

## Ref. 2102: Moorleys, Egremont, CA22 2UA, proposed reinstatement of the existing farmhouse and extension into adjacent barn to form a new dwelling. New lime render specification to accompany revised Planning and Listed Building Consent applications.

## 1.0 Proposed new lime render details.

Externally it is proposed to apply a render finish to the rear wall of the barn which is intended as a measure to overcome the poor quality sandstone facing of the external wall in this location.

This wall has a north westerly orientation and as such is subject to direct exposure from the prevailing weather conditions which over the years have caused the surface to deteriorate, additionally the original stones used to construct the wall were composed of many small pieces in uneven coursing, both of these points are indicated on the photographs below. The application of a render finish will provide a more durable finish and also help to avoid water penetration through the solid walls of the barn which is to be converted to living accommodation with an insulated independent internal lining, limiting the finish to the rear wall will avoid any significant impact to the properties general appearance.



Photograph of the existing rear barn wall showing the effect of the weathering, the structural support plate will be removed when the front wall is re-constructed.





Detail of the rear barn wall showing the poor quality small weathered stone pieces.

Advice has been obtained from a specialist lime products supplier:

## Mr Tim Wells of Eden Hot Lime Mortar

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## Who has reported as follows:

The existing wall appears to be slightly hollow and I would suggest it also needs a lime grout to fill the centre of the wall back up. Before this is done the wall would have to be repointed up to one metre high barring a hole approx. 50mm high and 1.5m between each hole, then grout the wall and plug the hole once the grout gets to that point. Leave the grout to set for approx. two weeks then keep working up the wall with the same procedure. Dubbing out can then take place followed by the harling coat and hot lime wash.

We as a lime industry have done a great deal of learning in the last few years, NHL's are a modern invention, they are supposed to mean Natural Hydraulic Lime, but in most cases this is not correct, they are getting harder year on year and not coping with handling the moisture, we are going back more and more to the hot mixed lime mortar that was used for centuries and adding a pozzolan to give a hydraulic set, this can be China clay powder, terracotta brick dust, wood ash etc.



Rainwater goods need to be installed full length to avoid any water run off onto the render finish and work must be carried out during favourable weather conditions.

Mix for the grout 4 quick lime 4 limestone dust 1 argical m1000 12 water Handful of fine fibres

Pointing mix 1 quick lime 3 sharp sand Up to 10% argical m1000 of the quantity of lime used

Wet dash
1 quick lime
4 sharp sand
5% argical of the total mortar
6mm chippings?

Hot lime wash- three or four coats, pigment added if a colour required other than white

The render will also be applied with an increased thickness, forming a plinth with a chamfered top edge, to the lower section of wall adjacent to the ground level to provide additional splash protection to the finished wall. Rainwater goods will be installed for the full length of the roof to avoid any water run off onto the render finish and the work will only be carried out during favourable weather conditions.

First issue 2022-02-22 to accompany planning and listed building consent applications submitted to Copeland Borough Council by The Manning Elliott Partnership.