

Ref. 2102. May 2021 : Moorleys, Egremont, CA22 2UA,

Additional statements to support applications ref : 4/21/2154/OF1 and 4/21/2155/OL1

This document has been prepared in response to the conservation and design officer consultation dated 13th May 2021 following his site inspection on the 5th May 2021 and is set out to follow the general order of additional information request.

1.0 Barn wall re-construction.

The section of stone wall on the front elevation identified by the Structural Engineer as requiring re-building is now shown on the revised ground floor plans as solid masonry wall with stone facing bonded and coursed into the existing front elevation all re-built using a lime-based mortar.

2.0 PV array.

The building occupies a rural location and based upon the clients requested renewable energy strategy, that principally sets out to minimise carbon production in both the short and long term, the PV arrays will be an intrinsic part of this. The primary heat source will be from an air source heat pump operating within a highly insulated building fabric, as detailed below and a significant electric loading will also be required to service an electric vehicle charging point which will be in an external location on the new boundary wall again demonstrating our clients commitment to renewable energy technologies.

It is proposed to site the PV panels on the barn roof with a south east aspect which is considered to be the most appropriate location utilising a surface mounting system feeding through to an external inverter box located adjacent to the new access gate wall, as the barn roof is to be replaced all cabling and fixings will be concealed within the new structure or buried underground in protective conduit.

Additionally, the property does not currently have an electricity service and Electricity North West have initially only offered a limited capacity supply, we think this is due to local infrastructure issues, but the proposed PV design assessment, as enclosed Helioscope document t, is considered to be essential to provide the additional energy input required.

3.0 Chimney stack

The original chimney stack, which we have established from historical documentation, was located in the farmhouse above a substantial chimney breast and fireplace, however at some time during the implementation of the, then approved, construction works the structure completely collapsed; the internal walls have been re-built with concrete blocks and the new farmhouse roof constructed across where the stack was originally located.

Our client has no further knowledge about this element of work and there appears to be a lack of recorded information detailing the original feature so any recreation would not necessarily follow the original form or need for a chimney stack.

It was never our clients intention to provide a solid fuel heating appliance in the property and it was only during earlier correspondence with the planning department that an alternative location over the barn was suggested with an indication that such a location would probably be acceptable.

We would also advise that it is still our clients preference, based upon the renewable energy strategy, not to have any solid fuel burning appliances and we can remove the chimney stack from the elevation detailing if this is preferred.

4.00 Barn walls.

It is not intended to render any of the barn walls they will however require a substantial upgrade in thermal performance to allow the introduction of low carbon heating technology. The external face will be repaired as required and the existing stone re-pointed with lime mortar, however, as stated above, the principal energy source is proposed to be an air source heat pump which has limited output when compared with an oil boiler and as such the fabric of the building will require a high degree of thermal insulation.

The submitted drawings detailed the current proposal which in general terms involve the fixing of galvanised wall lining brackets on to the face of the existing stone at regular intervals, these will be provided with adjustable legs lengths to support vertical metal studs to create a vertically and horizontally level surface, insulation is then installed between these studs and the wall finished with an insulated plasterboard. The whole system will be set out to retain a minimum clear ventilation path across the face of the existing stone walls of at least 50mm and more in places where the uneven wall face deviates from a vertical line.

We appreciate this specification uses modern high-performance products but still consider it to be appropriate for the location to provide the designed thermal fabric efficiency in as small a material make up thickness as possible suitable for the renewable energy strategy.

5.0 North side lean-to

The previously installed damp proofing wall lining system is to be removed from the lean-to section as well as the other walls in the farmhouse, the internal cement render coat will then be reviewed and removed where possible avoiding any areas that are could damage the stone facing, similar actions will be implemented for the external face again removing the cement render where possible. The walls will then be allowed to dry out before applying a new lime based external render system with the inside insulated as detailed above for the barn walls.

It is not intended to break out the concrete floor slab as it is considered that this could possibly destabilised the base of the existing external walls which appear to be partially underpinned by the concrete, the floor slab contains an effective DPM and the remedial work proposed to the walls together with the surfacing of the external ground level and the introduction of surface water land drains are considered to be sufficient to remove the current damp problems.

6.0 Windows and door and material detailing.

The previous planning application detailed the windows for the farmhouse which were installed when our client acquired the site, the remaining windows required to complete the development will be manufactured to match. Similarly, the larger door openings were detailed to have slim framed aluminium frames, these are still to be procured to details approved under the previous applications.

The roof of the farmhouse has already been replaced using what we understand to be material again approved under the earlier planning conditions and it is intended to continue this roof finish across the barn replacing the interlocking concrete tiles.

External paved materials and driveway finish are covered in point 9.0 below.

The new stairs will be of bespoke manufacturer but are unsure why this would need to be to agreed details, it is to be located in a different configuration and form to the original stairs which has already been removed.

Other general wall finish materials are discussed in other parts of this document and will be, where applied to existing stone walls, of a suitable breathable traditional nature suitable for the particular application.

We suggest any specific materials are conditioned for further confirmation before the materials are introduced to site.

7.00 Structural Engineers information.

The Structural Engineers drawing reference D1588/Sk.08 details the structural element for the garden retaining wall, which has been re-recreated on the sections, copy now enclosed of D1588/Sk.08 for your records.

8.0 Barn roof timbers

The Structural Engineer will review the timbers when the barn roof is stripped and the trusses lowered to the ground, however an initial assessment indicates that they are unlikely to be used in a structural context due not only to their condition but also section size which would fail to meet current designed load condition.

9.0 Driveway material.

Our client is not wanting to finalise the material specification for the external works until the development has progressed further and the impact of the vehicle turning area is able to be perceived in terms of the outlook from the habitable rooms on the ground floor.

10.0 Conditions.

We do not object to the introduction of conditions if they are considered to be required but request that these are worded to allow the general construction work to proceed as quickly as possible to allow the farmhouse at least to be rendered habitable and the barn structurally secured rather than restrictions being imposed that would require the approval of matters reserved by condition in advance of any further construction work proceeding.