

structurally as it now impacts the existing structure by accommodating roof spread and removing supportive dead load from the gable walls from the ridge. This alteration/repair has likely been the primary cause of the issues in the western section.



Image 10 showing rebuilt blockwork pediment and plank upright supporting ridge plank. Image 11 showing lack of ridge support and high collar ties that are not as per original construction and allowing lateral thrust on the walls that never existed in the original construction arrangement.

3.5 Photo Log

For a full accounting of all structural defects that are considered minor in the context of the buildings history please refer to the photo log in Appendix A. The log recognises issues relating to repointing frequently being required throughout, insect attack and water ingress on timber elements (most notably lintels), separation of stone facades internally and externally from the rubble core, vegetative growth causing distortion of walls and affecting the structure via an additional dead loading etc. The most notable item in terms of immediate safety are the loose and recently fallen roof tiles, a period of severe weather preceded my appraisal with high winds recorded, however there is a clear risk to human health from falling roof tiles and we advise access to the structure is restricted with a tool box talk and PPE for all requiring to access the structure.

4.0 Conclusion

4.1 General

The western section of the structure is in a very poor structural condition and is at risk of collapse with partial collapses already evident at pediment and wall junctions and it is believed to be inevitable that large sections of wall and the roof will collapse soon if left in its current state.

We believe this, as is often the case, is due to several contributing factors but most notably due to the replacement of the roof structure and the in-filling of openings with block/brick and cement-based mortar. The result of the modifications to the roof has been to remove necessary dead load from gable walls that was in place via historic purlins and set up a loose (collar tie) rafter arrangement due to under specifying and poorly installing a timber ridge beam support, this has allowed the generation of thrust at the head of the walls and the infilled panels have reduced

the walls pre-existing inherent ability to absorb these loads without severe cracking.

The wall is now severely distorted, and the movement is progressive and will continue to worsen as further ridge timbers and collar ties fail that will generate increased loading to the walls and exasperate the issue. The wall distortion and cracking > 600mm is likely at a point at which repair is not probable without a significant investment and engagement with a specialist conservation remediation company to make good and monitor the wall, however the roof would need replacing in its entirety to prior to this to prevent the progressive movement that is currently occurring, again the specification of the new roof would present a significant investment as it must be ensured it is designed in line with the structures historic fabric and prior to stabilizing of walls.

The eastern section largely was free from the most severe issues however significant cracking, vegetative growth and incorrect historic remedial fixes are present that will require addressing.

Most notably for both sections there is an imminent health and safety risk associated with the structure in the western section as outlined above and throughout from falling and loose roof tiles.

4.2 Proposals

The proposal to create a ruin-scape area with the structure is possible and would mitigate current risks associated with the structure, however the local authority alongside the client must determine the cost/benefit of the issues raised herein. Should this be adopted a maintenance plan is strongly advised for the structure to ensure it remains safe.

5.0 Rights of Originator

This report has been prepared for the sole use of the client only. It must not be reproduced or transferred to any third party without the express written permission of the author. It should not be relied upon by any third party.

Short of the whole structure involved being dismantled, an appraisal can only ever be based on the areas investigated in the belief they are representative.

We will consider the reissue of the report in its original form to a third party within six months of the original report date for an administrative fee, this being 50% of the cost of the original report/s. Upon the lapse of six months, the report can only be reissued following a full reinspection which will be charged at the current full survey rate.

We reserve the right to refuse copies of the report to any third party (other than those named previously). We also reserve the right to amend our opinions in the event that additional information is made available at some future date.

APPENDIX A: PHOTO LOG

EAST ELEVATIONS – SEE REFERENCE MAP PAGE 4



E1- Full Elevation



E2- Undulating roof – cementitious render and repointing evident



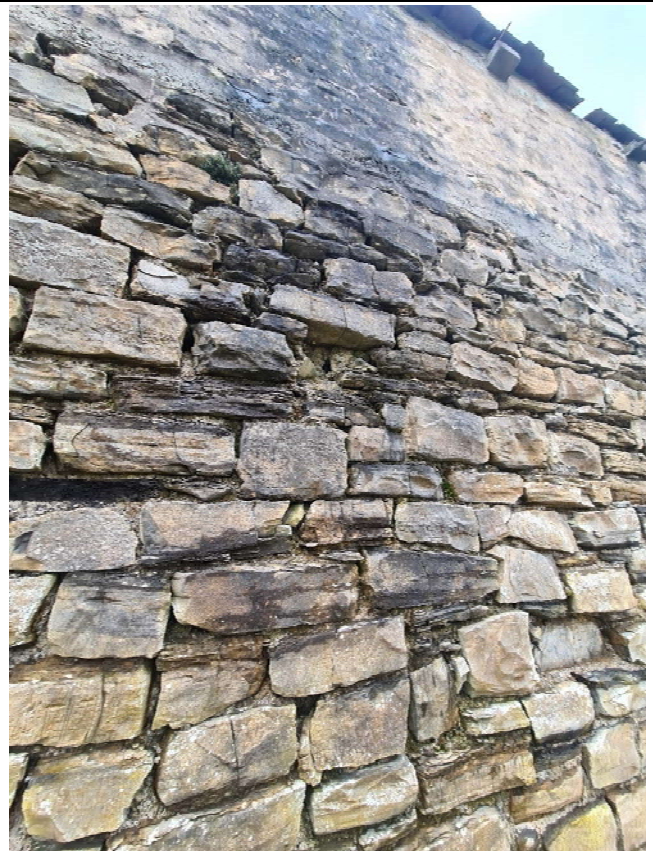
E3 - Fallen roof tiles adjacent to external wall



E4- Wall out of plumb and cementitious repointing



E5- Cementitious render and water staining



E6- Repointing required, crumbling and flaking stonework



E7 - Water staining, repointing required - generally in good order



E8 - Repointing work required



E9 - Arch and vouzsoirs in good order. Clear vertical break to west

NORTH ELEVATIONS – SEE REFERENCE MAP PAGE 4



N1 – Full elevation photo



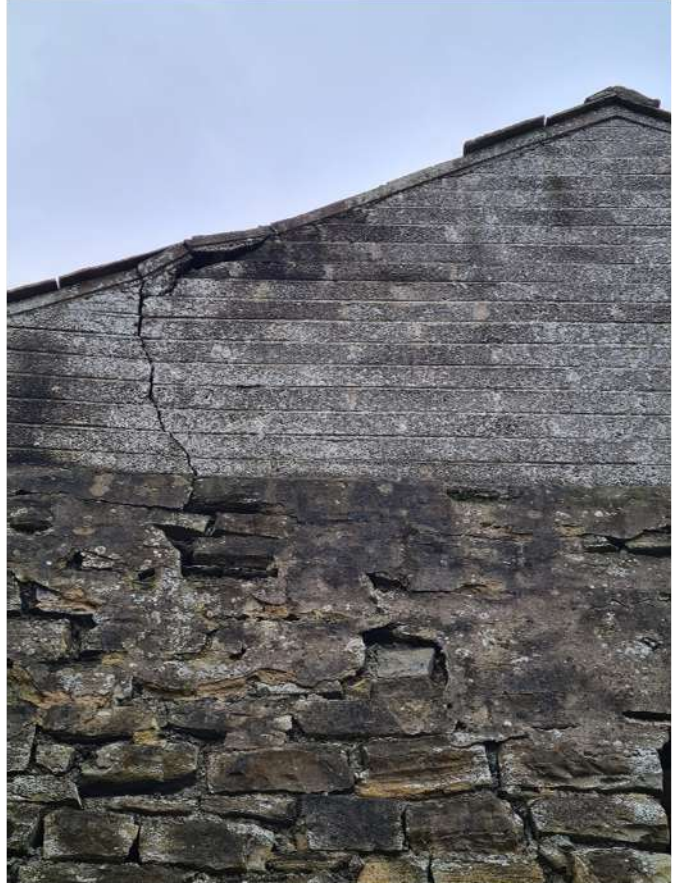
N2 – 90mm separation from stone door frame – corroded metal



N3- Separation of east elevation wall evident in vertical cracking



N4- Separation of stone door frame



N5 - Rebuilt blockwork pediment and recent vertical crack,



N6 - Timber lintels weather damage and insect attack observed



N7 - Diagonal cracking in left hand corner