



**STRUCTURAL APPRAISAL AND METHOD STATEMENT
OF
THE MAIN BARN (PLOT 3) AND SMALL BARN (PLOT 4)
AS PART OF THE REDEVELOPMENT OF THE ESTATE YARD**

At

**CAMPHILL
CHIDDINGSTONE CAUSEWAY
KENT TN11 8LE**

Client: THE REDLEAF TRUST

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REF: PS18.001.0408

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Paddock Wood
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1. INTRODUCTION

We have been requested to carry out a structural appraisal of the Main Barn (plot 3) and the Small Barn (plot 4) at the Estate Yard, so as to establish the potential for conversion of the 2 buildings into residential dwellings. This report is primarily intended for ancillary information, to be read in conjunction with the Planning Application documents and does not constitute a full summary for Building Regulation approval. Therefore, the primary concern of the report is to consider whether the buildings can be converted and adapted in accordance with Sevenoaks District Council's planning policies. We confirm that an internal and external inspection of the buildings at the application site was carried out.

2. DESCRIPTION

The Main Barn (plot 3) and the Small Barn (plot 4) at the Estate Yard are proposed to be converted and adapted including taking down a modern extension and rebuilding a more sympathetic lean-to extension in order to create 2 residential dwellings that will be in keeping with the surrounding buildings and other residential dwellings within the area. This is all as shown on the existing and proposed drawings submitted with the application.



The Main Barn (plot 3)



The Small Barn (plot 4)

3. FINDINGS

3.1. The Main Barn (plot 3)

The Main Barn comprises a mixture of sandstone, solid brickwork and concrete blockwork plinth walls. This in turn supports the main oak frame and external timber stud walls to the Main Barn and lean-tos. The later extension is of concrete blockwork. Internally there are areas of concrete

blockwork that have been inserted in order to provide the present commercial premises. This in turn has hidden most of the original timber frame structure, other than the main oak posts. Likewise a false ceiling has been provided throughout the barn which hides the main roof structure. The main roof to the original part of the barn and lean-to is a pitched timber roof structure with a clay tile covering. To the later extension there is a flat roof covering. There are a mixture of cast iron and UPVC rainwater goods throughout. There is a timber open rafter feet detail. There are single glazed windows and roller shutter doors. There appears to be a concrete floor within the Main Barn but this has a timber suspended ground floor above it to provide a level surface throughout the Main Barn and more modern extension.

The Main Barn has been utilised as a builders/joinery workshop and on the whole has been maintained over the years. Part of the main clay tile roof was re-tiled a few years ago. The later flat roof extension is now leaking and there is a temporary roof covering over the flat roof which is also now leaking. It is proposed that this modern extension will be removed as part of the proposal. In its place a more appropriate single-storey lean-to extension will be constructed which will be in keeping with the catslide lean-to on the south elevation. This will enable the original form and shape of the barn to be reinstated.

The building, where visible, is in structurally sound condition and is of permanent and substantial construction and is capable of conversion without major or complete reconstruction and the proposed conversion works will enable areas of the original oak framing to be revealed and exposed as part of the conversion works. The original external east elevation wall has been in part removed to allow access into the more modern flat roofed extension. As part of the proposals it would be possible to reinstate part of this upper elevation wall as shown on the proposed drawings. The ground floor will remain open as part of the living room where it links in with the new lean-to extension. Some of the more modern windows will be removed and a new glazed screen will be provided to the original mid-stray on the south elevation which is a common design feature within this style of Kent barn. Overall the fenestration will be rationalised together with the insertion of conservation roof lights to ensure that the appropriate number of openings are created for the accommodation proposed.

3.2. The Small Barn (plot 4)

The Small Barn comprises brick plinth walls with timber framed walls with a black stained weatherboard finish, this is all under a pitched timber roof structure with a felt tile covering. There are UPVC rainwater goods. There are timber single and double glazed windows. There is a timber entrance door. There is a concrete floor internally. The building is plastered and

decorated and has been used as an office to the builders yard. The building is in structurally sound condition and is of permanent and substantial construction and is capable of conversion without major or complete reconstruction. The proposal is for the Small Barn to be converted into a 2 bedroom dwelling. This will involve some internal changes and a few external changes but these are of a relatively minor nature. Please refer to the proposed drawings. The proposed roof covering would either be a natural slate, or a clay tile subject to a structural engineer justifying the existing roof structure can take the loading of the clay tile or natural slate covering.

4. METHOD STATEMENT

Both the Main Barn and Small Barn would be converted in a similar manner utilising the following Method Statement:-

1. Erect Heras fencing around site to secure the buildings.
2. Carry out demolition of modern extension to Main Barn and clear from site.
3. Allow to carefully clear out modern blockwork, false ceilings, etc, shown to be removed from the Main Barn and the Small Barn and clear from site.
4. Allow to inspect the main oak frame and carry out timber frame repairs as necessary.
5. Allow to carry out minor repointing and repairs to brick plinth walls, where necessary to both buildings.
6. Allow to erect scaffolding to both buildings in preparation of works to main walls and roofs.
7. Allow to remove existing weatherboard finishes, provide insulation to building regulation standard, provide ply wood lining and reinstate black stained weatherboarding finish to all external walls.
8. Allow to strip existing roof coverings and retain clay tiles for re-use (north elevation roof slope of Main Barn will not require re-tiling).
9. Allow to provide appropriate insulation to roofs and then breather membrane and tile battens and reinstate clay tiles to Main Barn and clay tiles or natural slate to the Small Barn.
10. Allow to insert new timber windows and doors and conservation roof lights all as shown to link in with works above.
11. Allow to provide new rainwater goods to the buildings.
12. Allow to carry out external decoration works to both buildings.
13. Allow to construct new lean-to extension to Main Barn.
14. Allow to carry out foul and surface water drainage works.
15. Allow to carry out external landscaping works to include paths, paved areas and new driveway and parking area.

16. Internally within the buildings allow to make alterations to internal walls in order to provide accommodation as shown on the proposed drawings. Include for insertion of new first floor structure to the Main Barn.
17. Allow to check condition of existing concrete floors and retain where necessary.
18. Allow to provide new insulation to ground floor structure.
19. Allow to insulate the buildings to building regulation standards.
20. Allow to provide plasterboard and plaster finishes.
21. Allow to provide all internal joinery, including kitchens, internal doors, etc.
22. Allow to provide floor finishes.
23. Allow to carry out the internal decorations.
24. Allow to provide plumbing and electrical installations to include sanitary ware all to comply with building regulations.
25. On completion allow to clear all builders materials, etc, and complete landscaping works and obtain building regulation completion certificate to complete the conversion works.

5. CONCLUSIONS AND RECOMMENDATIONS

As previously stated, the purpose of this report is to establish whether the buildings could be converted for residential use. From our observations, we are of the opinion the proposed works as shown on the drawings, are a viable undertaking and that the existing buildings are in a structurally sound condition and are of permanent and substantial construction and are capable of conversion without major or complete reconstruction, in accordance with policies set out by Sevenoaks District Council. The application drawings include details of the existing and proposed layouts which can be considered a logical and sympathetic re-use of these traditional buildings, all as shown.