# ALAN BAXTER PARTNERSHIPLE

## CONSULTING STRUCTURAL ENGINEER



JF/L469-001

Mr T. La Dell Tom La Dell Landscape Architecture Stocks Studio Grafty Green MAIDSTONE ME17 2AP

29th February 2024

Dear Mr La Dell

# RE: NURSERY BARN, FORMER NURSERY SITE, STAPLEHURST ROAD, MARDEN, TONBRIDGE TN12 9BS - STRUCTURAL REPORT FOLLOWING INSPECTION OF BUILDING

- 1) It is proposed to convert a former nursery storage building to residential use. A site inspection was carried out on the 18<sup>th</sup> May 2023 to consider the structural suitability for conversion.
- 2) We have been informed by our client that the Council refused the previous application because we have failed to demonstrate that the development represents the conversion of a building, with reference to the High Court decision on the Hibbitt case. We have reviewed the Council's decision notice, the case officer's report and subsequent email sent to the client's planning consultant, Peter Court, dated 14<sup>th</sup> February 2024. As a Chartered Structural Engineering practice, we are fully aware of the Hibbett judgement. We consider the Council's decision to refuse permission to be completely unjustified and we stand by what we have set out in this report.

#### **Description**

3) Nursery Barn is located to the north of Staplehurst Road, accessed via an unmetalled road, serving similar barns and residential properties. The barn comprises a mono-pitched timber building, subdivided with divisions to the left or east side of the building and was built approx. 18 years ago.

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IAN RICHARDS BSc CEng MIStructe, SIMON RAYNER BSc CEng MIStructe, Adrian Long BEng (Hons)
ASSOCIATES: David Davies IEng AMIStructe, Graham Spittle, James Folley
CONSULTANT: Michael Lewis

ALAN BAXTER PARTNERSHIP THE CLOCK BUILDING PYMPES COURT BUSBRIDGE ROAD LOOSE MAIDSTONE KENT ME15

TELEPHONE: 01622 744263 FAX: 01622 749270

POOLE OFFICE: WESTONS POINT HOUSE WESTONS POINT BOATYARD TURKS LANE POOLE DORSET BH14 8EW

TELEPHONE: 01202 748712

EMAIL: mail@abpengineers.co.uk Website: www.abpengineers.co.uk VAT REGISTRATION NO. 373 6951 20 LLP No. OC319497

- 4) The barn is constructed with a load-bearing timber structure, clad internally with plywood with timber weatherboarding fixed externally. The roof is constructed with 4 No. timber principal rafters with timber purlins spanning between, in turn supporting 115mm steel composite sheet roof panels.
- 5) The building structure is built from a ground-bearing concrete slab which has trench fill foundations to the perimeter we are advised. The building was last in use by the nursery business which ceased trading over 5 years ago. The barn was measured as 5.8 x 13.3m on plan, 2.75m at the high eaves and 2.2m to the low.
- 6) The front of the barn faces north with the high eaves to that side and with the shallow-pitched roof falling to the rear or south. There is a pair of side-hung doors to the left side of the front elevation with 3 higher-level windows to the right.
- 7) The floor level is set approx. 150mm above the level of the concrete apron found to the immediate front of the building. The sides and rear of the barn externally are somewhat overgrown. The weatherboard cladding is the same as the front of the building and appears similarly well maintained.

#### **Observations**

- 8) The British Geological Survey map sheet 288 covering the area shows the site to be underlain by Weald Clay with 2<sup>nd</sup> terrace river gravels found to the west of the site. The Weald Clay is a good founding subsoil but which can be greatly affected by moisture changes due to tree root extraction which can cause large changes in volume and hence movement of a building's foundations. Trial hole investigations of the building foundations will confirm their depth and the supporting subsoil beneath.
- 9) Nursery Barn is situated within a plot containing other barns and storage buildings, all the nearby buildings appear to be no longer in use with the site in an overgrown condition. The site falls slightly to the north east with ground levels generally level around the building. The barn is some 55m north of Staplehurst Road and approx. 80m east of Nursery Cottages. As mentioned previously, some other agricultural storage buildings are located nearby to the north.
- 10) The building was seen to be in good condition with generally flat even walls and straight, level eaves lines. The barn was constructed in 2006 and appears to have not been in use in recently. Some lichen and algal growth was seen to the exposed timber, but otherwise noted to be in good condition. The rainwater downpipe to the gutter at the low end of the roof was seen to discharge on to the ground. A WC was noted to the left front of the barn which discharges to a septic tank we are advised. Mains water and electricity were also noted within the barn, although both are not currently connected.

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11) An agricultural boundary fence was found to the south, approx. 5m from the rear of the barn, with no other fences or boundaries visible from the barn location. The barn is currently in use for the storage of agricultural and nursery supplies and was found to be dry and weathertight. The ground floor slab was measured as flat with no significant falls or observed indications of settlement. The walls were found to be generally level and plumb with no indication of settlement or movement observed.

#### **Conclusions and Recommendations**

- 12) We consider Nursery Barn to be in good condition and was found to be structurally robust and permanent. We consider that the building appears suitable for conversion to residential use. However, as is always the case, some minor works will be required to convert it into a habitable building. An outline of the likely works and the reasons for them are given below.
- 13) The existing roof is insulated but may not comply with current requirements for a residential property. We do however note that the erection of internal lining walls will allow for such support and will allow the installation of insulation if required, without any significant works to the roof or wall structure itself. The existing timber structure appears to structurally stable with plywood sheathing to the inside face, which will provide sufficient stability against racking of the structure. Based on our inspection, we do not consider that a more invasive timber investigation is required.
- 14) The lack of external plinth wall to the barn may require works to provide consistent damp proofing and weathering to the bottom of the external walls. Trial holes will be required to expose the slab edge or foundations and supporting subsoil. Subject to that inspection, the external walls may need additional foundations to support the external walls, but it is considered likely that the existing ground floor slab and foundations will be suitable to support internal walls and structure.
- 15) In conclusion, we consider Nursery Barn to be sound and stable, with no obvious structural barriers to prevent the conversion of this barn to a dwelling under Class Q of the Town and Country Planning (General Permitted Development) (England) Order 2015 (as amended).

Yours sincerely

JAMES FOLLEY
FOR ALAN BAXTER PARTNERSHIP

June MW Felley



View on front of Nursery Barn from north



View on front of barn from east



View along rear elevation of barn showing trees and foliage



View inside of barn looking to west showing wall lining and roof construction



View inside of barn to east