wall construction built around the late nineteen fifties to early sixties. It is a substantial building in some need of modernisation, but structurally sound.

The redundant stone barns have a number of relatively minor defects which have been described. A reduced scale copy of the plans and elevations of each of the buildings is included at Appendix 3 and highlights the areas where remedial works will be required.

The barns are in good condition and the defects are consistent with buildings of this age that, in later years, have been neglected due to physical and financial constraints. They are, however, attractive buildings, in good structural condition and capable of conversion to residential use with a minimum of structural alteration.

3.4 Arboricultural Survey

There are no mature trees on the existing site. There are a number of small trees and landscape planting along the southern boundary within the site, mature trees beyond the site boundary to the west and semi-mature trees beyond the northern boundary. An arboricultural survey has been prepared by James Royston and a copy has been provided as part of the application documents. The survey has been used to identify no-build areas due to root protection zones and the proposed development has no impact on existing trees.

3.5 Drainage and Flood Risk

The site has an existing drainage connection into sewers in Oaks Wood Drive. Drainage from the bungalow is combined and connects to the foul sewer.

Large areas of the site are occupied by buildings and concrete hard standings, which drain to gulleys. A detailed drainage survey has not yet been carried out but it seems likely that some surface water drains to the combined system.

It is proposed that foul drainage from the development will discharge to the foul sewer in Oaks Wood Drive.

The surface water drainage system will be separate. Disposal will be considered in accordance with the drainage hierarchy in Building Regulations Approved Document Part H 2002 with SUDS (Sustainable Urban Drainage Solutions) being the preferred method.

The Phase 1 Environmental Report prepared by Eastwood and Partners has identified that due to the likelihood of clay soils being present, soakaway drainage is unlikely to be suitable. Development should, however, be subject to percolation testing to confirm whether some disposal of surface water drainage from roof areas, for example, can be made to a soakaway.

External hard surfaces should be self –draining where possible including permeable paving or gravel. Any surplus surface water that can be disposed of on site would discharge to the surface water sewer in Oaks Wood Drive and be designed to include flow restriction and on-site storage as necessary.

The site does not lie within an area identified by the Environment Agency as at risk of flooding. There are no rivers, watercourses, or culverts close to the site. The risk of flooding is considered low. Provided that a scheme for the disposal of surface water drainage is agreed as suggested, there should be no risk of the site causing increased issues of flooding elsewhere.

3.6. Ecology Survey

Eric Bennett Consultancy carried out a bat survey in November 2010 and a copy of the report is attached with the application documents. The survey found no evidence of barn owl or a bat roost in any of the buildings. Following the retirement of Mr. Bennett the survey has been updated by Whitcher Wildlife Limited who have re-iterated the findings of Mr. Bennett. A copy of their report is attached.

3.7 Phase 1 Geotechnical and Environmental Report

In 2010 Eastwood & Partners of Sheffield produced a Phase 1 report, which was submitted with applications 2011/0412/0413 and a full copy was included as part of those application documents. A further copy can be produced if required. The following is a brief summary of their findings.

A limited amount of made ground is expected at surface level, likely to comprise granular material beneath areas of hard standing. Made ground is also expected beneath former buildings, although the thickness of made ground is unlikely to be significant. Beneath the made ground, firm to stiff clay is expected, becoming weak mudstone and/or shale with depth. Ground water is not expected at shallow depth.

The Barnsley coal seam underlies the site at shallow depth which may have been worked in the past. A drilling programme will be required to determine the depth to the Barnsley coal seam and if it has been worked.

It is likely that suitable founding material will be encountered at shallow depth within the area for development and traditional strip or trench fill footing, taken through any made ground to a minimum depth of 900mm.

If shallow coal workings are encountered and are in need of drilling and grouting, the footings will need to be thickened and reinforced.

Less than 600mm of made ground is expected. Ground-bearing floor slabs should be appropriate.

Generally, no significant contamination is expected to be encountered. Chemical testing of the soils will be required to determine the level of risk presented and hence the level of remediation required.

4.0 Evaluation

The site is within an area allocated on the current Barnsley MBC Unitary Development Plan as Housing Policy. Residential redevelopment is therefore appropriate.

The existing buildings on site include a Grade II Listed barn, a secondary barn which is not listed but could be considered to be within the curtilage of the listed building and affects its setting, and a detached bungalow.

By inspection, we conclude that the existing buildings are capable of conversion with a minimum of structural alterations. Economically it may be sensible to investigate the demolition and reconstruction of the non-listed barn to match its current form and introduce modern building techniques to improve potential damp proofing issues and introduce improved standards of insulation more effectively. These proposals, however, recognise the importance of the secondary barn, Barn B, in relation to the listed building and suggest it be retained and converted.

The site and existing buildings will benefit from the removal of inappropriate additions and large areas of concrete hard standing, which were added during farming activities.

The site is capable of accommodating an additional building plot within the northwest corner without detriment to the existing listed building or bungalow.

5.0 Involvement

Prior to submission of the previous application in 2010, a meting was held with Mr. Graham Northern of Development Control and Mr. Tony Wiles, the Conservation Officer, to discuss the proposals.

The response at that time was encouraging and of course planning consent for residential development was granted under application numbers 2011/0412 and 2011/0413.

6.0 Proposals

6.1 Description

It is proposed to develop the site for a total of five dwellings and garages. The existing bungalow will be modernized, the listed barn converted to a single dwelling, the secondary barn will be converted to two dwellings, and a new dwelling will be constructed on an area of vacant land in the north west corner of the site.

The scheme attempts to restore and enhance the setting of the listed building by removing unattractive later additions and providing a sense of enclosure by establishing a formal courtyard to the south.

6.2 Use

The site was formerly agricultural but has been redundant for many years. The bungalow was occupied as a private dwelling until 2010 and is therefore residential.

The BMBC Unitary Development Plan allocates the site as Housing Policy. The proposed use is residential.

6.3 Access

Existing access is taken from Oaks Wood Drive at the south eastern corner of the site. There is an access gate between two stone piers 5.0m wide set back from the highway kerb by 3.8m and providing good visibility. There is a separate pedestrian access gate.

The proposals utilise the existing access but include alterations to the boundary wall allowing the gates to be inset. The access road has a gradient of approximately 1 in 12 from its junction with Oaks Wood Drive up to the point where it meets the parking courtyard. Thereafter, gradients reduce to around 1 in 20 providing full access for wheelchair users. Unit 1 is the only property where a stepped approach may be required to accommodate existing levels and this could be designed to be suitable for ambulant disabled access.

It is intended that refuse vehicles will not have access to the site. A communal bin storage area is provided within 30m of the access and individual bins would need to be transported to the kerbside for collection.

The central parking court provides adequate manoeuvring for private vehicles and could be adapted to provide turning for a fire appliance. It is considered, however, that the parking court should be maintained for private vehicles and that a water supply to a fire hydrant is provided on site to avoid the need for access by a fire appliance in the event of a fire.

6.4 Layout and Scale

The development has been designed to reflect the courtyard setting of the existing farm buildings. New buildings are of single and two storey construction, of similar scale to the existing buildings in a vernacular manner using traditional proportions that are wide frontage (in the case of Unit 4), narrow depth buildings with roof pitches around 37.5°.

The new buildings, and in particular Unit 4 and the associated garages, help to reinforce the sense of enclosure, which is typical of traditional farm buildings.

All dwellings have generous private gardens and overlook the central communal areas helping to create a sense of place and community.

6.5 Appearance and Materials

The site is dominated by the existing Grade II Listed barn, Unit 3, which stands on high ground to the north of the site. We have proposed that this building should be restored with a stone slate roof replacing the later blue slate to the north pitch, and including natural stone slates to the rear engine house. The listed barn has a very traditional appearance featuring small "punched" openings with larger formal doorways framed by stone quoins, lintels and sills. We propose that doors and window frames to this barn are in timber set in deep reveals and finished with a very dark brown stain. The intention is that the frames will be "lost" within the openings. A statement has been prepared to assess the significance of the works on the listed building and is provided with Appendix 4.

The remainder of the new and existing buildings are to have artificial stone roof slates, and window frames with a grey/green painted finish with doors and garage doors in dark oak.

Rooflights have been included to the existing buildings and the new dwelling, Unit 4. This will allow natural light to a number of internal rooms and help reduce the need for additional windows.

External walls are of natural coursed stone and any new walling should be constructed in reclaimed stone to match. The existing stone barns and the new dwelling, Unit 4, are to be pointed in a lime-based mortar to include crushed stone aggregate flush with the face of the stone and slightly back from the arris of the stone.

Rainwater goods are to be in black with half round gutters and circular rainwater pipes featuring socketed connectors.

The existing perimeter wall to the site is to be retained in coursed stone, however, new walls to the courtyard are to be of traditional dry stone construction with irregular stone toppers. Roadways and hard surfaces are a mix of tarmac, gravel and free-draining block paving. Footpaths are a mix of artificial stone flags, butt jointed and free draining and gravel, as shown on the site layout plan.

6.6 Landscaping

It is proposed that formal landscape planting is limited to a specimen tree within the parking court and a small avenue of trees to the north of the access road. There will also be a number of trees planted within rear gardens in a similar manner to that shown on the site plan. These will be subject to the submission of a detailed landscaping layout prior to commencement.

7.0 Summary

The proposals to convert the existing redundant farm buildings at Oaks Farm in association with the residential development will provide an alternative, economically viable, future use of the historic farm steading. The site is allocated for residential use and within a highly sustainable location on the outskirts of Darton and Mapplewell villages.

The layout, form, character and choice of materials, together with the removal of inappropriate buildings, will enhance the appearance and setting of the important listed building and provide residential accommodation within the area.

Signed ..... S. Lord .....

Susan Lord
Executor of the Estate of Kenneth Birkinshaw (Deceased).

APPENDIX 1

SITE LOCATION PLAN