

IR / P896

Mr J Daughtry
Provectus Developments
26 Kings Hill Avenue
Kings Hill
West Malling
Kent
ME19 4AE

19th May 2022

Dear Mr Daughtry,

**RE: BARN, ABBEY FARM, CHURCH STREET, HIGHAM, ROCHERSTER, KENT ME3 7LS-
STRUCTURAL ENGINEERS REPORT ON PROPOSED CONVERSION**

1. Further to my site visit on 21st April 2022 I now report my findings and recommendations.
2. The barn is single storey precast concrete framed building with steel & timber push walls at low level, timber slats at high level and a corrugated cement. See Photos 1 to 8.
 - 2.1. The barn is not present in the 1960 aerial photograph but is in the 1990 photograph. We estimate that it was probably constructed in the late 1960's.
 - 2.2. Alan Baxter Partnership LLP visited the building in order to carry out a non-intrusive inspection and to give an overall view on the general structural condition of the barn, with a view to domestic conversion.
 - 2.3. The building was in use as a wood store at the time of our visit. No finishes were removed during our inspections to reveal concealed structure.
 - 2.4. As structural engineers we are unable to advise on matters of timber decay and damp penetration.
3. The building appears to be in reasonable structural condition considering it for its age, type and use.
4. The corrugated sheeting roof is supported on precast concrete purlins, which are in turn supported on precast concrete portal frames. See Photos 5 to 8.

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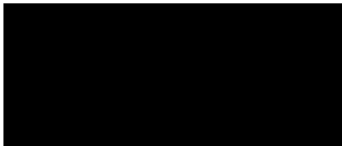
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- 4.1. The main concrete portal frames appear to generally be in good condition, with no visible cracking and spalling. See Photos 5 to 8.
- 4.2. Generally the reinforced concrete, where visible, is in good condition with no significant cracking or spalling noted.
- 4.3. The floor of the building is compacted earth with central raised concrete area.
5. The geological map of the area shows Lambeth Group which consists of sand, silt & clays.
 - 5.1. There is no evidence in the building to suggest significant differential foundation movement.
6. Conversion to domestic use, would from a structural perspective, be possible, even beneficial from a lateral stability viewpoint if internal cross walls and first floor is inserted.
 - 6.1. Conversion should be achievable without significant alteration to the main precast concrete portal frames of the barn.
 - 6.2. The precast concrete purlins are likely to be reaching the end of their life and consideration should be given to replacing them with modern pressed metal members
 - 6.3. Some secondary structure may need to be inserted to carry the weight of new ceilings etc.
7. The building is likely in excess of 50 years old and was constructed using materials and practices of the time.
 - 7.1. The building will require ongoing maintenance.
8. CONCLUSION
 - 8.1. The building is in a good structural condition considering its age, type and use
 - 8.2. Conversion to domestic use, appears to be structurally feasible without any significant alterations to the primary structure. The opportunity to insert a first floor and new internal walls into the building would greatly increase the lateral stability of the building.

Yours sincerely,



IAN RICHARDS
FOR ALAN BAXTER PARTNERSHIP LLP