

DESIGN, ACCESS & HERITAGE STATEMENT

The repair of the existing farm building at Sewingshields Farm.



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On behalf of: Mr Murray

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Top, view northward from the B6318 (Military Road). Left, view of the subject of this report from the south west. Right, the north-eastern elevation of the barn

Introduction

The farm building at Sewingshields is a traditional stone built two storey building with offshut on a sloping site with slate roofs, combined with the farmhouse, attached byre and cottage they form a courtyard arrangement constructed around the early 19th Century. Behind the block of traditional farm buildings are two open fronted barns in an 'L' shaped arrangement, constructed of stone with corrugated sheet roofing, to the south east is a further courtyard arrangement of farm buildings constructed of stone and slate. Collectively they make an impressive set of buildings in a prominent position in the landscape. The application relates to the eastern building within the courtyard arrangement adjacent to Sewingshields farmhouse. The farmhouse is a Grade II Listed Building.

The farm buildings are located within the Northumberland National Park. They are owned by Mr J Murray

The buildings have been identified for restoration work, which is to be part funded by Defra's Countryside Stewardship scheme, administered by Natural England.

Doonan Architects Ltd has been asked to prepare a Management Plan for the repair of this farm building, the purpose of the plan is to identify the works necessary to bring them back into a state of good repair, so they can continue to be used as part of the farming operation.

Tenders have been sought and the next phase of the grant, which is still to be agreed, is the delivery phase, i.e. to undertake the repairs on site. However, in order for the project to be assessed for the next phase of the grant, listed building approval for the repairs is required.

Description

Sewingshields Farm stands on a south facing slope amongst trees along the ridge of the whinstone scarp along the line of Hadrian's Wall, 6.5km north of Haydon Bridge on the edge of the Haydon Civil Parish boundary. It sits to the north of the B6318 road (Military Road). The farm is within the Northumberland National Park, and is within the Hadrian's Wall World Heritage Site and is surrounded tightly by a Scheduled Monument.

The barn sits adjacent to a byre that is attached to the farmhouse. The building is two storeys, with an offshut range to the east. The main two storey section faces west and sits on land falling to the south and east, it is constructed of coursed roughly-squared stone with cut quoins and dressings and a roof of welsh slate with stone watertables. There is an external stone stair on the west elevation providing external access to the first floor. The doors and windows are typical of farm buildings in this area; simply boarded doors with braces, simple joinery to the windows with some vent windows. The windows vary, the variance of pane ranging from two to eight. The variance in windows represents various change in use of the buildings over time with differing ages and priorities, i.e. ventilation versus light.

The historic building assessment carried out by Peter Ryder provides a detailed analysis of the building's form, materials, past function, style and adaptations

Listed Building Status & Significance

The barn at Sewing Shields Farm sits adjacent to the farmhouse, which is Grade II listed, the listing description can be found below:

Listing description of the adjacent farmhouse:

'House, early C19. Squared stone, tooled and margined raised quoins, ashlar dressings. Stone slate roof, stone-coped gables with kneelers, stone stacks on left gable and ridge, brick stack on right gable. 2 storeys, 3 windows symmetrical with slightly set back rendered right extension. 16-pane sashes with slightly projecting sills, central ground floor sash renewed. Right section has flush-panelled door with 4-pane fanlight in chamfered stone surround; C20 glazed porch. 16-pane sash windows. Rear elevation squared rubble, re-used from the Roman Wall, with small wing and outshuts, various openings.'

The farmstead at Sewingshields is located within Grindon Common which is identified as Parallel Ridges and Commons in the Tyne Gap and Hadrian's Wall in the Landscape Character Assessment of Tynedale District and Northumberland National Park. The complex, enduring form of the Whin Sill, set within a simple and uniform landscape of gently rolling moorland and enclosed pastures, remains it defining feature. Characterised by elevated ridges and shallow troughs with a strong east-west alignment: cuesta landscape, with dramatic outcrops of igneous rock forming pronounced north facing scarps and south facing slopes. There is extensive Roman archaeology associated with Hadrian's Wall, but also earlier archaeology. Farmsteads are dispersed with limited habitation, they nestle into the landform surrounded by shelter plantations and are typically 19th Century.

The Northumberland Historic Landscape Character map identifies that the range of buildings immediately east of the farmhouse at Sewingshields fall within the pre-1860's non-ancient woodland area, with the second range of buildings (south and east) are characterised by their surveyed enclosure (straight-edged), fields with a regular pattern and straight boundaries of the mid 18th century to 19th century.

Prior to the 18th Century, the region was very unsettled due to its proximity with the border with Scotland and many buildings of this period were constructed with defence in mind. Many areas became deserted. Following this period, more peaceful times meant that it became easier to settle and conduct farming activities without fear of attack. During these more settled times there was a gradual occupation of these areas as the large areas of common were being enclosed at the end of the 18th Century, with commoners being awarded parcels of land in exchange for permanent settlement of these areas and improvement of the pastures. It was around then that the building at Sewingshields was constructed, possibly at the same time as the farmhouse.

The buildings layout provides some suggestions as to its intended use, the ground floor contains windows suggesting it was for stabling purposes, and the upper floor as a granary. The southern outshut would have been used to house animals, with the northern one potentially to house an engine linked to the granary above – this appears to have been remodelled in the 20th century. Further adaptations have been made in the past 200 years, as expected with its continuing agricultural use, for example with the insertion of two doorways to the north of the building and most of the window and door carpentry being renewed.

Proposed Works

The buildings have been subject to a thorough condition inspection, which has been undertaken by Tristan Spicer AABC of Doonan Architects. The condition of the buildings is detailed in the attached condition report. The report includes the following:-

Building: (i.e. farm building.)

Element: (i.e. roof coverings, rainwater goods, roof structure, walls, floors, joinery etc.)

Location of the defect: (i.e. orientation, elevation, and number linked to an identification plan.)

Photograph of the defect: (to ensure it is easily identified.)

Description of the defect: (a brief description and possible cause of the defect.)

Recommended proposed repair: (this is based upon a sound conservation approach to ensure the original character is maintained and to ensure the repair is carried out in a traditional manner using traditional materials, but is sufficient to secure the building and reduce the maintenance burden into the future.)

Quantity: (i.e. such as the area of repointing, or the number of slates to replace etc.)

Priority: (The repairs identified will be categorised in accordance with BS 7913:1988 'Guide to the principles of the conservation of historic buildings' into immediate (1-2 years), necessary (2-5 years) and desirable (5-10 years)).

Specification Reference: This refers to a specification for the various repairs. A copy of the specification document is included with the application.

Cost: (Our estimated cost of each repair element for budgetary purposes.)

The repairs are to be undertaken on a 'like for like' basis, however in a few instances the repairs will require alterations beyond a simple 'like for like' basis, for example as the introduction of stainless steel bars across cracks and pins to secure stones. Such a repair enables more of the original stonework to be retained by avoiding rebuilding large sections of masonry. There are also areas below the watertables where the walls are too poor to be repaired and as such these wall heads will require carefully taking down and rebuilding. Existing guttering will be renewed as the original is corroded. New cast iron deep flow guttering will be used, which will be more effective in removing water from the roofs to the already limited number of down comers. The position of these will be retained to allow the water to drain to the existing gully, which will be cleaned out and the drain jetted to ensure the water is efficiently removed from the building to eliminate the risk of subsidence.

The repairs are fully detailed in the schedule of works, specification and drawings, however in summary the repairs are as follows:-

ROOF

The roof has a number of slipped and missing slates and the mortar flashings to the water tables and abutment have failed. A number of slating battens have split and are displaced. As such it is proposed the roof is re-slatted. All the sound original slates will be reused, and any shortfall will be made up of slates to match the existing. The works will include renewal of the corroded rooflight. The reslating will include lead soakers, covered with a traditional mortar fillet at the junction with the watertables and roof to reduce the risk of water penetration.

The re-slating will enable repairs to the roof structure below. The main roof over the Granary is reasonably sound, and is generally serviceable with only a few rafters requiring renewal as these have split in places. However the eastern roof structures over the store and kennel are in poor condition, with more rotten timbers and rot to the wall plates. The condition of the timbers including the principle rafter and purlins over the kennel is such that it is beyond repair and will require complete replacement, while the roof over the store can be repaired with new rafters and wall plate. The repairs will be undertaken on a like for like basis to replicate the existing roofing arrangement of trusses/principle rafter, with purlins and general rafters.



Store Roof. Note decay to one of the rafters.



Kennel Roof. Note the missing and slipped slates, and decay to the purlin and principle rafter.

There is evidence of woodworm in all of the timber roofs, although it does not appear to be extensive. It is unclear as to whether this is active or not. However it is proposed the roofs are sprayed with a suitable bat friendly insecticide to prevent any further woodworm attack.

RAINWATER GOODS

The existing installation is poor with large sections missing and those that remain are corroded. It is therefore proposed that new cast iron guttering is installed throughout. This will be installed on rafter brackets as the roofs are to be re-slatted and these can easily be installed. The current arrangement will be replicated with the guttering running along the southern gable wall with downpipes discharging to the existing gully. The gully will be cleaned jetted and inspected to ensure it is efficiently removing water away from the base of the walls to eliminate the risk of subsidence.



Southern Gable Wall. Note the missing stonework to the apex, the rainwater goods, and the displacement of the east kneeler and surrounding stonework.

WALLS

The verge walls to the northern and southern gable walls are in poor condition, the water tables have displaced leading to the washing out of mortar and the loss of strength in these critical locations. This loss of integrity has resulted in the displacement of the kneeler and surrounding stonework. It is therefore proposed these areas are rebuilt to ensure there is a sound and firm base upon which the water tables can be re-bedded, so they can provide the necessary protection to the wall head. In order to limit the rebuilding and to improve the structural integrity it is

proposed that new stainless steel pins are inserted to reduce the risk and associated problems with any future movement of the kneelers as a result of the lateral pressures imposed by the watertables.

At the southern gable wall there is a fair amount of missing stone to the apex, however on close inspection internally it is clear there was a small dovecote type opening. This will be retained when the wall head is rebuilt.

There is some minor cracking to the west and southern walls but nothing of significance, however in order to prevent further movement it is proposed these are subject to inserting stainless steel stitches across the cracks to avoid the need to rebuild the masonry, ensuring as much of the original masonry is retained.

As with many rubble stone buildings of this age the repairs will include localised piecing in where stones are missing, rebedding stone that have been displaced and pointing up around timber lintels and areas of missing mortar.

However, at Sewing Shields it appears the walls have been pointed some time ago in a cement based mortar, giving the appearance that the walls appear sound. However on closer inspection these mortar joints are cracking and it is apparent that when it was repointed the original mortar was not removed, leaving a thin layer of cement mortar. The use of cement has reduced the porosity of the mortar joints, so when the wall is subject to wetting and drying the water will follow the course of least resistance, i.e. through the stone rather than the mortar joints. The wetting and drying cycle allows salts to crystalize at the surface of the stone, which encourages the decay and breakdown of the stone, rather than at the joint. It evident that a number of stone have decayed at a greater rate than the surrounding mortar joints. This process leaves a protruding mortar joint, which 'catches' water running down the surface of the wall and directs water into the wall, which accelerates the decay. In addition the cement mortar has no resistance to cracking and as such once the cracks are formed they provide a channel for water penetration into the wall, again exacerbating the problems. Given the above it is proposed the entire walling has the cement mortar hacked out and is fully repointed in a lime base mortar.

The mortar used in the repairs will be a naturally hydraulic lime with a sharp sand, in a 1:3 ratio. Samples will be prepared so the mix and application can be approved. The new mortar is to match what remains of the existing original lime mortar as closely as possible, though will be of a better, more durable quality.



Northern Gable wall. Note the protruding cement based mortar. Granary Floor: Note the decay to the floor boards.

FLOORS

There is little works proposed to the floors as these are mainly in situ modern concrete slabs. However there is a brick floor to the kennel. A number of the bricks have decayed and a number of these will be renewed to reinforce the surface.

There is some rot to the first floor of the Granary as a result of the previous leaks to the roof. This will require a floor joist to be renewed. The floor boards above have also rotted in this location. However in other areas the boards have been subject to woodworm and are in a poor condition. This will necessitate the complete renewal of the floor boarding to enable the spaces to be used again. These will be replaced on a 'like for like' basis. The retained joists will be treated for woodworm.

The floor boards are missing to the kennel space, and the remaining joist are in a poor condition due to the leaks to the roof above. In order to provide and further storage space it is proposed the floor is reinstated. This will require new floor joists to be installed and new T & G timber floor boarding to be installed.

WINDOWS, DOORS AND JOINERY

The existing windows and doors will be retained where possible. They will be repaired where components are rotten. New timber to match the existing will be spliced in at cills, door boards and frames, so that the maximum amount of the original timber can be retained. The existing components will be rubbed down, new putty applied to glazing and redecorated to prolong their longevity.

However, where the windows are either missing or beyond repair new windows are proposed, with single glazing to replicate the existing fenestration pattern and timber section sizes. This is necessary to ensure the building is weather tight and secure to encourage its use.



Western Elevation: Note the window with missing vertical glazing bars in a poor condition. Note the external stair is unprotected and is hazardous to use.

The repairs will also include the installation of a new timber handrail to the external stone steps. Currently this is missing which leaves these external steps in a hazardous state. A simple handrail with timber posts and rails is proposed to maintain the very simple utilitarian aesthetic of traditional farm buildings.

In summary, the repairs and alterations proposed will bring the buildings back into a state of good repair, they will improve the buildings usefulness, encourage use and therefore promote maintenance which will improve the long term prospects of the buildings. The alterations are sympathetic using traditional materials to match the existing, as such will have a negligible visual and conservation impact. It is considered the repairs works do not harm the buildings. Indeed the repairs will be a positive enhancement to the buildings, which are currently in urgent need of repair, which detracts from their appearance.

Design and Access

USE

The building is used as part of the farming operation. Given its poor condition its use is limited, however this will be improved by the works

AMOUNT

The works to the buildings will be maintained within the existing volume of the buildings. No new space is proposed.

LAYOUT

The works are to an existing building, the form of which will not be changed by the repairs.

SCALE

The building range is scaled from single storey byres to two story byres. No additional space is to be created.

LANDSCAPE

The surfaces around the buildings will be maintained.

APPEARANCE

There are no significant changes to the building, only repairs carried out to the existing building. New windows and doors are proposed but these are to match the existing, and a new handrail to the steps is proposed to allow safe access.

ACCESS

Access to the site will be unchanged.