



45 Westmorland Drive
Felpham
West Sussex
PO22 8NA

March 2018
IH Ref: ABF1090/AOB

Giles Dixon
Arundel Properties Ltd

By E-Mail ONLY

Dear Giles,

**Proposed Development at Arundel Equine Centre, Tortington, Arundel
Structural Appraisal of Existing Stables With the View of Converting Into a Residential Unit**

Following our site inspection/appraisal, on Wednesday 28th February 2018, of the existing timber framed stable buildings with the view of it to be converted into a residential dwelling. At the time of inspection the weather was clear. Our structural appraisal is as follows:

Existing Timber Framed Stable Outbuildings Inspection

The existing stable outbuildings were 2 single storey softwood timber framed buildings which shared a dividing wall (also please refer to attached drawing).

The larger of the 2 stable buildings was approximately 10m wide x 17m in length with corrugated metal sheet roof and horizontal timber weather boarding to the external walls. The metal corrugated sheet roof finish was fixed to softwood timber purlins at 600mm centres (approximate size 50x125). The purlins seemed to be in good condition when viewing at ground floor level with no structural defects visible. The purlins were supported on timber frames at 3m-4m centres along entire length of the building. These timber frames were formed using 4/70x150 timber posts, 2 situated within the external wall and 2 situated internally within the front of the stable buildings. The timber posts were supporting the principle rafters, and all were fully fixed together at all intersections with plywood gusset plates. All timber frames visible were in good condition with no structural defects noted. The make of external walls was mainly 50x100 timber studs with wood internal finish and were built off blockwork at ground floor level. The ground floor to the buildings was a reinforced in-situ concrete ground bearing slab throughout, and visually seemed to be in good condition with no structural defects noted. The existing foundations were not exposed for inspection at the time of our visit, however we would assume that they were in good condition as there was no evidence of subsidence or structural failure noted.

The smaller of the two stable buildings was approximately 6m wide x 10m in length and was split into two sections, 1 being additional stables and the other a storage area. Again, the roof covering was a metal corrugated sheeting fixed to softwood timber purlins at 600mm centres (approximate

size 50x125), with timber weather boarding to the 50x100 timber external walls. The purlins and external walls seemed in good condition when viewing at ground floor level, with no structural defects visible. The purlins were supported on a 50x100 timber studwork cross wall with a timber weather board finish, and a timber softwood truss with a slightly raised bottom cord. Both the stud cross wall and truss seemed to be in a good condition with no structural defects noted. The external walls and internal stud cross wall were built off brick/block walls at ground floor level. The ground floor in this area has been assumed as a ground bearing slab similar to that which was noted in the other part of the stables, and has been deemed to be in good condition with no structural defects visible. The existing foundations were not exposed for inspection at the time of our visit, however we would assume that they were in good condition as there was no evidence of subsidence of structural failure noted.

Proposed Conversion Appraisal

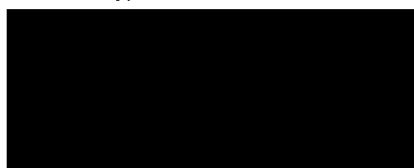
The proposed conversion consists of retaining both stable buildings in their entirety including all current existing finishes with the plan to over finish with a light weight timber cladding. The existing wall structures are mainly in good condition, however may require some local repairs and/or replacement of rotten timbers and treatment against insects. Due to the slight increase in weight of the proposed roof finishes there may be a requirement for local strengthening of the existing roof structure. Also, if the soil sub-strata is of a clayey nature and together with the nearby trees currently around the site there may be a requirement for underpinning to the existing foundations and the installation of a suspended ground floor to comply with current regulations. However, we would advise that you consult with your Local Authority/Warranty provider for advice.

Conclusion

We deem that the existing stable buildings are generally in good condition, structurally sound and are suitable for the proposed conversion works planned. However, there may be a requirement for some local strengthening/replacing of existing timbers with the possibility of underpinning of the existing foundations and the installation of a suspended ground floor structure.

We trust that the above is satisfactory, however should you have any comments or queries please do not hesitate to contact the undersigned.

Yours sincerely,
ABMH Ltd



Alun Blow

