



45 Westmorland Drive
Felpham
West Sussex
PO22 8NA

13th December 2017
ABMH Ref: ABF1090/AOB

Mr Giles Dixon
Clarendon Properties Ltd

By E-Mail ONLY

Dear Giles,

**Proposed Development at Arundel Equine Centre, Tortington, Arundel
Plot 5 – Barn Conversion & Alterations**

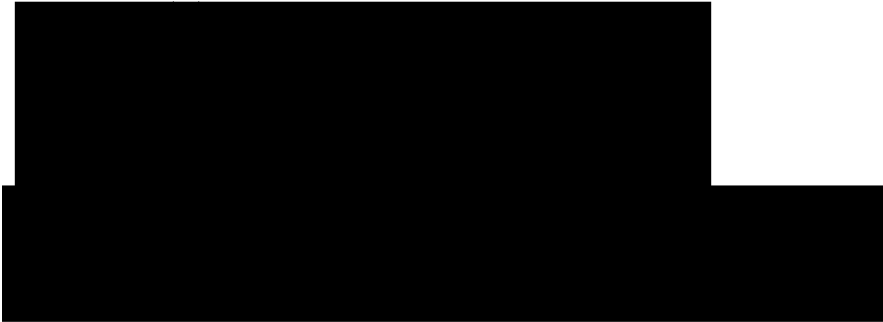
With regards to Plot 5 at the above development, we have now reviewed the structural survey/report by McCarey Simmonds undertaken on the 31st October 2015 together with the proposed conversion layout drawings produced by the Architect and we believe in our professional opinion that the existing barn building can be converted successively into living accommodation with no adverse effects to the existing structural frame.

As the existing main structural frame of the barn is in good condition and structurally sound we propose that it is kept in-situ and incorporated within the proposed conversion works design (as shown in the Architects layout drawing). There will be the requirement of local strengthening to some existing members to accommodate for new loads imposed on them, and some existing members will require replacing due to being rotten to a state of disrepair and structurally unsound. However, as stated above these works will be minor and localised and will not affect the overall structural stability of the existing structural support frame.

We would like to conclude by confirming that in our professional opinion the existing barn is in good condition and is structurally sound for the proposed conversion works outlined on the Architects drawings. As noted above some existing members will require strengthening or replacing, however this will be in localised areas and will not affect the overall structural stability of the building.

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

Yours sincerely,
ABMH Ltd



Inc: Copy of McCarey Simmonds Structural Appraisal Report
Copy of the Architects Proposed Ground Floor Layout Plan for Plot 5

MS03022/DS

Planning & Building Control Dept.
Adun District Council
Arun Civic Centre
Maltravers Road
Littlehampton
West Sussex
BN17 5LF

31st October 2015

Dear Sirs,

**Structural Appraisal of Proposed Conversion of Stables at Arundel Equine Hospital,
Tortington Lane, Arundel**

Further to the recent planning application for the conversion at the above property, please find below a Structural appraisal of the Timber framed stable buildings to be converted following our site visit on the morning of Wednesday 14th October 2015 and attached is a sketch layout drawing of the existing condition. The weather during the visit was cool and clear.

The timber framed stable Outbuildings - Existing Structural Condition

The Stables outbuildings were two single storey softwood timber framed buildings which share a dividing wall as per the attached sketches.

The large eastern stables building was approximately 10m wide x 17m long with corrugated metal sheet roof and horizontal timber weather boarding to the external walls. The roof was covered on the underside of the timber purlins with a boarding. The purlins were at approximately 600mm centres, where the underside of the purlins was exposed they appeared to be in a good condition but they were largely hidden by the boarding. The purlins were supported on timber frames at 3-4m spacing along the length of the building. These were formed with 4No. 70 x 150 timber posts, two in the external walls and two internal at the front of the stable bays. The posts supported timber principal rafters with plywood gusset plates at the junctions with the posts. The frames were also in a good condition where they were visible. The walls to the stables were largely clad with ply board on the internal faces

The Design Studio, 94 High Street, Steyning, West Sussex BN44 3RD

Directors: Brian McCarey BEng (Hons) CEng MStructE David Simmonds BEng (Hons) CEng MICE
Registered office: McCarey Simmonds Limited c/o Hughes Spencer, Latchmore House, 99/101 London Road, Cowplain, Waterlooville, Hampshire. PO8 8XJ
Company Number : 5436887 VAT Registration Number : 858 0208 23

but appeared to be 50 x 100mm softwood studwork where visible. The studwork appeared to be supported on a blockwork wall at ground level. The floor to the stables were insitu concrete throughout which is assumed to be a ground bearing slab and was generally in a good condition where visible. The existing foundations were not exposed.

The west smaller building was approximately 20m long and 5.5m wide and had been split into sections to provide additional stables, storage and a medical treatment room. The roof was metal sheeting over timber purlins at approximately 600mm centres which were in a good condition. The purlins were supported on timber studwork cross walls and in the larger rooms there was a softwood truss with a slightly raise bottom chord. The walls were formed with 38 x 75 softwood timber studwork and clad on the outside with horizontal timber boarding, where exposed the studwork was in a good condition. The studwork walls were supported on brick and blockwork walls at low level. There were concrete floor slabs within the various rooms which were in reasonable condition; however they are likely to be a ground bearing slabs.

The existing foundations had not been exposed as the building was largely surrounded by concrete hardstanding. The subsoil is likely to be river / beach sandy gravel deposits or Lambeth Group clay, silts & sands according to the geological maps. There were some fir trees about 7m to the south of the stables and there was a cherry tree and an oak tree about 15m to the east of the stables.

Proposed Conversion

The proposed conversion is to retain the walls and roof profile of the larger building and part of the smaller building. Some of the adjacent smaller building is to be removed. The existing wall structures are mainly in a good condition but are likely to require some local replacement of rotted timbers and treatment for insects. The existing roof finishes are likely to be an increase in weight from the existing corrugated metal sheeting and therefore the existing roof structure is likely to need some strengthening.

The subsoil is likely to be Clay therefore some underpinning may be required to conform with the current guidance, the underpinning depths would not be significant as the existing trees are not close. The ground floor slabs are likely to need to be replaced with a suspended floor to comply with current guidance on building near trees in clay subsoil.

Summary

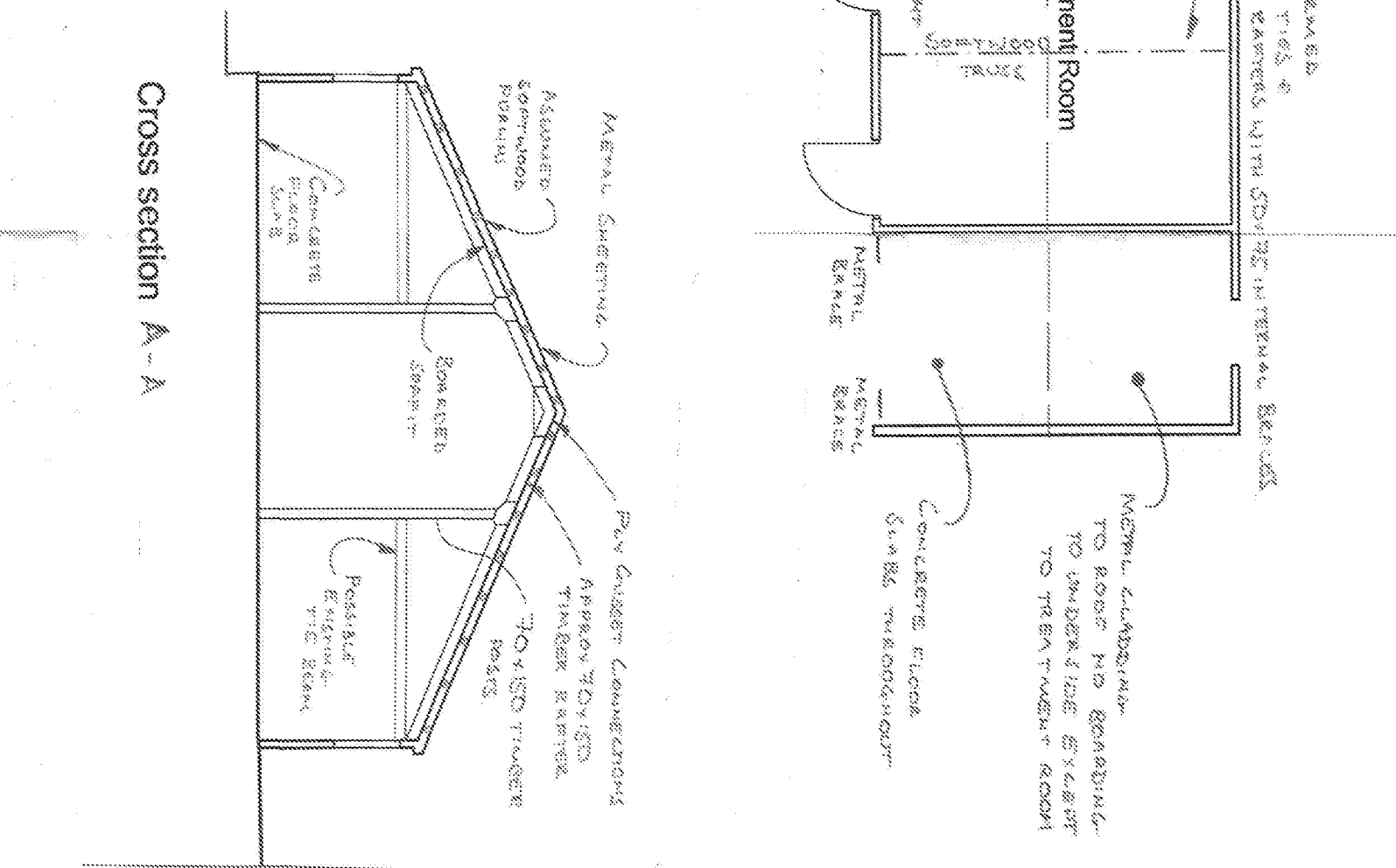
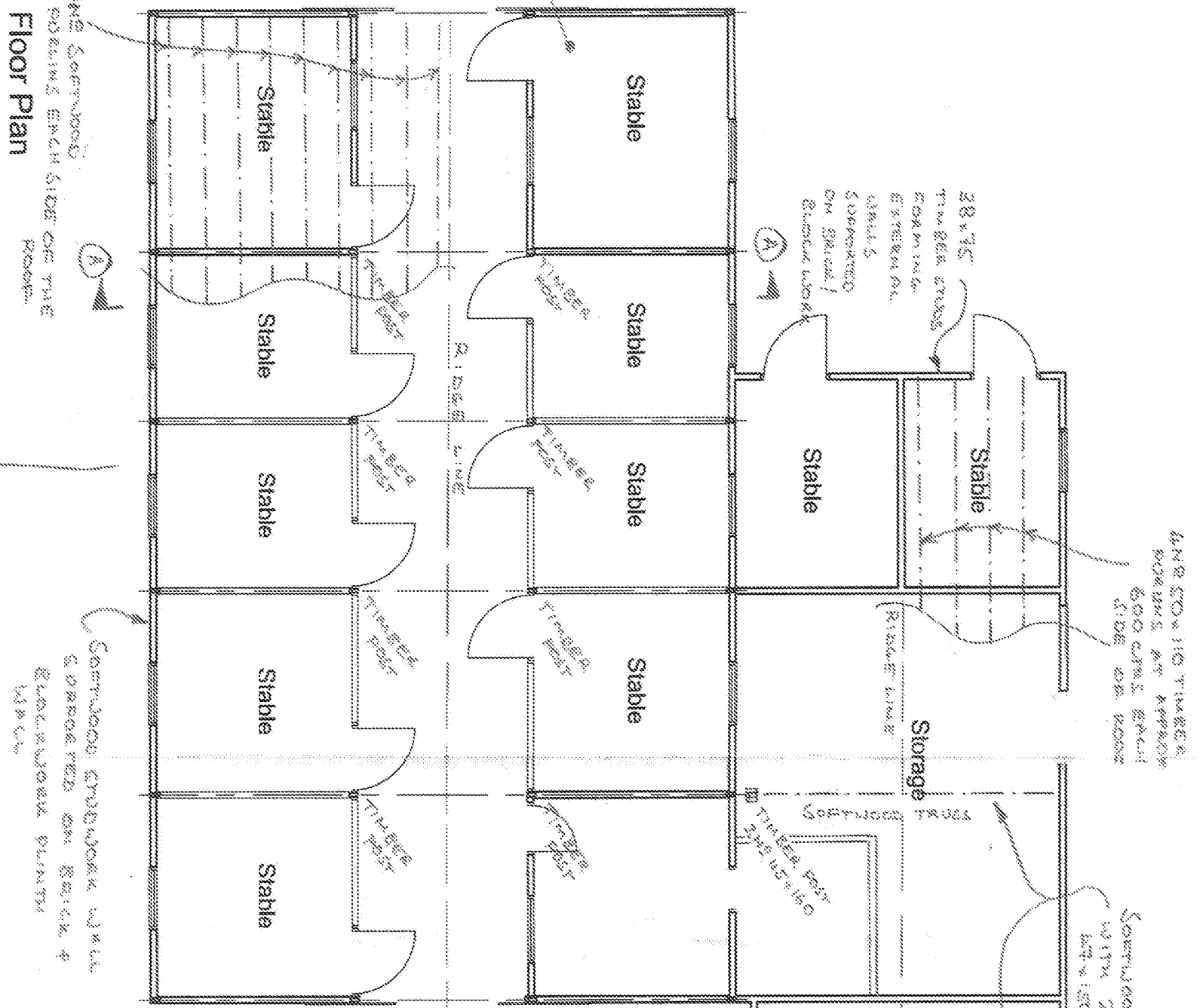
We consider the existing stable buildings are generally structurally sound and suitable for conversion, allowing for some strengthening and possible underpinning to allow for the location of the adjacent trees.

Please do not hesitate to contact us if you have any queries or require any further information.

Yours Sincerely

D C Simmonds - Director
McCarey Simmonds Limited

Cc Mr G Mount Folkes Architects



Cross section A-A

Floor Plan

Cross section A-A

McCarey Simmonds

Consulting structural & civil engineers

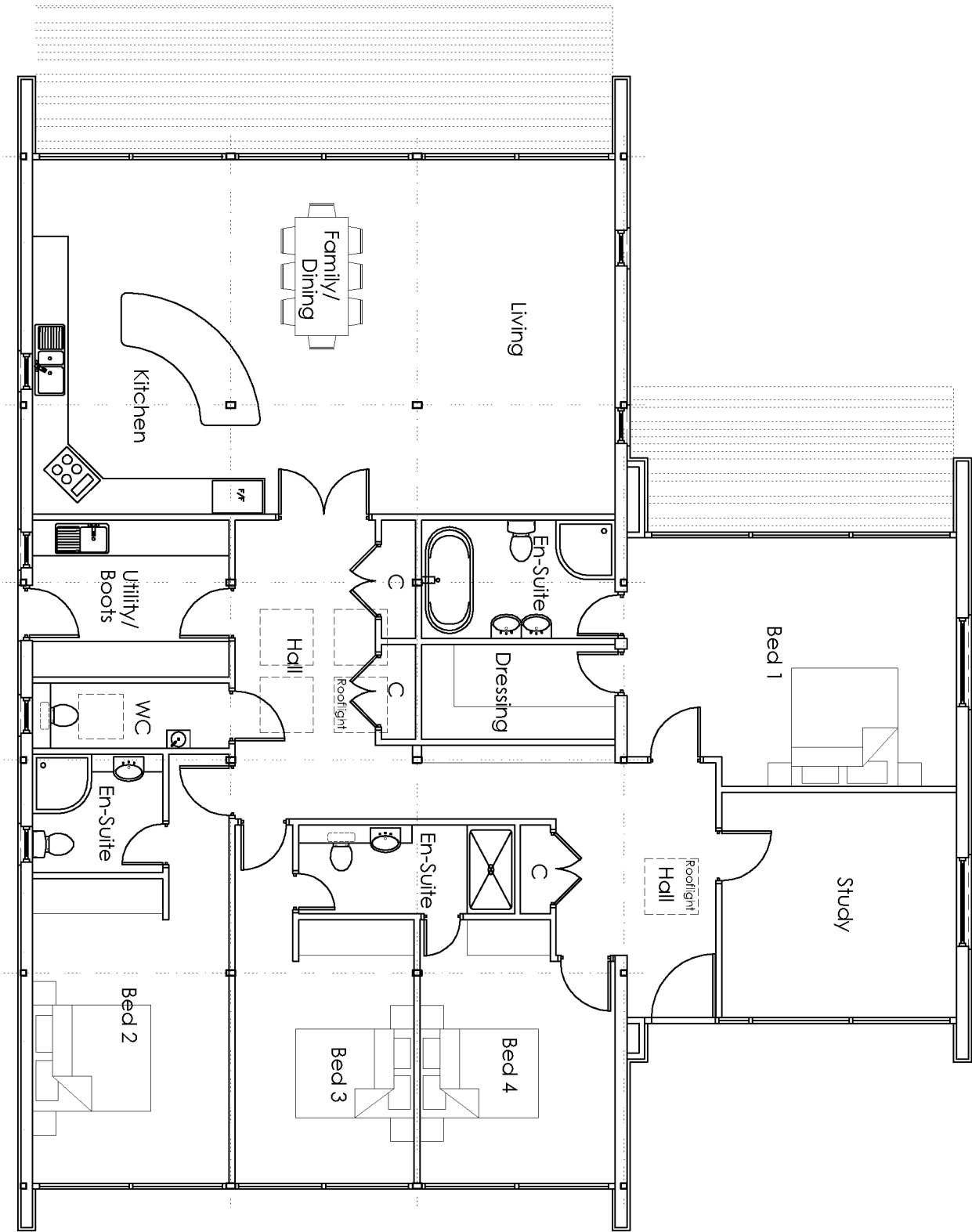
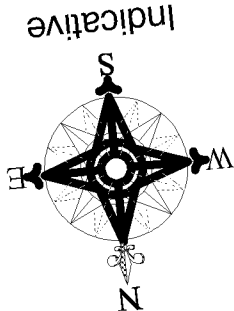
JOB TITLE		DATE	
Stable conversion, Arundel Equine Hospital		Oct 2015	
ITEM	JOB NO.	SHEET NO	
Existing Building Structure	MS03022	SK01	
PREPARED BY		CHECKED BY	
DS			



PROPOSED PLANS 1:100

PLOT 1

214.6 sqm
(2309sqft)



Ground Floor Plan

RIBA #

Chartered Practice

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Drawing For Planning Purposes Only

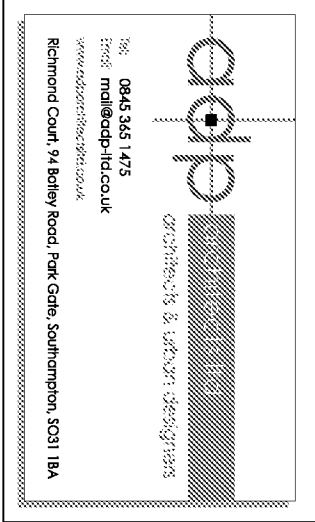
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Note: This drawing has been produced with information from a topographical survey carried out by others. All information therefore derived from the survey drawing is assumed to be accurate and ADP Architects Ltd cannot be held accountable for any discrepancies discovered on site. IF IN DOUBT ASK FOR CONFIRMATION.

A 4.11.17 Windows/doors update

rev: date:

note:



project name/address:

Residential Development
Arundel Equine Centre
Tortington
Arundel
BN18 0BG

client:

Clarendon Properties Ltd

drawing title:

PLOT 5 – Floor Plan

job number:

1781

drawing number:

02

revision:

A

drawing scale/date:

1:100 (A3)

date:

May 17

drawn: