

Mr John Harris
11 Warren Lodge Gardens
Halifax
HX3 0RB

Date 10th February 2022
Our Ref: 21463

Dear Mr Harris,

Re: Lower Deerplay Farm, Triangle, Sowerby Bridge, HX6 3DT

With reference to the issue of our recent Conversion Report ref: REP 001(A) dated 15th November 2021, we would write to advise you of the validity of our report in relation to the proposed scheme. Considering the scheme as outlined on the following Stoddard Architecture drawings:

2021.019 PL102 – Proposed Elevations
2021.019 PL100 – Site Plan - Proposed
2021.019 PL101 – Proposed Plans
2021.019 PL04 – Elevations Existing
2021.019 PL03 Plans As Existing
2021.019 PL02 Site Plan As Existing

We would expect the external walls of the existing barn to be underpinned to a sufficient depth such that they do not project above the proposed ground level. Trial pitting around the building revealed weathered sandstones at shallow depth therefore good bearing strata is available without the need for wide or special foundations.

Consideration will need to be taken by the contractor to ensure that the building and the excavation side will remain stable while the underpinning operations are carried out, the nature of the sandstone strata will greatly assist in this regard.

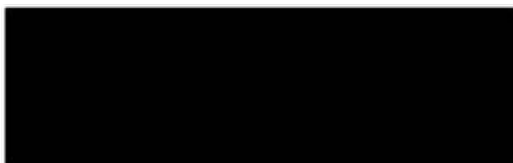
Broadly, we would expect the following sequence of work to be carried out.

1. Remove the existing roof covering.
2. Carry out repairs to the elevation walls as required and install crack stitching bars as necessary.
3. Excavate down the front and rear of the elevation wall in section (legs) not greater than 900mm.
4. Excavate material under the exposed foundation.
5. Clear out loose material and insert dowel bars into the adjacent ground.
6. Cast a new "L" shaped foundation base, with the top of the base lower than the proposed new floor level to account for insulation and ongoing finishes.
7. Install a suitable waterproofing/tanking system to protect the habitable spaces.
8. Pack the underside of the existing foundation tight to the top of the new underpinning leg.
9. Move to the next leg and repeat from item 1.
10. Some limited local rebuilding of the southwest corner and western gable walls may need to be undertaken that will require some lateral restraint or propping of the remaining walls, while the work is being undertaken.
11. After the underpinning is completed, construct the new external masonry.
12. The sequence of work and inclusion of any wall propping to be agreed with the contractor carrying out the underpinning ensuring that there is a period of three days between any adjacent legs.

The proposed new farm access track to the south and garage will require some degree of temporary propping works which should be carefully sequenced with the underpinning works to ensure the work progresses in a safe manner.

Notwithstanding the underpinning requirements for the proposed scheme, the conclusion of our report that the building can be converted, remains valid.

Yours sincerely,



Adrian KM Smith IEng AMIStructE MICE
For Dudleys Consulting Engineers Ltd