BUILDING SURVEY REPORT

On

Xxxxxx Road,
Xxxxxxxxxx,
Xxxxxx,
Xxxxxxxxxx

For

Mrs Xxxxxxxxxxx,
Xxxxxxxxxxxx,

Prepared by

David Carver Associates Ltd.
Chartered Surveyors,
16, Rodney Road,
New Malden,
Surrey,
KT3 5AB

Inspection Dates: xxxxxxxxxx

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GENERAL INFORMATION

Name and Address of Client

Mrs. Xxxxxxxxx,

Xxxxxxxxxxx,

Xxxxxxxxxxx

Property Address

XXxxxxxxxxxxxx,
Xxxxxxxx Xxxxxxxx,
Xxxxxxxxxxxxxxx,
Xxxxx,
XXXXXXXX

Date of Inspection

Our inspection of the main building was undertaken on Wednesday xxxxxxx 2010 and we inspected the annex on the following day; Thursday Xxxxxx 2010.

Weather

The weather was dry and bright on both inspection days. The inspections followed several weeks of predominantly dry weather.

Limitations to Inspection

At the time of inspection the main building was fully furnished, with fitted floor coverings throughout and inspection within the roof space was restricted by a quantity of stored articles. Floor surfaces were concealed throughout, by fixed-down coverings.

Whilst the annex was not furnished, the floors were concealed by fixed-down coverings including wood laminate, ceramic tiles, etc. Our inspection within the garage (in particular) was restricted by a large volume of stored articles. Access onto the flat roof was available, however, via the skylight, at the top of the stairs.

The vendor was not present during our inspection of the annex. Some of the information provided in this report is derived from our Vendor Questionnaire and from our conversations with the vendor. This information has been passed on to you in good faith but we cannot confirm its accuracy.

Tenure and Tenancies

We understand that the property is Freehold and for the purposes of this report we assume that it is free from any onerous restrictive covenants or other unusual outgoings which may adversely affect its value. You should of course rely on your solicitor's usual advice and searches in this respect however.

2.0 GENERAL DESCRIPTION

2.01 Description of Property

The main building comprises a detached house, built on two floors and probably constructed around 70-80 years ago. The original house was very small (being only one room deep) and is believed to have been substantially extended by the current owners, when they purchased the house, some 13 years ago.

The property also includes a detached annex at the rear and we believe that this was originally constructed as a single-storey double-garage. We are lead to believe that it was constructed 13 years ago but that the first floor accommodation was added subsequently; around 5 years ago.

2.02 Accommodation

MAIN BUILDING:

Ground Floor: Entrance hall, main reception room (left), dining room (rear/centre), study (front/right), cloakroom, kitchen/breakfast room, utility room.

First Floor: Landing, bedroom 1 (rear – with access to roof terrace), en-suite bathroom with WC & shower, en-suite dressing room, bedroom 2 (left – with access to roof terrace and en-suite bathroom/WC), bedroom 3 (front/centre), bedroom 4 (right), family bathroom with WC.

ANNEX:

Ground Floor: Entrance hall, living room (rear), tandem garage.

First Floor: Open-plan dining room with kitchen, bedroom (rear), en-suite bathroom with WC.

2.03 Site, Outbuildings and Parking

The property is constructed on a large plot, which tapers, almost to a point, at the rear. At the front end, closest to the road, the site slopes slightly from right to left and from front to rear but the rear garden slopes more significantly to the rear.

A log cabin is constructed within the rear garden but there are no other outbuildings. Car parking space for a number of vehicles is provided on a gravelled drive at the front and as indicated, a tandem garage is included, within the annex.

2.04 Orientation

The front of the property faces approximately west-south-west and unless otherwise stated, all directions in this report are taken as if facing the property from the street.

2.05 Location and Amenities

The property is situated in a well-established residential locality, amongst mixed age and style properties. The property overlooks xxxxxxxxxx to the front and has an open aspect over fields, to the rear.

All usual local amenities are available within a short distance and xxxxxxxx Town Centre is approximately 2½ miles away.

3.0 EXTERNAL CONSTRUCTION AND CONDITION

3.01 Summary of Construction

The house is traditionally constructed and its (original) external walls appear to be of cavity construction, with a thickness of approximately 330mm, including the internal plaster and the render finish, applied to external surfaces. In the extended areas, the walls are probably constructed in solid concrete blockwork; with a render finish to the external surfaces. The thickness of these walls was checked in a number of locations and was found to be around 280mm on average, including the external render and the internal plaster. There is a possibility that these walls are of cavity construction but the original, approved plans should provide further insight and confirmation, if these are available. (We would advise that all plans and specifications relating to alterations and extensions are passed on to you, in case these are ever required for reference). The roof of the original house is pitched and covered with the original plain clay tiles. Pitched roofs are also provided over the single-storey and two-storey extensions and these are covered with plain concrete tiles. Part of the single-storey extension has a flat roof, however, (used as a roof terrace) and this is covered with asphalt.

Internally, floors within the original section of the house are mostly of suspended timber construction but are of concrete in the study, cloakroom and utility room (and we believe that these areas were originally the kitchen. Within the extended areas, the ground floor is of concrete construction throughout, whilst the upper floor is of suspended timber construction (timber joists, with chipboard sheeting laid over).

The walls of the annex (up to first floor level) are assumed to be built in solid concrete blockwork, with a smooth render finish to the external surfaces. The thickness of these walls is approximately 255mm, including the internal plaster and the external render. (Some of the internal wall surfaces are ‘dry-lined’ in plasterboard and in these areas, the thickness increases to around 280mm). The upper floor accommodation is enclosed within a ‘mansard’ roof, with plain concrete tile claddings to the sides and a flat roof at high level, covered with bituminous felt. This mansard is believed to be a steel and timber frames structure but none of the steelwork (and very little of the timbering) was accessible within the limitations of our inspection. The ground floor is of concrete construction whilst the upper floor is of suspended timber.

All mains services are connected to both buildings.

For ease of reference, the main body of this report will relate to the main house and the annex will be described in detail within its own appendix: ‘Appendix A’.

3.02 Roof and Roof Spaces

The roof of the original section of the house is steeply pitched and incorporates a gable projection at the rear, over the bay and French doors leading from bedroom 2 out onto the roof terrace. The roof is clad with small-gauge, plain clay tiles, incorporating the original clay ridge tiles at the apex. The tiling has been patch repaired over the years, as is not unexpected and the replacement tiles have weathered differently and are relatively obvious, therefore **(see photo 5)**. If you wish, it would be possible to swap the tiles around (as the majority are not nailed); so that the replacement tiles are positioned in some concealed/obscured location (behind a chimney, for example) and the original/matching tiles could then be relocated to those more visible areas that were previously patched. All tiles were found to be in place but the tiles are separating towards the left-hand verge (edge), on both front and rear slopes and this appears to be caused by slight lateral movement of the left gable elevation **(see photo 6)**. This is not particularly significant but the gapping between tiles could be re-distributed by moving the tiles along and if necessary, by re-tiling the verge detail.

The condition and remaining life expectancy of tiles is often best indicated on their undersides but in this instance, the undersides are concealed by the bituminous sarking felt lining that was installed beneath the tiles at the time of original construction. Remaining life is difficult to estimate with any degree of certainty, therefore but on the evidence available, the roof remains in satisfactory, serviceable condition and we think it unlikely that re-roofing will become necessary for at least another 10 years. The tiling will require increasingly frequent maintenance as it approaches the end of its economic life, however.

A single-storey porch is provided at the front of the building and this has a pitched roof, also covered with the original plain clay tiles. This roof is in need of general maintenance, to include replacement of one missing tile and two more that are slipping on the left-hand slope. At least one of the half-round ridge tiles may need to be re-bedded on mortar at the same time. Old tiling has also provided on the front/left ‘inglenook’ chimney breast and once again, a number of damaged tiles were noted at upper and lower levels and these should be replaced at the same time **(see photo 7)**. Once again, increasingly frequent maintenance should be anticipated as these original tiles approach the end of their economic life.

We suspect that re-claimed clay tiles have been used on the roof of the single-storey extension along the right-hand side of the building as these are quite weathered in their appearance. Several have been replaced by way of routine maintenance and again, you must anticipate the need for ongoing maintenance **(see photo 8).**

The roof of the 2-storey rear extension is of a traditional pitched design although it incorporates an additional pitched section over the 'pediment' feature, at the extreme rear **(see photos 9 & 10)**. The left-facing surfaces are covered with plain concrete tiles and these have become quite weathered in appearance over the years since construction, due to the nearby/overhanging trees, etc and have faded. The tiles are coated with moss and lichen **(see photo 11)** and we would recommend that the roof surfaces are lightly brushed-down from time to time to the remove moss. In other respects, the tiling is in satisfactory condition overall but we did note one broken/missing tile **(see photo 11)** and this should be replaced by a roofing contractor.

Inspection of the tiling on the right hand side of the two-storey extension was restricted and was only possible by standing on the roof over the annex **(see photo 10)**. Here, the tiles have a slightly different appearance/profile and may be older/reclaimed clay tiles. From our limited inspection, these tiles also appear satisfactory but a broken tile on the pediment section should be replaced **(see photo 12)**. A more detailed inspection is recommended from long ladders and any other maintenance should be undertaken simultaneously. Upon closer examination, the verge fillets at the rear edges may require raking-out and re-pointing at the same time **(see photo 13)**. (We noted an area of dampness at the rear/right corner of the roof space, which may be attributable to rainwater penetration through the verge and further investigation is required from long ladders and repair, as necessary. If these are indeed reclaimed or 'salvaged' tiles, they may require more frequent maintenance than the concrete tiles, used elsewhere.

The roof of the single-storey (reception room) extension is mono-pitched and is also covered with plain concrete tiles. Again, the tiling is coated with moss and lichen and should be lightly brushed-down. Again, the tiling is quite weathered in appearance but is otherwise in satisfactory condition. Similar tiling is provided on the slopes of the small canopy, over the kitchen door and this is in similar condition.

Where the roof surfaces adjoin chimney stacks and at other abutments, weather-proofing is provided in the form of lead flashings over lead 'soakers'. In visible areas, these were found to be in satisfactory condition but in some locations they require re-sealing into brickwork, either with a mortar fillet, or with a suitable mastic sealant **(see photo 14)**. In part, the lead flashings are secured by lead straps and on the single-storey (right-hand) side extension, some of these have 'unfolded' and should be re-folded into the correct position. To the canopy over the rear-facing kitchen door, the roof abutments are weather-proofed using cement fillets; a cheaper and less long-lasting alternative to traditional lead flashings. Ultimately, these are prone to cracking and should be carefully monitored and repaired but their replacement by lead flashings would be advisable.

Valley gutters are formed where different roof surfaces adjoin each other at right-angles and for the most part, these are lined with aluminium sheeting, where visible. No signs of leakage were apparent but the mortar fillets between the aluminium linings and the tiling are crumbling, both on low-level roofs and at high level **(see photo 15)**. As part of a general overhaul of the roofs, therefore, these fillets should be raked out and re-pointed within the next 6 months or so. Leaves and other debris should be cleared more immediately; both from the valleys and from the rainwater system generally **(see photo 16).** Please see our further comments later in Section 3.06 "Rainwater Goods".

Over the 'drive-through' on the right-hand side of the main building, there is a pitched roof, which adjoins the single-storey extension on the right-hand side of the kitchen. This drive-through has a pitched roof, covered with re-claimed clay tiles **(see photo 17)**. Again, the surface of the tiling was found to be affected by a significant build-up of lichen and moss and should be brushed-down. Several tiles have been replaced over the years and we suspect that the ridge tiling will need to be re-pointed or re-bedded on mortar within the next few years. The lead flashing should be re-sealed/secured into brickwork at the left-hand side of the front slope. Ivy is also beginning to grow onto the roof surface from the right-hand side and this should be removed as soon as possible (and preferably killed-off, to prevent re-growth). The tiles used n this structure are of some considerable age and a good proportion of them are decaying on their undersides, where the 'nibs' from which they are suspended on the timber battens, are breaking off. This will cause the tiles to slip out of position with increasing frequency over the coming years and you should anticipate the need for relatively frequent maintenance, pending re-roofing in due course.

The roof terrace at first floor level is effectively a flat roof, over part of the single-storey extension. The surface is almost completely concealed by timber decking, however, and this was not lifted or dismantled as part of our survey. At the perimeter, however, it is possible to see that the flat roof is covered with asphalt and that it incorporates a sunken rainwater channel across the rear edge, which enables rainwater to discharge out into a hopperhead and downpipe on the right-hand flank.

We cannot be sure of the overall condition of the asphalt but at the perimeter, the upstands against brick wall surfaces have not been formed to the highest standard. In these locations, the asphalt has been taken up through 90° rather than dressed over a 45° angle fillet (to reduce the incidence of splitting) and lead flashings are also absent **(see photo 18)**. As a result of sub-standard detailing, the asphalt applied vertically at the upstands will be subject to melting, rippling and 'slumping' and careful monitoring is advised. (The asphalt upstand underneath the bedroom 2 French doors was found to be slightly rippled and may be starting to fail). Of more urgent significance, however, we noted a split within the rainwater channel at the rear **(see photo 18)** and this poses a risk of rainwater penetration through to the ceiling in the main reception room, beneath. An urgent repair

should be applied here, therefore. Minor blisters were also noted within the asphalt upstands and these too will demand attention within the foreseeable future.

Whilst the flat roof structure was not opened up, it appears to be a 'cold-deck' flat roof, whereby the insulation is provided beneath the roof deck (rather than on top – in which case it would form a 'warm deck'). Cold deck roofs of this type require a permanent source of ventilation in order to control condensation. Condensation forming within flat roofs causes the joists and decking to rot and is a common cause of failure. In this particular instance, the roof structure is ventilated by means of four 'mushroom' vents; one set into each corner of the roof **(see photo 19)**. From our limited, surface inspection, however, we have been unable to confirm whether these vents are fully effective and whether airflow through the roof is adequate and uninterrupted. As and when the roof is re-covered in due course, this will provide an opportunity to investigate the form of construction and the adequacy of design. It may be appropriate, at that time, to change the design of the roof to a 'warm deck' and you should seek advice from a building surveyor or architect at that time.

It should be noted that the flat roof coverings pose maintenance problems and have limited life expectancy from new; often further reduced by poor-quality workmanship, materials and design. When re-covering flat roofs, a contingency sum should always be allowed in case previous leakage (or improper design/construction - resulting in condensation) has caused decay to supporting timber joists/decking. The condition of these elements will not be known until such time as the roof covering has been stripped off, however.

Roof Space

Access to the roof space is obtained via a ceiling hatch and pull-down 'loft ladder' in the master bedroom. The hatch provides access into the roof void above the 2-storey extension but it is also possible to squeeze between the rafters and into the original section of the roof void, across the front. Inspection was partially restricted by stored articles laid over chipboard flooring within the extended section. Isolated/loose boards within the original section across the front are potentially hazardous and extreme care is required when moving around in this area, therefore.

For the most part, the undersides of the roof structures have been lined with foil 'bubble-wrap'-type insulation and the vast majority of the roof framing elements could not be seen therefore **(see photo 20)**. The only area where this material has not been applied is to part of the rear slope within the original section of the roof **(see photo 21)**.

The original section of the roof frame is traditionally constructed using steeply-pitched rafters, braced at mid-span by horizontal 'purlins', with vertical ridge props, diagonal strutting and horizontal

collars **(see photo 22)**. The roof frame is lined with a bituminous paper 'sarking' felt and whilst this is only visible in a small area due to the 'bubble-wrap' linings elsewhere, it was found to be in surprisingly good condition – although it is very fragile **(see photo 21).** The framing in this section of the roof was found to be free from undue distortion or deflection and it appears able to satisfactorily carry the loadings imposed upon it.

The roof frame of the 2-storey extension is similarly constructed, using pitched rafters, braced at mid-span by horizontal purlins and these too are braced by diagonal struts **(see photo 20)**. (The vertical timbers provide rigidity to the ceilings.) In this particular instance, the struts transfer loadings onto steel beams, within the first floor ceiling structure, which span left-to-right. Horizontal 'collars' are also provided at high level; spanning between opposite rafter pairs to provide lateral restraint within the frame (although again, these are largely concealed by the foil 'bubble-wrap' lining, forming a 'ceiling'). The roof frame was found to be free from distortion or deflection and it appears able to satisfactorily carry the loadings imposed upon it.

By looking behind the lining, it is possible to see that a bituminous sarking felt lining was laid over the roof frame, prior to the fixing of the tiles and whilst we do not anticipate any problems with this, we could not see enough of this lining to establish its condition. Linings of this type are designed to provide a secondary water-resistant lining, to prevent leakage in the event of tile damage but they also help to prevent dislodgement of tiles by wind-suction.

The framing of other roof structures (including the pediment and those over the single-storey extensions) could not be inspected within the limitations of our inspection and we cannot confirm the condition of the concealed timbers. These roofs were also found to be free from undue distortion or deflection, however.

The rear section of the roof space (above the master bedroom suite) is large enough to convert to habitable space, should you so wish, subject to local authority consents and approvals **(see photo 20)**. The narrowness of the existing landing would mean that the staircase would probably have to be accommodated within the (part of) the dressing room and a dormer might well be required on the right hand side, to provide the required head-height above. A dormer might also be required on the left had side, to provide good head height on the left hand side of the resulting room.

3.03 Thermal Insulation

Within the roof space, a layer of quilted fibreglass insulation is laid over most of the top floor ceiling to a depth of around 100mm. This is insufficient and should be upgraded to approx. 250mm. It is also important that the insulation is installed beneath any electrical wiring; not on top, to minimize

the risk of overheating - which can pose the risk of fire. The foil 'bubble-wrap' lining applied to the underside of the roof frame will have some effect, but there is no need to heat the roof space (so long as tanks and pipes are properly lagged) and it make more sense, therefore to insulate the top floor ceiling, rather than the roof line.

We could not confirm the adequacy or type of insulation provided within other, inaccessible roofs; including the flat roof (roof terrace) over part of the single storey rear extension. Given that the redevelopment of the property was completed 13 years ago, however, it is unlikely that insulation would meet today's standards.

The cold water storage tanks within the roof space are fitted with lagging jackets but one of the tank lids has been removed and this should be re-fitted as soon as possible. Most (but not all) of the associated pipework is insulated and supplementary lagging should be provided (including to the overflow pipes), to guard against freezing/bursting. The central heating 'feed and expansion' tank was formerly insulated with fibreglass quilt wrapping but this has become detached and should either be securely re-fixed or replaced by a purpose-made lagging jacket. The lid should also be re-fitted and please see our further comments in Section 5.04 "Heating Installation".

Our vendor questionnaire indicates that the cavity walls of the original house were insulated with cavity 'fill' as part of the redevelopment/extension. We have not had sight of any documentation relating to this work, however, and would suggest that further enquiries are made by your solicitor. In particular, it must be confirmed that a BBA approved system has been used. It has been found that some types of cavity-fill can enable moisture to bridge across the cavity and reach the internal wall surfaces, in very exposed locations. We undertook moisture meter testing of internal wall surfaces as part of our inspection, however and found no signs of lateral damp penetration.

Windows throughout the property are double-glazed but the air-gap within the double-glazed units is relatively narrow and their efficiency is likely to be relatively low, in comparison with today's technologies. Better draught-proofing would be beneficial.
We would draw your attention to the Energy Performance Certificate, which forms part of the Home Information Pack. This will provide a rating for the energy efficiency of this particular property, together with estimated energy consumption costs, etc. We would caution, however, that these ratings are based on relatively simplistic data and a set of assumptions that often cannot be verified, (such as the thickness of insulation within inaccessible roof structures and walls). The information provided within the certificate may well be subject to error, therefore.

3.04 Valley and Parapet Gutters

Valley gutters were described above in Section 3.02 “Roof & Roof Spaces” and there are no parapet gutters forming part of this particular property.

3.05 Chimneys Stacks

There are three chimney stacks serving this property. The first of these is positioned at the apex of the roof of the original building; to the right of centre **(see photo 23)**. This is constructed in fair-faced brick and contains four flues, fitted with clay pots. It would appear that the stack incorporates a slate damp-proof course towards the base. Overall, the stack was found to be in satisfactory condition but some of the mortar joints are eroding slightly and general maintenance will be required within the next 5 years or so. More immediately, however, we would recommend that redundant flues are capped-off/ventilated using earthenware bonnets or similar; to prevent unwanted rainwater entry, whilst permitting airflow to continue through the redundant flues.

The second chimney stack corresponds with the substantial, inglenook-style chimney breast on the outside face of the front elevation, towards the left side. This appears to have been reconstructed or re-bricked as part of the redevelopment of the property and overall, the brickwork and pointing were found to be in sound condition. The brickwork forming the very highest courses is slightly weathered, however and again, general maintenance will be required in due course **(see photo 24)**. We noted a loose tile lying on a high level ledge and as this could be dislodged by high winds, it poses a safety hazard **(see photo 25).** This should be removed as soon as possible, therefore.

The third chimney stack forms part of the single-storey extension and is located at the rear/left of the building. This contains a single flue, serving the fireplace in the rear part of the main reception room. Again, the brickwork and pointing were found to be in satisfactory condition and the metal flue terminal is fitted with an electric fan; to provide the necessary ‘draw’ **(see photo 26)**. This was not tested but please see our further comments in Section 4.04 “Fireplaces & Chimney Breasts”. The electrical cable should really be clipped to brickwork.
The breadth of the chimney structure reduces with height and the wider section towards the base is finished with slanting brickwork on its upper surface **(see photo 27)**. This will be vulnerable to damage as a result of rainwater penetration and frost attack and we would recommend that you consider the application of an impervious, protective covering such as lead sheet, to prevent rainwater absorption and frost attack.

3.06 Rainwater Goods

Across the front of the property, rainwater discharges into half-round guttering, which is mostly of the original cast-iron but a small section has been replaced in PVC, to the left of centre. The guttering is connected to cast-iron rainwater pipes; one of which (on the front elevation) discharges into a sealed connection with the underground drainage system. The second rainwater pipe is located on the left hand flank elevation and it discharges over an open gulley (which should be cleared of leaves). As it was not raining at the time of our inspection, water-tightness of the fittings could not be confirmed but the guttering and downpipes are affected by corrosion and they appear to be close to the end of their economic life. Ivy growth on the left flank elevation has wound itself tightly around the rainwater pipe and has reached the gutter/roof level **(see photo 28)**. This should be removed (and preferably killed-off) as soon as possible.

Rainwater discharges from the roof terrace through an outlet at the rear/left corner and into an old cast-iron hopperhead and to a PVC downpipe and a gulley. Hopperheads of this type are particularly vulnerable to blockage by leaves and other debris and must be carefully monitored and kept clear.

On all other parts of the building, the guttering is of modern half-round PVC; discharging to PVC rainwater pipes. Again, the water-tightness of the system could not be confirmed but we did note a number of issues, including:

- Many of the gutters and valley gutters are choked with leaves and other tree debris and these should be removed as soon as possible, to prevent overflowing **(see photo 16)**. The close proximity of trees will mean that the gutters will have to be checked regularly and cleared of debris; particularly during the autumn and early winter months. Gulley gratings must also be kept clear of leaves and tree debris.
- The rainwater pipe has become disconnected from the gutter on the right-hand side of the 'pediment' roof **(see photo 29)**. This rainwater pipe discharges over the yard at the rear and whilst the ground slopes sufficiently to take rainwater away from the building, a gulley should really have been provided here **(see photo 30).**
- Rainwater discharging from the 2-storey pitched roofs at the rear and is fed onto the roof terrace by means of two PVC downpipes. One of these is badly broken and should be replaced as soon as possible **(see photo 31)**. It would be better, however, to redirect these rainwater pipes and thus reduce the volume of water flowing across the flat roof.
- A proportion of rainwater from the roof of the 2-storey extension and the pediment is discharged via a PVC downpipe, onto the pitched roof of the single-storey extension, below. The guttering fitted to the single-storey extension is of a relatively low-capacity type and as

such, it may not be able to handle a large volume of rainwater during heavy rainfall and this could result in overflowing; particularly if the guttering is obstructed by leaves/debris. Monitoring is advised and we suspect that guttering of higher-capacity will be required here.

- The rainwater pipe on the single-storey reception room extension discharges to an unconventional drainage connection and we are not certain why an ordinary gulley was not provided here **(see photo 32)**. This was found to be choked with leaves, etc and should be cleared out as best as possible – but we would recommend that a gulley is installed here.
  We were specifically assured by the vendor that this arrangement is connected to the rainwater 'soak-away' beneath the lawn, although we could not confirm this for ourselves, within the limitations of our inspection.
- No rainwater fittings are provided on the front porch, rear kitchen porch canopy, inglenook roof surfaces, etc. Rainwater running off these roof surfaces will tend to blow against or splash back against the wall surfaces adjacent **(see photo 33)**. This could result in lateral damp penetration and modifications could be considered.

The above should not be regarded as an exhaustive list of defects and the entire system should be carefully/constantly monitored during rainfall and any defects dealt with immediately. Leakage from rainwater fittings can cause lateral damp penetration through walls, with the accompanying risk of rot in adjoining/embedded timbers.

3.07 Walls and Foundations

As indicated, the walls of the original, front section of the building appear to be of cavity construction, with a smooth sand-cement coating on the external surfaces, known as render. The wall thickness was found to be approximately 330mm (including the internal plaster and external render). Clay tile subsills are provided beneath the window openings. Cavity walls consist of two 'skins' of brick and/or blockwork, constructed parallel but with an intervening cavity. This form of construction provides better levels of thermal insulation and with a cavity between the internal and external surfaces, it helps to prevent lateral damp penetration. Un-plastered internal wall surfaces are visible within the roof space and from here it is apparent that the internal leaf is of brick, rather than concrete blockwork and we would assume that the external leaf is similar. The lintel over the window is of concrete, with a lead cavity 'tray' above, to prevent moisture penetrating from the cavity, through the top of the window opening **(see photo 34)**. We assume that similar detailing is provided elsewhere but other lintels and cavity trays are concealed throughout the property, by external render and internal plaster finishes.

The inner and outer leaves of cavity walls are linked together with metal ties, to provide rigidity. Over time, however, these ties can corrode and ultimately snap but the cavity was opened-up as

part of our inspection and we have been unable to confirm the condition of the ties. We would caution, however that in any property of this age, the ties might well be affected by corrosion. Ultimately, therefore, their replacement may be required at some stage in the future and this is a relatively expensive procedure that requires the use of scaffolding. If you require further information or assurance on this aspect, you should arrange for specialist investigations to be carried out prior to exchange of contracts; either by opening-up the cavity (by removing bricks) or by using a remote device such as a boroscope.

The render finishes on the original cavity walls were found to be in reasonable condition overall and tapping reveals that most areas retain adequate adhesion with the underlying brickwork. A number of typical, minor cracks were identified around window openings and whilst these do not appear to be of any structural significance, they will require raking-out and repair, prior to re-decoration. Much of the left flank elevation is concealed by ivy growth; concealing the underlying wall surface. Ivy tends to leave marking on the wall surface which is difficult to remove and as it tends to grow quickly and often uncontrolled, we would recommend that it is removed and killed off **(see photos 35 & 36)**.

On the right-hand flank wall of the original building, a vent cover is absent over the tumble-dryer vent and a suitable plastic fitting should be provided here. Unevenness was also noted over and around the study window and localised repairs should be undertaken here (and around the boiler flue penetration) prior to re-decoration in due course.

The walls of the single-storey and two-storey extensions are also smooth-rendered externally. The thickness was found to be approximately 280mm, on average, including the external render and the interior plaster. We assume that the walls are constructed either using solid concrete blockwork or that they are of cavity construction. Concrete blockwork is visible to the rear gable wall, within the roof space, but the original, approved plans should be checked, to confirm whether the walls are of solid or cavity construction.

The render finishes were found to be in good condition but paint finishes are flaking at the rear/left corner of the single-storey extension, at the rear and localised preparation and re-decoration will be required here. From the roof terrace, it is possible to see that an angle-bead (a metal strip, used to form a straight edge to the render, at a corner) is corroding and this will need to be broken out and replaced by stainless-steel beading **(see photo 37)**. Failure to use stainless-steel beadings in other locations may mean that others corrode over time and that these too will have to be broken-out and replaced in stainless-steel).

We were advised by the vendor that the 2-storey columns that support the rear pediment roof are constructed using steel stanchions (surrounded by concrete blockwork); running into foundations

beneath ground level. Invasive exposure of these elements was not undertaken but very careful design and construction are necessary to ensure that steel elements are fully protected against corrosion. Again, we cannot provide any assurance of this and would recommend that the approved drawings are passed on for your information, retention and reassurance.

Foundations and Structural Movement

The foundations to the property have not been opened-up for examination and we are unable to report on their size or depth. It is probably reasonable to assume that the foundations of the original building are less substantial than those of the extension but we have not had sight of any plans or specifications and cannot therefore comment in any further detail as to their design, depth, etc.

We have not undertaken soil testing or analyses of the site but according to the Geological Survey Map for the area, the property is constructed on 'Upper Chalk'. Generally speaking, this is a good building base.

We are pleased to confirm that we found relatively little evidence of structural movement within the building, although we did identify a number of minor cracks within the external rendering, running between ground and first floor window openings to the front elevation and from the apex of the porch roof, running up to the first floor window sill, above. These cracks are not considered to be of any structural significance, however.

Internal cracking was noted within the left-hand flank wall of the original structure, in the front section of the main reception room. Cracking runs diagonally through the wall and rises from front to rear; with other cracking branching-off and running up to the window, adjacent **(see photos 38 & 39)**. Parts of this crack have been made-good with proprietary filler and we were advised by the vendor that this was undertaken in October/November 2009, in readiness for the marketing of the property. The filler has not been completed or re-decorated in this particular area but there are some obvious, earlier repairs where filler has been redecorated **(see photo 39).** At low level, the crack has not been repaired and is of approximately 1 - 2mm width and looks to be of some age. The vendor, Mr Lynch, indicated that cracking had existed in this location since he purchased the property, some 13 years ago.

Inspection of the corresponding external wall surface was very restricted by the growth of ivy. It may be that corresponding cracks exist within the external wall surface, although we could not see any such cracks due to the thickness of the ivy. As indicated above, we would recommend that this is removed and killed off within the near future. No extrapolation of the cracks was identified within bedroom 2, at first floor level, directly above.

It would appear that the cracking is indicative of slight settlement at the rear/left corner of the original 2-storey structure. On the evidence available and based on what we have been told, we think it likely that this occurred historically and we saw no evidence to indicate that any significant movement has occurred recently. It may be that the crack has recurred through plaster finishes and decorations as a result of minor thermal/seasonal movement and a failure to properly repair the cracking, as part of the earlier redevelopment/refurbishment of the property. We would recommend therefore that the internal plaster is removed on approximately 200mm each side of each of the cracks, to expose the underlying brickwork. As indicated, the ivy should be removed on the external surface of the wall so that this may be examined in further detail. If corresponding cracks exist within the render, the render too should be removed on approximately 200mm each side of the crack. The cracking should be thoroughly raked-out and resin-bonded, in order to restore structural integrity and this will help to prevent 'nuisance' cracks reopening through the plaster and external render as a result of shrinkage or minor thermal movement. Plaster and external rendering should then be reinstated.

It is of course important to confirm that your buildings insurance policy will provide normal and ongoing protection against subsidence, settlement and other usual perils. Buildings insurance should be arranged therefore in good time, before exchange of contracts.

We noted a large number of mature and part-grown trees within the site and within the adjoining land. Many of the trees are within potential root-influencing distance of the building, including conifer hedges along the left and right-hand boundaries, pines, beeches **(see photos 40 & 41)** and other evergreen/deciduous varieties, including silver birches, close to the rear/right corner of the building; one of which leans slightly towards it **(see photo 42)**. As you may be aware, trees can cause damage to buildings and underground services such as drainage but on the basis that the property is constructed on chalk, the risk of building movement is lower than it would be on, say, a shrinkable clay sub-soil. The roots of larger trees may still result in damage as a result of direct pressure on foundations, however; particularly as they have probably been unable to penetrate deeply into the ground due to the nature of the chalk. Large trees on a shallow-root system can be susceptible to falling during high winds, therefore, and as a precautionary measure, your buildings insurance policy must provide cover against the risk of tree-impact damage to the main building, annex, boundary structures, etc.

Another issue relating to the larger trees is that they will drop large volumes of leaves and other debris onto roof surfaces, into the gutters and also into the grounds of the building. It will be necessary to have the gutters checked and cleared on a regular basis, during the autumn and early

winter months, and you could invest in gutter-covers, which should help to reduce the accumulation of debris within them.

In the circumstances, we strongly recommend that you obtain specialist advice from a reputable Arboriculturist as soon as you take occupation of the property. A report should be produced on the condition of the trees and this should include any recommended maintenance or further investigations considered necessary; together with relevant time-scales. We see from our Vendor Questionnaire that three of the trees within the site are the subject of Tree Preservation Orders; meaning that Planning Permission will have to be sought from the Local Authority before maintenance (or felling) may be undertaken. Your solicitor's enquiries should confirm which trees are affected.

Minor external cracks were noted within the render finishes to the extended parts of the property, including several on the right hand flank elevation and one close to the rear/right corner **(see photo 43).** Other (filled) cracks were noted within the parapet wall across the rear of the roof terrace. These cracks are the result of minor thermal movement within the underlying concrete blockwork and are not believed to be of any serious structural significance. They should be thoroughly raked out and repaired, prior to the next external redecoration.

3.08 Damp Proof Course and Dampness

The damp-proof course (dpc) is an impervious membrane, built into the walls at ground floor level, to prevent moisture rising into the walls, from the ground. The dpc is concealed within the main walls by the render finishes applied externally and by the internal plaster. In the original part of the building, however, (given its age) the dpc is likely to be of slate and we would assume that it is of plastic within the extended areas. By now, the slate damp-proof course is likely to be breaking down and coming to the end of its economic life. We see from our vendor questionnaire, however, that damp-proofing was not undertaken as part of the refurbishment/extension of the property, some 13 years ago.

It is possible that the damp-proof course is "bridged" by the render finish applied to the external wall surfaces. Old/porous rendering can soak-up moisture from the ground, into brickwork above damp proof course level, thus by-passing or "bridging" the damp-proof course. To prevent this, the rendering beneath damp-proof course level should be removed and the remaining render terminated horizontally, using a stainless steel "bell-cast" drip detail. Brickwork revealed by the removal of rendering at the base of the wall might need to be re-pointed, in order to provide a neat and tidy finish.

Tests with an electronic moisture meter were undertaken to wall surfaces within the ground floor accommodation where accessible, but this inspection was limited in part by kitchen fittings, appliances, radiators, furniture, etc.

Where tested, the walls were found to be largely free from dampness and the damp-proof course appears to be operating satisfactorily at present. We cannot give any warranty as to its future performance, however, but as indicated, we would expect a slate damp-proof course to be approaching the end of its economic life. Remedial treatment may be necessary at some stage in the future, however, and this tends to be disruptive, as it involves replacement of plaster up to a height of around 1 metre, the removal and re-fixing of skirting boards, radiators, etc.

One area of dampness was identified in the utility room, to the right-hand flank and front walls **(see photo 44)**. Inspection in this area was restricted by the presence of a washing-machine and tumble-dryer but on the evidence available; it appears relatively likely that this localised dampness is associated with a plumbing leakage from the washing-machine. This must be investigated by a plumber, prior to exchange of contracts, however, and any defect rectified immediately. Thereafter, the moisture content within the walls will need to be carefully monitored but it may take at least 6 months for the walls to dry out, before re-decoration may be undertaken. Localised re-plastering may be required, however.

Decorative finishes were found to be damaged at high level in the front/right corner of the dining room **(see photo 45)**. This location is immediately below the airing cupboard, at the front/right corner of the master bedroom, where the shower pump is located. The carpet within this cupboard was found to be loose and underneath, the chipboard flooring is visibly stained/damaged as a result of leakage **(see photo 46)**. We were told by the vendor that the seals on the shower pump had been leaking recently but that these have now been replaced and the hose connections, etc all appeared dry at the time of our inspection. Moisture meter testing of the chipboard floor revealed that this is still drying out, however, and should be left uncovered. The dining room ceiling, beneath, has dried out satisfactorily, although it requires more careful preparation and re-decoration, to better conceal the damage to finishes.

Condensation

No significant signs of condensation were found within the property at the time of inspection but it will be important to maintain adequate levels of ventilation and regular heating, particularly in the kitchen and bath/shower rooms, to help prevent such problems. It is advisable to open the windows (at least for a short period) even during cold weather, to enable the property to be properly ventilated. Many of the windows are fitted with ‘trickle’ vents, to provide background ventilation whilst the windows are

closed; in accordance with good practice. It is advisable to leave these open, even during cold weather; to help control condensation.

In the bedroom 1 en-suite, an automatic extractor fan operates when the light is switched on and its operation continues after switching off, on a timer. (It would appear that the fan cannot be isolated, to avoid night-time disturbance, however). Slight flaking was noted to the paint finish on the ceiling immediately above the shower enclosure and this is very difficult to avoid when showers are in regular usage. The positioning of a low-voltage fan closer to the shower enclosure may help to more effectively remove warm, moisture-laden air during use of the shower, however and it must be ensured that the ceiling, above, is properly insulated, from within the roof space.

In the bedroom 2 en-suite, an extractor fan is also provided and this operates automatically when the light is switched on. It also overruns after switching off, to improve air exchange. A similar arrangement is provided in the family bathroom (although the fan is beginning to pull away from the wall and may need to be re-secured). In the ground floor cloakroom, no means of natural light or ventilation is provided and an extractor fan operates automatically when the light is switched on (and overruns on a timer, after switching off).

An extractor fan is also installed over the cooker space in the kitchen. We did not trace/test the vent outlets from the various extractor fans, although we did note that some of the louvres are missing from the vent at the rear of the kitchen and these should be replaced.

Ventilation of roof voids is required to prevent/control condensation; particularly during cold/still weather conditions. Within the 2-storey extended areas, continuous ventilators are built into the soffit boards, within the eaves and tile vents are also provided on the roof surfaces at higher level. These appear satisfactory but the foil ‘bubble-wrap’ insulation fixed to the underside of the roof surfaces will restrict airflow through the roof void. Vents are also provided within the soffit board across the rear of the original section of the building but none are provided across the front. Continuous soffit ventilators should ideally be installed here, together with additional means of ventilation close to the ridge (either by means of ventilated ridge tiles or individual tile vents) to encourage airflow through the roof space.

The mono-pitched roof over the single-storey extension (that forms the rear part of the main reception room) is ventilated by means of a continuous ventilator within the soffit board but there is no means of ventilation at high-level on this particular roof and tile vents should be installed across the top of the roof, to ensure that an airflow is achieved. On the subject of ventilation through the flat roof, forming a roof terrace at first floor level, we would refer you to our earlier comments in Section 3.02 “Roof and Roof Spaces”.

3.09 External Joinery

The window frames to the original, front section of the building appear to be of the original oak, with paint finishes internally and externally. The windows are of traditional side-hung casement type; incorporating a number of fixed units and top-hung fanlights. As part of the earlier refurbishment of the building, the original frames have been fitted with double-glazed inserts, incorporating ornamental square leading for decorative effect. Overall, these frames were found to be in surprisingly good condition and this appears to be testament to the quality of the oak that was used at the time of original construction. The frames could/should be better draught-proofed, however, and we would recommend this, prior to the next winter.

In most instances, localised/minor rot was noted across the base of the frames, at the junctions with the tiled sub-sill, beneath. This is caused by rainwater penetration over many years and localised repairs will be required and in particular, the re-sealing of gaps should be undertaken using an appropriate mastic sealant, to prevent water penetration/entrapment in the future. Splitting was also noted along the grain in many instances but in most instances, this is not of any serious significance and is expected with oak frames. In bedroom 2, the windows on the left-hand flank could not be opened because one was seized and the lock was defective on the other. A detailed external inspection was not possible here, therefore, but similar repairs may well be required. A handle is broken on one of the windows in bedroom 3 but the window is secured nonetheless by a key-operated lock.

In the family bathroom, the casement window was found to be seized and this too will need to be investigated and repaired. Some of the joints at the corners of the casement opener are also separating and these too will require repair by a joiner, therefore.

To the extended areas, most of the window frames are of a very similar design/construction, although they are manufactured in softwood, rather than hardwood and incorporate draught-proofing. They appear to have been well maintained, however and in most instances, are in satisfactory condition. Rot was identified to one of the windows on the left side of the main reception room, however, and replacement is likely to be necessary in this instance **(see photo 47)**. We were unable to check the condition of the window ram in the bedroom one dressing room, due to ornaments and the vendor's dressing table, immediately adjacent.

We have not tested the hermetic seals of double-glazed units but a number of these have clearly failed and have caused condensation to form within the sealed units. Whilst the following is not intended to be an exhaustive list, failures of this type were identified to windows in the entrance hall, study, dining room (where two units have failed within the rear bay), the family bathroom, etc. The

vendor assured us that he has ordered replacement glazing and that this will be installed prior to completion of the sale. This should be followed-up by your solicitor and confirmed.

The door at the main entrance to the property is of oak, with substantial iron hinges and this was found to be in satisfactory, serviceable condition. A timber stable door is provided to the utility room and this too appears satisfactory (although its operation was not specifically tested). A similar stable door is provided at the rear of the kitchen, with a leaded/coloured glass panel. The door was found to be serviceable but the glass is starting to loosen and may require restoration in due course.

Softwood double-glazed French doors lead from the main reception room onto the terrace, at the rear and these appear to be in satisfactory condition and incorporate ornamental leading, to match the windows. The doors leading from the master bedroom onto the roof terrace are of similar type and quality and these too were found to be in satisfactory condition. Similar doors leading onto the roof terrace from bedroom 2 are slightly ill-fitting, however, and may require adjustment. Paintwork is peeling at low level on the interior and it may be that rainwater is soaking under the doors. We would recommend that storm bars are fitted across the lower external edges of the doors, therefore, to ensure that rainwater is discharged away, over the threshold. These French doors are set into a bay and the load-bearing column at the rear/right corner is affected by rot, at its base **(see photo 48)**. The decayed section will have to be cut out and replaced prior to the next course of re-decoration.

3.10 External Decorations

External paintwork was found to be in good condition overall. Bearing in mind the age of the property, lead-based paints may have been used on internal/external joinery surfaces over previous years. Preparation (i.e. burning off or sanding) can result in the release/inhalation of vapours/dust, which contain traces of lead. This can constitute a significant health hazard, particularly to pregnant women and children, and all possible health/safety precautions should therefore be observed.

4.00 INTERNAL CONSTRUCTION AND CONDITION

4.01 Ceilings

Within the original parts of the house, the ceilings are of the original lath and plaster construction but in most instances, these appear to have been covered over with plasterboard; with cornices added in most of the rooms. Hairline shrinkage cracking was noted between plasterboard sheets in places but this is not significant, from a structural point of view and will require only cosmetic attention prior to re-decoration. Similar making-good will be required where the plaster has 'popped' over nail heads, in most of the rooms. Further repairs and preparation will be required at the front/right corner of the dining room ceiling, where water damage has occurred.

The application of plasterboard over lath and plaster is not best practice. Over time, lath and plaster ceilings tend to lose adhesion and the weight of 'un-keyed' plaster can cause plasterboard sheets to pull away or even collapse; unless they are very firmly fixed. No indications of undue distortion or failure were apparent but monitoring is advised.

4.02 Internal Walls and Partitions

Most of the internal walls are of solid construction and are assumed to be built in brick or concrete blockwork, with set plaster finishes. A minority appear to be of timber stud construction, however, with plasterboard finishes.

Plaster finishes were found to be in good condition overall but you should anticipate the need for general, typical preparation and repairs prior to re-decoration.

'Rucking' or tearing of the decorative finish was noted at the front/right corner of the bedroom 1 dressing room, at the point where a plasterboard-clad timber stud partition adjoins the solid, exterior wall. The rucking is an indication of thermal movement and this is not of structural significance, although it will require cosmetic attention prior to re-decoration.

In the bath/shower rooms, the wall surfaces are mostly tiled and/or clad with tongued-and-grooved timber boarding.

The extension/redevelopment of the house will have involved significant structural alterations and in particular, the creation of openings between the original accommodation and the extended areas. The structure has not been opened-up as part of our inspection, however and concealed beams and lintels have not been exposed or assessed. Whilst we saw no indications of failure or distortion, it is

important to confirm that the extension and structural alteration of the property was undertaken with local authority Building Control approval and that Completion Certificates are available to pass on to you. Please see Section 7.0 “Matters to be referred to Your Solicitor”.

4.03 Floors

Floors throughout the property were concealed at the time of inspection, by fitted carpets and other floor coverings, which prevented any surface inspection. It would appear, however that the upper floor is of traditional suspended timber joist-type, with boards laid over. Within the ground floor accommodation, the extended areas have concrete floors, as do the study, cloakroom and utility room (these rooms are believed to have been formed from the kitchen of the original house). Elsewhere at ground floor level, the floors in the entrance hall and in the front section of the main living room are of suspended timber construction.

The floors were found to be acceptably level throughout but the chipboard flooring in the first floor extended areas creaks quite badly underfoot; including in bedroom 1 and in its en-suite bathroom and dressing room. This may prove to be annoying and creaking boards should be secured as necessary; taking care to avoid puncturing any under-floor pipework, wiring, etc. We would also refer you to our comments in Section 4.08 “Timber Defects”.

Wood-strip floor finishes are provided in the ground floor entrance hall, study and dining room. These were found to be quite worn.

Due to fixed-down floor coverings (including ceramic tiles, wood-strip, etc), we were unable to confirm whether concrete floors at ground floor level incorporate an effective/continuous damp-proof membrane or insulation, in accordance with current standards. We would assume that a heavy-duty polythene membrane would have been installed within the extended areas but any original concrete flooring (in the study, cloakroom and utility room) may not incorporate an effective membrane – unless of course the original slab was broken-out and replaced as part of the earlier refurbishment. We saw no indications of dampness that might suggest a problem in this respect and whilst dampness was found in the front/right corner of the utility room, it would appear likely that this is associated with a plumbing fault – although further investigations are required prior to exchange of contracts.

4.04 Fireplaces and Chimney Breasts

Chimney breasts remain in their original positions but a number of these are now redundant, including in bedrooms 3 & 4 and in the ground floor study. The redundant flues should be

capped/ventilated at chimney stack level, to prevent unwanted rainwater penetration whilst allowing airflow to continue, as this will help to prevent/control condensation.

In the ground floor entrance hall (which was, we believe the dining room, in the original house), the vendors have installed a stone fireplace surround and hearth, together with a gas coal-effect fire. Two similar fires are installed in the main reception room; one within the inglenook-style fireplace at the front and one within the second fireplace, on the left-hand flank. The fires appear to be relatively modern and incorporate electronic ignition but no testing was undertaken as part of our survey. Your solicitor should be asked to make enquiries of the vendor and confirm whether the fires have been recently serviced by a Gas Safe registered engineer. The coals are dirty and not correctly set in some instances, however, and this suggests that servicing might not have been undertaken in recent times. If satisfactory documentation (including Gas Safety Certificates) is unavailable, we would strongly recommend that you ask the vendors to have these gas fires checked and serviced by a Gas Safe registered engineer, prior to completion of the sale. As part of these checks, the engineer should confirm that levels of ventilation are adequate. It is necessary to provide a source of fresh air whilst most gas fires are in use, to replenish oxygen that is used in combustion. Inadequate replenishment of oxygen can lead to asphyxiation.

We note that the chimney stack at the rear/left corner of the property has a metal terminal at high level; fitted with an electric fan. Flues sometimes require fan assistance if they do not 'draw' smoke effectively and the manufacturer's instructions, etc must be passed on to you by the vendor. **In addition, we strongly recommend that carbon-monoxide detectors are installed in the main reception room and in the entrance hall as soon as you take occupation.**

A gas-fired 'Aga' is installed in the kitchen and this is served by a stainless-steel flue pipe, which rises up through the building via the roof space, to a terminal above roof level. This was not tested but once again, confirmation must be sought that the Aga has been serviced by a Gas Safe registered engineer within the past 12 months. If satisfactory documentation is unavailable, we would recommend, once again, that the vendors commission a Gas Safe/'Aga' registered engineer to undertake a service and provide a Gas Safety Certificate in time for your occupation. Again, the adequacy of ventilation must be specifically checked.

4.05 Internal Joinery

Internal joinery comprises simply-moulded skirting boards, architraves and panelled doors etc, in fair overall condition. Many of the doors have been clad with tongued-and-grooved boarding, to provide a cottage-style effect. Some were found to be in need of minor adjustment. Unusual, fluted architraves are provided around door openings and mostly, these were found to be in satisfactory

condition but shrinkage cracking will require cosmetic attention in some areas, prior to re-decoration. A number of the skirting boards have been damaged by the vendor's dog, including in the entrance hall and in the utility room. The affected sections will need to be replaced.

The staircase appears to be of traditional timber construction and was found to be firm underfoot. Handrails were also found to be sound.

Radiator covers are installed in a number of rooms but these are loosely fitted and you may wish to have them fixed to the wall surfaces.

Fitted wardrobes are provided in bedrooms 1 & 2 and also in the bedroom 1 en-suite dressing room. These were found to be serviceable but some doors are in need of minor adjustment. Similar adjustments were found to be necessary to the cupboard doors in the dining room. Fitted dwarf cupboards and shelves in the study were found to be serviceable.

In the kitchen, a range of pine-fronted wall and base cupboards is installed, with a number of appliances, including a slide-in cooker, cooker hood, dish-washer, a double 'Butler' sink unit with waste-disposal unit and an integrated microwave oven, set into the 'island' unit. None of the appliances (or their electrical/plumbing connections) was tested as part of our survey. Work surfaces and drainers are of granite and appear to be in satisfactory condition but new mastic sealants are required between the granite tops and the tiled splash-backs. An 'Aga' is installed in addition, as mentioned in Section 4.04 "Fireplaces and Chimney Breasts".

4.06 Internal Decorations

Internal decorations are in fair condition but once the vendor's furniture and effects, pictures, etc have been removed, we anticipate that re-decoration will be required throughout. Please note our earlier comments in Section 3.10 "External Decorations", noting the likelihood that lead-based paints will have been used on the property in the past and the need for care during preparation prior to re-decoration.

4.07 Cellar/Basement

There is no cellar or basement with this particular property.

4.08 Timber Defects

Floors were concealed by fitted carpets and other fixed-down coverings, including ceramic tiling, wood-strip flooring, etc and these coverings (together with heavy items of furniture) placed significant restrictions on our inspection of the floor surfaces. Much of the ground floor structure is of concrete construction, however and this, of course, will not be vulnerable to timber defects such as rot or wood-boring insect infestation. Such defects may exist elsewhere, however, particularly in the original timber floors, for example and those at ground floor level will be most vulnerable, where dampness or condensation within the sub-floor void might be contributory factors. We raised corners of carpet in a number of rooms but no timber defects were found within the floorboards within the limitations of our inspection.

The skirting boards fixed to damp-affected walls in the utility room were also found to be damp – and these are at risk of rot. We would recommend their removal, until the walls have dried out, to prevent any possibility of a dry rot outbreak, during the vulnerable drying out period. (Dry rot is a particularly destructive and fast-spreading form of fungal decay.)

We would caution that rot and/or wood-boring insect infestation may exist in concealed locations, however, and that these might be revealed or exposed at some time in the future, particularly if and when floor coverings are changed. Examination of every timber is impossible in any pre-purchase survey but if you wish to arrange for a more detailed investigation, it will be necessary for floor coverings to be lifted to enable re-inspection, either by ourselves or by a timber treatment specialist prior to exchange of contracts.

We were advised verbally by Mr Lynch that all structural timbers within the original section of the building were spray-treated with insecticide/preservative as part of the refurbishment/redevelopment of the building but that no paperwork or guarantees are available in relation to these works.

Effective ventilation through the sub-floor voids is essential to control condensation and damp conditions, as these are conducive to rot attack. Airflow is introduced into the sub-floor voids by means of airbricks, set into the external walls at low level. These should be cleared of dirt/debris periodically, to enable them to fulfil their intended function. Airflow is introduced into the sub-floor voids by means of 225mm x 75mm airbricks of which there are two within the original section of the left-hand flank wall and two within the front elevation. We also noted the presence of two airbricks at the rear of the building and these may be connected with ventilation pipes running through the concrete floor in the main reception room, to promote airflow through the voids beneath the timber floors at the front of the house. (One of these airbricks is largely obstructed, however, and should be re-opened – **see photo 49)**. We would recommend that additional airbricks are installed within

the front elevation, corresponding with the suspended timber floors in the entrance hall and at the front of the main reception room. (The concrete floors in the study, utility room and cloakroom will not require sub-floor ventilation, however).

5. SERVICES

As far as the service installations are concerned, our inspection was a limited, superficial one and in the absence of specific tests we cannot give any warranty as to their design, condition or efficiency.

5.01 Electrical Installation

Mains electricity is connected to the property and the meter and two consumer units are located within the cupboard at the front corner of the study. We see from our vendor questionnaire that the installation was re-wired 13 years ago – although it does not appear to have been checked or tested subsequently.

Visible wiring was found to be in PVC-covered cable (although concealed cabling was not traced or tested). Within the consumer units, circuits are protected by miniature circuit-breakers, a safer and more convenient alternative to old-fashioned, re-wireable ruses. Most of the circuit-breakers are labelled, in accordance with the regulations but three are not and these circuits should be traced and labelled by an electrician, for easy identification/reference. The tamper-covers are missing from each of the consumer units and these should ideally be replaced. The second consumer unit is also fitted with an RCD (safety cut-off) to provide additional safety protection on the higher-rated circuits.

A number of areas of concern were identified in relation to safety, from our limited, superficial inspection. This included the following items, although this is not intended to form an exhaustive list:

- A wall-mounted light switch in the ground floor cloakroom – which should be replaced by a pull-cord switch, as a safety precaution, in view of its close proximity to the wash-hand basin.
- The absence of a rose, meaning that cables are exposed to the utility room light.
- A missing cover on a junction box in the study, where cables/connections are exposed.
- A loose light switch to the bedroom 1 dressing room.
- Dismantled equipment and exposed cabling adjoining the immersion heater on the hot water cylinder **(see photo 50)**. The cover is also missing from a junction box, at low level; leaving cables exposed.
- Surface-mounted PVC cables run externally to outside lighting, etc.
- Other general concerns in relation to external equipment and to the supply serving the log cabin, the outside lighting, vehicular gates at the entry to the site (although these are not serviceable), etc.

Exposed wiring and connections are potentially hazardous and we strongly recommend, therefore, that you commission an independent NICEIC (or equivalent) registered electrician to test the

electrical installation prior to exchange of contracts and to provide a quotation for all works that are found to be necessary. In relation to the annex, please see our further comments in Appendix A.

Many domestic electrical works are now required to comply with the Building Regulations and on completion of any qualifying works, a compliance certificate must be obtained from the installer.

5.02 Gas

Mains gas is connected to the property, and the meter is located in the cupboard at the front corner of the study. We did not smell gas during our inspection but gas-tightness of pipework and other fittings may only be confirmed by a specialists test. The Gas Safe Register recommends that gas appliances (boilers, fires, hobs, cookers etc) should be tested upon change of ownership and a Gas Safety Certificate obtained. Poorly maintained or improperly installed gas appliances can cause carbon-monoxide poisoning and you would be wise to seek specialist advice prior to exchange of contracts, therefore. See also Section 5.04 “Heating Installation” and Section 4.04 “Fireplaces and Chimney Breasts”, above, as well as our comments in Appendix A, relating to the annex and our specific recommendations for specialist testing and checks.

5.03 Water

Mains water is supplied to the property and we were unable to find an external stopcock in the public footpath at the front. The vendor should be asked to confirm the location of the external stopcock, in case the whole supply needs to be isolated for maintenance at any time in the future. It will also be necessary to confirm whether the supply is metered. The supply appears to enter the building in the meter cupboard, at the front corner of the study, where a stopcock was found. This was found to be serviceable but it should be lubricated using WD40 or similar, from time to time. Visible plumbing was found to be in copper pipework. We were advised verbally by Mr Lynch that the original pipework on the incoming water supply was replaced by a new, plastic supply pipe, when the property was developed 13 years ago. This was not confirmed by excavation, however, as part of our survey.

Cold water for domestic purposes is stored within a pair of modern plastic tanks within the main roof space. The lid has been removed from one of these tanks and should be re-fitted, to keep the water supply clean and hygienic.

In the bedroom 1 en-suite bathroom, a modern, period-style suite is installed and the water supply to each of the sanitary fittings was found to be pumped, via the electric pump located in the airing cupboard, nearby. Water pressure was found to be good, therefore. The fittings include an

enamelled, pressed-steel bath, with a telephone-style mixer tap. Water leakage was noted at the swivel connection, beneath the cradle for the shower handset and this will require investigation and repair by a plumber. The chrome finish is chipped on the plughole surround and the overflow is secured by a rusty screw and these aspects are a little disappointing. The suite also includes a period-style pedestal wash-hand basin with chrome mixer tap; which has become a little tarnished. A bidet is also installed, together with a close-couple WC. An overflow pipe is not connected to the WC cistern and one should be fitted as soon as possible (or an alternative flush mechanism, which will enable overflowing via the pan). The shower enclosure incorporates two tiled sides and one of glass, together with a glass door. Mastic sealants were found to be a little discoloured and these must be very carefully maintained in perfect condition, to prevent leakage into the floor, beneath. An 'Aqualisa' shower mixer is installed. The shower head requires de-scaling.

In the bedroom 2 en-suite, a modern period-style suite is installed, including a vanity wash-hand basin with chrome mixer tap. A modern close-couple WC is installed adjacent, together with an enamelled, pressed-steel bath with telephone-style mixer tap. This particular bath is fully-screened but the door is slightly heavy to operate. An 'Aqualisa' shower mixer is installed but the shower head was found to be leaking and may need to be replaced. Mastic sealants within the shower/bath enclosure are a little untidy and again, these must be carefully maintained in good, watertight condition. The bath enamel was found to be slightly discoloured as a result of limescale build-up. Water supplies to the sanitary fittings are again pumped and pressure was found to be good, therefore.

In the family bathroom, the sanitary fittings comprise a vanity wash-hand basin with chrome mixer tap, a close-couple WC and a bidet. An enamelled pressed-steel bath is also installed, with a telephone-style mixer tap. Again, this leaks at the swivel connection beneath the cradle and will require attention. Again, the bath is fully-screened and the sliding door is a little heavy to operate. Mastic sealants are slightly discoloured and are split, in part. These must be replaced, as necessary, to restore water-tightness. Again, an 'Aqualisa' shower mixer is installed and all supplies are pumped, hence pressure is good. This bath is slightly smaller than standard size.

5.04 <u>Heating Installation</u>

Hot water for domestic and central heating purposes is provided by a 'Glow-Worm 30HXi gas-fired condensing boiler, located in the utility room. We see from our vendor questionnaire that this was installed 3½ years ago and that it was last serviced some 18 months ago. On the basis that servicing should be carried out annually, this is now overdue and we would recommend that servicing is completed by a Gas Safe registered engineer in time for your occupation.

(Documentary evidence of servicing and a Gas Safety Certificate should then be passed on to you, prior to exchange of contracts).

The heating system is a conventional 'gravity-fed' system and the feed/expansion tank is located in the roof space. The water level within this tank is too high, however, and has actually exceeded the ball-valve **(see photo 51)**. This will require investigation and remedy by a heating engineer, as part of the service. The lid should then be re-fitted.

Hot water production and central heating are controlled by a digital programmer, located in the utility room. The instruction booklet relating to this (and the boiler) should be passed on to you by the vendor.

Hot water for domestic purposes is stored within a copper cylinder, located within a cupboard in the master bedroom. As indicated above, the electrical connection to the immersion heater has been disassembled and requires investigation and reassembly by an electrician. The hot water cylinder is fitted with a thermostat, to regulate the temperature of stored water. Adjacent to the cylinder, there is evidence of leakage from the central heating pump and this should be checked by a heating engineer. It would appear that one of the pump valves will have to be replaced but all joints should be checked.

On the central heating system, hot water is pumped through a system of modern copper pipework (where visible) and steel panel radiators. A number of radiator valve caps were found to be missing and these should be replaced, as necessary. A radiator was found to be pulling away from the wall in bedroom 1 and it should be re-fixed.

The boiler and heating system were not tested as part of our survey but you should also seek assurance from the vendor that the boiler was installed by a Gas Safe registered engineer. By way of confirmation, the Benchmark Logbook (duly completed and signed by the installing engineer) must be passed on to you, prior to exchange of contracts. This is the only available form of confirmation that the installation was made by a properly qualified and registered installer, in accordance with the Building Regulations. In any event, however, we would recommend that you have the system checked by an independent Gas Safe registered engineer prior to exchange of contracts and as indicated, servicing should also be undertaken, as this is overdue.

5.05 Drainage

The property is connected to the mains drainage system and the foul drains within the site run from the rear towards the front and presumably out into a public sewer beneath the street. We were

advised by the vendor that surface (rain) water from gulleys is drained into soakaways, located beneath the lawn, at the rear of the building. Soakaways are a means of disposing of rainwater into the ground. The soakaways (and the pipes that connect to them) are underground, however and could not be located, exposed or tested within the limitations of our inspection, however. Given the age of the property and the close proximity of trees and shrubs, we think it possible that roots will have penetrated into underground drains and would recommend that you seek specialist advice.

On the foul system, we found four inspection chambers within the site. The front-most of these is located just outside the vehicular gates and this is known as the 'interceptor' chamber, which is positioned just before the private drain enters the public sewer. The chamber is constructed in brick and has a heavy-duty, cast-iron cover. This was lifted and fine roots were found to be covering the interior of the chamber - but roots may also be penetrating via the 'benching' on either side of the half-round channel at the foot of the chamber **(see photos 52 & 53)**. We cannot confirm which tree or shrub these roots originate from (although it is possible to confirm this by botanical investigation, if required). It will be necessary for the fibrous roots to be removed from the sides of the chamber and for any significant root-access points to be raked-out and re-pointed in an attempt to prevent recurrence. (Checking will be required periodically, however, and roots may well have to be removed again, from time to time). The seriousness of root penetration via the benching will require investigation by specialist contractors and we strongly recommend, in addition, that the entire system is tested using CCTV equipment before exchange of contracts, to establish whether roots have penetrated into other, concealed parts of the system. This must be regarded as a possibility, given the close proximity of trees, hedges and shrubs, etc to the underground drains and the fragile/poorly-sealed joints between earthenware drains of this age.

What appeared to be droppings were seen to be floating within the interceptor trap and we also identified what appeared to be droppings elsewhere in the system, as will be described below. We suspect, therefore, that rats are entering the domestic drain – probably from the main sewer and their access will have been facilitated by the fact that the rodding-eye stopper is missing **(see photo 53)**. The stopper should be replaced, to help deter rats from entering the system in the future.

The second inspection chamber is located upstream of the aforementioned interceptor chamber and is within the driveway area. It has a light-duty steel cover. The inspection chamber itself is constructed in brick and the channels are of clay; although a PVC drain enters from the left side. This PVC connection is assumed to run upstream to a third inspection chamber and in turn to the soil and vent pipe, fixed to the front elevation (to the left side of the entrance), which serves the bedroom 2 en-suite bathroom. This branch appears to be an addition to the original system that would have been made when the property was redeveloped, 13 years ago. The third, intermediate inspection chamber on this run could not be lifted as its plastic cover was wedged into the frame by

many tiny stones from the gravel driveway. This cover will need to be freed therefore, in the event that access becomes necessary for maintenance.

The fourth and final inspection chamber is positioned close to the front/right corner of the building and is upstream of the second. This chamber is constructed in brick and the drains are formed from clay pipework. There is an entry into this inspection chamber from the right-hand side, in plastic pipework, however, and this appears to run upstream to the 2-storey annex, within the rear garden. Entries from the left side appear to come from the main house. Further rat droppings were found to be present within this chamber but the drains were otherwise clear and free-flowing in this location.

Part of the drainage system that serves the annex is positioned above ground level and at its furthest point upstream, this is propped by a rather untidily-constructed brick column **(see photo 54)**. The pipework then runs toward the front of the site, behind the railway sleepers and brick retaining wall forming a planter, adjacent to the right-hand boundary **(see photo 55)**, before running into the ground and connecting with the original drainage system via the fourth inspection chamber, as described above. Rodding-access points is provided on this run, both at the furthest point upstream **(see photo 54)** and also at the front end of the planter that adjoins the right-hand boundary – should access be required for clearing a blockage, etc **(see photo 56).**

Water was seen to flow readily through the system but we are concerned that the above-ground plastic pipe to the annex is 'pinched' between the brick retaining wall and a silver birch tree, immediately adjacent **(see photos 57 & 58)**. As the tree continues to grow (or if its degree of lean continues), the plastic pipe will be in danger of fracturing and leakage – and CCTV testing will be required to determine whether the pipe has already been constricted or otherwise damaged. (The gas pipe that serves the annex is located adjacent and in this respect, please see our further comments in Appendix A.) To prevent this, it will be necessary to break out the brick/block retaining wall, beneath the sleepers and to replace this retaining structure by additional railway sleepers. It will then be possible to move the sleepers from time to time and thus provide the pipe with sufficient clearance against the tree.

The rearmost section of the drain that serves the annex has been placed above ground level in order to provide it with sufficient gradient to allow connection into the pre-existing drainage system. The alternative would have been to install a sump and electrically-pumped system, which would, no doubt, have been more expensive. The above-ground pipework will be vulnerable to freezing during prolonged periods of cold weather and we would recommend that you consider the installation of lagging.

In summary, we recommend that the system is fully tested, prior to exchange of contracts, by a specialist contractor in order to confirm its condition and to establish the extent and location of any root penetration into concealed locations. Any recommended repairs should be undertaken and we would caution that these can be expensive. The contractor should therefore be asked to provide quotations for any recommended works, therefore and the missing rodding-eye stopper should also be reinstated.

The above ground drainage system serving the main house consists of a number of 'soil and vent' pipes, located on the front elevation; at the front/left corner and apparently also at the rear/right corner (although in this instance, only part of the pipe is visible externally). Where visible, these soil and vent pipe were found to be in satisfactory condition and they incorporate rodding access points at low level, to facilitate the clearing of blockages, if this should be necessary. One of the waste pipe connections into the soil and vent pipe on the front of the building has sagged, because it has not been clipped to the wall. It should be clipped in the correct position **(see photo 59).**

5.06 Security

A burglar alarm system is installed but this appeared to be switched off at the time of our inspection. We queried this with the vendors and were told that it was kept switched-off due to the fact that their dog was left in the house most of the time. The system was not tested as part of our survey and further enquiries should be made via your solicitor, to establish whether the system is NACOSS approved and to check whether it has been regularly serviced. The manufacturer's instructions should be passed on to you, together with details of the servicing contractor, codes, etc. You may also wish to confirm that the system meets your own particular security requirements.

An entry-phone system is installed outside the vehicular gates at the front of the site. We were advised by the vendor that this system (and the electrically-operated gates) is no longer serviceable. The disused electrics, etc should be checked by an electrician, as part of the tests recommended above, in Section 5.01 "Electrical Installation".

At the entrance to the property, the front door is secured by 2 five-lever mortise lock and a cylinder lock. The stable door at the rear of the kitchen is also fitted with a 5-lever lock but we would recommend the addition of key-operated bolts, top and bottom – and the French doors in the reception room and master bedroom should be similarly protected. You should also ensure that all windows at ground floor level (and those at first floor level that are accessible from the ground) are fitted with locks. It would be wise to seek specialist advice, in addition, from the local Crime Prevention Officer.

5.07 Other

Mains-wired smoke alarms are installed in the ground floor hall and on the first floor landing. These were not tested as part of our survey but judging by the red LED's that are showing, the backup batteries require changing. The alarm should be tested on a weekly basis.

6.0 THE SITE

6.01 Outbuildings

A log cabin is constructed within the rear garden and this is currently used as a gym **(see photo 60)**. The cabin is a timber structure that is dry-lined internally, using plasterboard finishes and that has a timber floor. This is a basic-quality structure, however, which is in need of maintenance. It has a flat roof, covered with felt. The weather-proofing details at the edges are poorly detailed and have been temporarily patched with 'Flashband' **(see photo 61)**. This roof covering appears to be at the end of its economic life and replacement is recommended. UPVC double-glazed windows are installed but internally, handles are missing. The frames have also been painted (brown), to a DIY standard. At the rear of the log cabin there is a lean-to storage facility, in poor condition, with a badly rotten plywood roof. This, we would suggest, requires demolition.

6.02 Garages

Garage space is included within the detached annex and this will be described in further detail in Appendix A.

6.03 Paths, Drives and Boundaries

The property is constructed upon an irregular-shaped plot, which tapers almost to a point, at the rear. It also slopes downwards from front to rear and the degree of sloping increases towards the rear of the site. The rearmost section is used as a 'builder's yard' and this area will need to be cleared of building materials before exchange of contracts – as will the area at the side of the annex, the area behind the log cabin, etc.

Your solicitor should confirm liability in respect of the ownership and maintenance of the various boundary structures. The front garden is largely given over to off-street parking and comprises a yard area, having an uneven tar macadam finish, overlaid by gravel chippings.

The front boundary is marked by a wall, presumably constructed in concrete blockwork with a render finish and featuring re-claimed brick columns. Both sides of the wall are concealed by thick ivy and no meaningful inspection was possible, therefore. This should be removed or at least brought under control. Access to the site is via two substantial timber gates in reasonable condition but as indicated, the electric operation of these gates is no longer functional. Rot was noted in parts (particularly along the bottom of the right-hand gate) and repairs will be required.

The boundary on the right-hand side of the front garden is marked by a close-boarded fence, in satisfactory condition. There is a roofed gateway between the right-hand boundary and the main building and we noted that one of the gate-posts is affected by rot and will need to be replaced.

The patio at the rear of the house is surfaced with re-claimed brick cobbles, in fair condition, but the surface undulates slightly. This patio is constructed between rendered 'retaining' walls, which are assumed to be built in concrete blockwork. The exact form of construction and design could not be confirmed but it would appear that the retaining wall does not incorporate any form of ground drainage. This might shorten the expected lifespan of the retaining structures but if any plans or specifications relating to these walls are available, they should be passed on to you. The decking at the rear of the annex has not been well built and springs underfoot.

Close-boarded fencing behind the conifer hedge on the right-hand side of the rear garden was found to be leaning and will need to be replaced before long. Further towards the rear, the right-hand boundary is defined by a (possibly pre-fabricated) retaining structure, built from timber and pebbles **(see photo 62)** and this holds a significantly higher ground level on the other side of the boundary. No obvious evidence of failure was apparent but timber elements will, of course, be vulnerable to rot, over time and liability for the upkeep of this structure should be confirmed. If replacement were ever necessary, this would be a very expensive and disruptive operation.

We note that a gate leads into a field at the rear of the site but your solicitor should confirm ownership of the adjoining land and should advise whether any right-of-way is in existence. There are many trees within the site, including pines, conifers, beeches, silver birches and other deciduous/evergreen varieties. We see from our vendor questionnaire that three of these are protected by Tree Preservation Orders and this will mean that Planning Permission will have to be obtained from the local authority before maintenance or felling may be undertaken. As indicated earlier, in Section 3.07 "Walls and Foundations", we strongly recommend that you seek specialist advice from a tree surgeon on the condition of the trees and all recommended works should be carried out.

7.0 MATTERS TO BE REFERRED TO YOUR SOLICITOR – PRIOR TO EXCHANGE OF CONTRACTS

Your solicitor should check:

a) That the required Statutory and Local Authority Approvals were obtained and complied with in respect of:
   - The construction of the 2-storey and single-storey extensions at the rear of the original building and the associated internal structural alterations.
   - The construction of the detached garage at the rear and the subsequent addition of the first floor accommodation, to include the alterations to the drainage system, the installation of the electrical system, etc.

b) That Benchmark Logbooks are available in respect of the boiler installations and that service history documentation is available for these appliances and the gas fires.

c) That plans and specifications are available in relation to the previous extension/redevelopment of the property, should these ever be required for future reference.

d) Responsibilities for boundaries

e) Rights for you to enter neighbouring property to maintain any structure situated near or on the boundary and any similar rights your neighbours may have to enter your property.

f) Whether valid/underwritten guarantees are available in respect of timber treatments, damp proofing, roof coverings, electrical installations, the central heating systems, etc. Benchmark Logbooks must also be passed on to you, in relation to the installation of the boilers.

g) That there are no defects in the legal Title in respect of the property and all rights associated therewith, e.g. access.

h) Liabilities in respect of any shared services.

i) Tree Preservation Orders. (We have been informed that there are three, affecting the subject property).

j) Planning restrictions e.g. Conservation Area status which would place restrictions on external treatment and maintenance of the building.

k) That the property is not constructed upon “made up” ground, contaminated land etc.

We note that you are interested in converting the roof space and the garage (within the annex) to form habitable space. It is likely that Planning Permission will be required for such works, although this might not be necessary for a loft conversion – and you should seek specialist advice on this aspect. (If your purchase is dependent upon these proposals, we advise you to seek advice before exchange of contracts.) Building Control approval will also be required for each of these proposals.

8.0 CONCLUSIONS AND RECOMMENDATIONS

A very substantially extended detached house, which has been generally well maintained since the redevelopment and extension works were completed 13 years ago. The accommodation is spacious but is perhaps a little “bottom-heavy”, due to the relatively small size of three of the four bedrooms at first floor level. The detached annex provides further (spacious) accommodation.

A number of general maintenance items are now required, however, and some aspects will require specialist investigation prior to exchange of contracts – particularly the service installations – and these should be tested by specialists. Some aspects of the electrical installation are potentially dangerous.

There is evidence of structural movement; most notably within the left-hand flank elevation of the original structure and whilst external examination of the affected area was restricted by ivy, we saw no evidence to suggest that this is recent or progressive. The cracking will require a resilient form of repair, however.

There are many trees within the site and specialist advice should be sought on their condition. These trees are within possible root-influencing distance of both the building and the drainage system - and roots were seen within the drains. Specialist testing of the system will be required prior to exchange of contracts, therefore. Localised dampness was noted in the utility room and this might well have been caused by a plumbing defect. Further investigation and repairs will be required by a plumber, therefore.

Many parts of a building such as foundations, subfloor areas etc are concealed during a survey inspection, and we are unable to comment on these. It follows, for practical reasons, that we have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible, and we are unable to report that such parts to the property are free from defects. Our inspection of structural floor timbers was very restricted, for example and this is one area where you may wish to consider further investigation before exchange of contracts, should you wish to be better assured.

We indicate below the salient defects which require attention but advise that this is not intended to be a complete schedule, and full reference should be made to the report as a whole. You are advised most strongly to obtain competitive quotations from reputable contractors/specialists on the matters listed below, prior to exchange of contracts. As soon as you receive the quotations and reports for the work specified and also the responses from your legal advisers, we will be pleased to advise whether or not these would cause us to change the advice which we give in the Report.

Only when you have all this information before you, will you be fully equipped to make a reasoned and informed judgement on whether or not to proceed with the purchase. We must advise you, however, that if you should decide to exchange contracts without obtaining this information, you would have to accept the risk that adverse factors might come to light in the future.
Works/investigations will include:

1. General maintenance of the main roof, to include replacement of slipped/broken tiles. Ongoing maintenance should be anticipated – particularly to the older tiles on the original (front-most) section of the building, the porch, inglenook, drive-through, etc.
2. Lifting of the decking on the roof terrace, to facilitate a more detailed inspection of the asphalt finish beneath. On the evidence available, however, the design/workmanship is not of the highest standard and a split within the rainwater channel at the rear requires urgent attention. This flat roof covering may have limited life, however.
3. Complete overhaul of the rainwater system in order to restore water-tightness. Cast-iron fittings (at the front) will have limited life, however and the guttering will probably need to be replaced within the near future. Leaves and other tree-related debris will need to be removed regularly, to prevent blockage and overflowing. Gulleys should be provided at the foot of two rainwater pipes at the rear.
4. Localised repairs to the render finishes on external walls, to include replacement of a rusting angle-bead on the chimney, to the left side of the roof terrace. Rendering should ideally be removed from wall surfaces beneath damp-proof course level, to prevent “bridging”.
5. Improvement in the level of sub-floor ventilation by the installation of additional airbricks within the front elevation and the clearing of one that is obstructed at the rear of the building.
6. Removal of ivy from wall surfaces – particularly the left flank. Resilient crack repair techniques will need to be employed in relation to the diagonal cracking within the left flank elevation.
7. General overhaul of external joinery prior to re-decoration, to include localised repairs and replacement of decayed timbers, in places. A number of double-glazed units have failed and it should be ensured that these are to be replaced by the vendor, prior to completion of the sale, as promised.
8. General repairs to internal wall and ceiling plaster finishes prior to re-decoration throughout.
9. Checking/testing of gas fires and the ‘Aga’ –prior to completion of the sale. A Gas Safety Certificate should then be passed on to you, together with copies of the engineer’s reports.
10. Testing of the central heating system by a Gas Safe registered engineer prior to exchange of contracts. Servicing of the central heating boiler is also believed to be overdue and this should be arranged by the vendor, and undertaken by a Gas Safe registered engineer, prior to completion of the sale.

11. Testing of the electrical installation prior to exchange of contracts by an NICEIC registered engineer – to include a quotation for all works found to be necessary. Some aspects of the installation, as existing, are hazardous.
12. Testing of the underground drainage system to establish its overall condition, prior to exchange of contracts, and to confirm water-tightness and the extent of root penetration.
13. Upgrading of insulation within the main roof space and provision of better ventilation to the original section, at the front.
14. General repairs to sanitary fittings, where necessary. Further investigations are required in the utility room, where we suspect there is a plumbing leak. This should be investigated and repaired as a matter of urgency in view of water damage to wall surfaces, etc.
15. Further investigation by a reputable damp/timber treatment specialist – with particular reference to the condition of concealed timbers. Investigations will be restricted due to fixed-down floor coverings, furniture, etc, however and you will proceed with the purchase in the knowledge that defects might be found at a later date, therefore.

With regard to the annex, works/investigations will include:

16. Careful monitoring of the flat roof covering. We have concerns in relation to buckling of the decking beneath the felt, which may indicate hidden faults. Repairs/renewals may be required.
17. Replacement of a missing tile to the left side of the mansard. Possible refitting of the rubber gasket around the soil pipe penetration.
18. Investigation/eradication of pests from within the mansard and the annex generally.
19. Clearing out and overhaul of the rainwater system, as necessary.
20. Provision a finish coat of render on the right hand flank wall.
21. General maintenance of external joinery, to include replacement of glazing where the hermetic seals have failed.
22. Replacement of a missing section of the soffit board at the front/right corner of the mansard.
23. Re-spacing of spindles around the staircase, to comply fully with the Building Regulations - although correction of the non-uniform rise height would mean replacement of the staircase.
24. Completion of the kitchen installation.
25. Specialist testing of the electrical installation prior to exchange of contracts.
26. Specialist testing of the gas and heating installations by a Gas Safe registered engineer, prior to exchange of contracts. The boiler should also be services, if this is due.
27. Connection of the water supply and testing of the water system by a registered plumber, prior to exchange of contracts.
28. Insulation of external water/drainage pipes.

9.0 ADDITIONAL INSTRUCTIONS

None.

This report is provided for your sole and confidential use and whilst it may be shown to other professional advisers acting for you, the contents are not to be disclosed to, nor made use of by any third party.

We trust that in this report we provide the information and advice you require but if we can be of any further assistance, please do not hesitate to contact us.

Signature of Surveyor . . . .

David Carver BSc FRICS

For and on behalf of: David Carver Associates Ltd.,
16, Rodney Road,
New Malden,
Surrey,
KT3 5AB

Telephone Number: 020 8605 0081
Date of Report: 20th April 2010

APPENDIX A

ANNEX

Introduction

We have been told by the vendor that the annex was initially constructed as a single-storey detached double-garage, around 13 years ago, in conjunction with the redevelopment and extension of the main house. The first floor accommodation is believed to have been added subsequently and completed around 5 years ago.

External Construction and Condition

The annex has a mansard roof structure, within which the first floor accommodation is located. The mansard is predominantly flat but with vertical and steeply-pitched surfaces at the perimeter; above first floor level. These vertical and steeply-pitched surfaces are clad with small-gauge, plain concrete tiles; found to be in good condition overall but one broken/slipped tile was noted to the left-hand face and this will need to be replaced within the near future. A supply of spare tiles was found between the annex and the right-hand boundary and whilst we assume that these will be included within the sale, you may care to confirm this by a solicitor's enquiry of the vendor.

The flat section of the roof is covered with bituminous felt and is painted with solar-reflective paint **(see photo 63)**. The solar-reflective finish appears to have been applied/re-applied relatively recently and this will need to be repeated periodically, to maintain validity of any manufacturer's warranty – but this should be confirmed by reference to guarantee documentation to be passed on to you, by the vendor. We were advised verbally by Mr Lynch that this is a high-performance felt, carrying a long-term guarantee but we have not had sight of any documentation in this respect and as indicated, all relevant documentation should be passed on, ensuring that both workmanship and materials are covered by a long-term guarantee.

We noted the presence of two patch repairs on the roof surface **(see photo 64)** and whilst we assume that these have been applied in response to leakage, we do not know this for certain. We also noted that the roof surface undulates significantly and that this causes rainwater to 'pond' on the surface **(see photo 63)**. This may be the result of buckling within the underlying timber decking but without details of the exact form and construction, it is difficult to be certain. The roof is not provided with any means of ventilation and we assume therefore that it is constructed on 'warm roof' principles; whereby the insulation is installed on top of the roof deck, to remove the necessity for ventilating the structure. If any available plans or specifications are available, however, these

should be passed on to you, for reference. We found no indications of ongoing rainwater penetration at the time of our inspection but as you may be aware, flat roof coverings have a limited life expectancy from new, which can be further reduced by poor-quality workmanship, design and materials. We cannot provide any warranty that this roof will remain watertight, therefore and would caution that the buckling of the decking may be indicative of design/construction problems. The correction of such problems could be expensive/disruptive.

It is notable that the mansard roof is fitted with guttering only on the left and right-hand sides and it would have been better therefore, to have constructed low-level kerbs across the front and rear edges of the roof, to minimize rainwater run-off on these sides of the mansard (where rainwater fittings are not provided). This could be seen as a design oversight but is not particularly significant.

Dormer windows project from the mansard at the perimeter and these are assumed to be timber-framed structures, clad with lead sheet **(see photo 65)**. The quality of the lead-working on the upper surfaces is not of the highest standard and whilst we found no indications of rainwater penetration, water-proofing problems cannot be ruled out in the future **(see photo 66)**. The finer details of the design are very important when installing lead claddings and it is particularly important to prevent condensation forming on the underside of the lead, as this will cause it to corrode from beneath. It would appear that aluminium 'soakers' have been used to form the junction between the dormer sides and the tiled surfaces of the mansard and again, we saw no indications of leakage in these areas. Curiously, however, lead flashings have been provided in addition to soakers around the left-hand dormer on the rear face and the reason for different detailing in this location is not known **(see photo 67).**

The framing which supports the mansard structure is almost completely concealed behind the external claddings and by plasterboard wall and ceiling finishes internally. The only area where access is possible is at the rear/right corner, where the window sill is removable to allow access to the WC cistern, in the bathroom. Inspection from this point is very restricted, although it is possible to see some of the timber rafters that form part of the frame of the structure. It is also possible to see that foil-backed rigid insulation boards have been fixed to the outside of the timber frame, thus forming a 'warm' structure and meaning that the void does not need to be ventilated **(see photo 68).** A breathable sarking felt appears to have been provided on the outside of the insulation, prior to the fixing of the tile cladding and part of this lining is visible at the front/left corner of the building, where part of the soffit board is missing **(see photo 69).**

We are advised by the vendor that the mansard structure is built around a steel frame but no part of this was visible within the limitations of our inspection. The design and construction of steel-framed structures has to be undertaken very carefully, to ensure that the frame will not suffer corrosion and

a high standard of workmanship and on-site supervision is required. On the information currently available, we are unable to provide reassurance on these aspects and it is particularly important to confirm that the design was approved by the local authority Building Control Department, that periodic inspections were carried out during construction and that a Completion Certificate has been issued.

Within the accessible void at the rear/right corner, we noted the presence of droppings and that polystyrene waste material has been gnawed **(see photos 70 & 71)**. It would appear likely therefore that squirrels have obtained access but we do not know whether this infestation is continuing. It is possible that squirrels obtained access at the front/left corner of the mansard, where part of the soffit board is missing **(see photo 69)**. The missing section should be reinstated as soon as possible (once you are satisfied that squirrels are not inside!) Any other possible means of access should be investigated, however, by a pest control specialist.

We were unable to confirm the adequacy or type of thermal insulation within the flat roof but would assume that similar, foil-backed foam material has been provided. If the original approved plans are available, these should provide further insight and confirmation.

At the entrance to the property, there is a small porch roof canopy comprising overlapping lengths of lead sheet on a timber framework and this structure was found to be in satisfactory condition.

Rainwater discharges from the left and right-hand sides of the mansard into modern, half-round PVC guttering. It was not raining at the time of our inspection but staining was noted behind the gutters in a number of areas and these stains appear to indicate leakage **(see photo 72)**. The system should be carefully monitored during rainfall and repaired, as necessary. The guttering will be susceptible to blockage as a result of falling leaves and other tree debris; particularly on the right-hand side, where trees overhang the building. It will be necessary to have the gutters checked and cleared regularly, therefore, to prevent blockage and overflowing and the wisteria shrubs must be pruned periodically. You should consider the installation of gutter covers, to help prevent blockage. Rainwater pipes discharge onto the paving at the front of the annex and through a grating, into a channel running across the full width. We assume that this is connected to a soakaway, to take rainwater away into the soil but this was not confirmed and no testing was undertaken.

Up to first floor level, the walls of the annex are assumed to be built in solid concrete blockwork, with a smooth render finish on the external surfaces. Internal surfaces are partly plastered and partly dry-lined with plasterboard. The wall thickness, excluding render and plaster, is estimated to be around 230mm. The rendering was mostly found to be in sound condition overall but the finish is rough

over the rear-facing garage window and this should have been better finished. The render finish on the right-hand flank elevation has not been completed and whilst a 'scratch' coat of render has been applied to the blockwork, the 'finish' coat has not been applied **(see photo 73)**. This will need to be applied within the near future.

The foundations beneath the annex have not been exposed and we have no information relating to their design or construction. It will be important to confirm that the foundation design was re-assessed before the first floor extension was added, by a structural engineer and calculations undertaken to confirm adequacy. (If a local authority Building Control Completion Certificate is available, it should be reasonable to assume that the local authority inspectors were satisfied in this respect). We would confirm that we found no evidence of any significant movement attributable to subsidence, settlement or other undue movement of the foundations. A number of trees are growing very close to the structure, however and we would reiterate our earlier recommendation that you have the trees checked and assessed by a tree surgeon; whose recommendations should be implemented. Several minor cracks were noted within the external walls but these are not considered to be of structural significance. Comprehensive insurance cover must be provided by your policy, against subsidence, settlement, tree impact and other usual perils.

The damp-proof course is largely concealed within the walls but where it is partially visible adjacent to the garage doors at the front, it was found to be of plastic, as expected. The damp-proof course appears to be 'bridged' by the planter that has been constructed up against the front/left corner of the annex, as this is filled with soil **(see photo 74)**. No membrane is visible between the planter and the building, to prevent moisture soaking through, into the structure. It would be better, in our opinion, for the wisteria shrub to be re-planted into a pot; to enable the removal of the planter.

Moisture meter testing of wall surfaces was undertaken internally but this part of our inspection was restricted by a large volume of stored articles; particularly in the garage. Inspection was also restricted by the plasterboard dry-linings, fixed to wall surfaces in parts of the ground floor accommodation. In the accessible areas, however, the internal wall surfaces were found to contain acceptably low levels of moisture and whilst these readings should be regarded only as a guide in respect of dry-lined wall surfaces, there appear to be no obvious causes for concern.

The ground floor is of concrete construction and should incorporate a continuous damp-proof membrane (in heavy-duty polythene), to prevent moisture rising into the slab from the ground. The floor was not disturbed, however and the existence of a membrane could not be confirmed. On the basis that the floor was originally constructed as a garage, however, it may not contain insulation in accordance with current standards but once again, the original approved plans may provide further information on this aspect.

Within the ground floor accommodation, the windows are of single-glazed timber casement type, with ornamental square-leading. These are fitted with low-security locks and the 'trickle' vents have not been installed in some instances. Windows were opened at random and most were found to be serviceable but one has been sealed or painted shut within the ground floor reception room. General maintenance should be anticipated prior to re-decoration. The window at the rear of the garage appears to be an original 1930s frame that has been salvaged – and ongoing maintenance should be anticipated. (A projecting sill should ideally be fitted.) Entry into the annex is via a 'stable' door with a leaded, single-glazed panel and 5-lever lock. This was found to be in satisfactory condition and serviceable. French doors are provided at the rear of the ground floor reception room and these are of similar construction, being of single-glazed softwood, with ornamental leading. We would recommend that storm bars are fitted across the lower, external edges of the doors, to deflect rainwater away, over the threshold. A missing exterior handle should also be replaced; as should the missing glazing-beads. We were unable to confirm whether these doors contain safety glass and you may wish to seek specialist advice on this.

The garage doors at the front are constructed in oak but the doors on the left-hand side are, of course, 'dummies'. The pair on the right-hand side is secured by a combination lock and you should confirm that the code will be made available to you.

The first floor windows are of similar construction, except that they contain double-glazed inserts, with trickle vents. These were found to be in reasonable condition overall but two of the hermetic seals have failed in the bathroom and the glazing will need to be replaced in this room, therefore.

External decorative finishes were found to be in good condition.

Internal Construction and Condition

Internally, the ceilings are of plasterboard construction and for the most part, they were found to be in good condition. The ceiling in the garage has been patched and made good at some stage, however, and may require better finishing or re-skimming to disguise this. Most of the internal wall surfaces are also dry-lined in plasterboard and were found to be in satisfactory condition overall. Localised general maintenance should be anticipated prior to re-decoration, nonetheless.

Internal decorative finishes are generally in satisfactory condition but once stored articles, etc have been removed from the garage (and once the service installations have been completed to a more acceptable standard), this area (at least) will need to be re-decorated.

Internal joinery comprises simply-moulded skirting boards, architraves and panelled doors. Adjustment of some of the doors is required, including that to the ground floor reception room - as this will not close. The staircase is of traditional timber construction and was found to be generally firm underfoot but the tread heights (the 'rise') are not of identical towards the top of the flight. This is potentially hazardous but correction would mean replacement of the whole staircase. The balustrade around the stair opening at first floor level is formed from spindles but the spacing of these is non-uniform. In part, the spacing is too wide and this contravenes the Building Regulations. The regulations require that a 100mm sphere (representing a young child's head) should not be able to pass between any two spindles, as a safety precaution. We would urge you to have the spindles re-set at the appropriate separation, to ensure compliance – particularly if young children are to visit or occupy the annex. Additional, matching spindles will need to be sourced or made up especially, as necessary.

The kitchen fittings within the first floor accommodation comprise a range of wall and base cabinets with beech-block work surfaces. These are in need of oiling, to provide treatment/protection and a mastic sealant should be provided adjacent to the splash-back areas. The stainless-steel sink top has not been fitted and this would appear to be a type that should be fitted to the underside of the work surface **(see photo 75)**. A number of integrated appliances are installed but these were not tested in any way. We did note, however, the presence of mouse droppings underneath the freezer **(see photo 76)** and we recommend therefore that you seek specialist advice from a pest control expert. Isolating switches for the appliances were not found and if these have not been included, they will need to be installed as part of other work on the electrical installation (see below). We noted that the wall cupboard in the front corner does not open.

Floors throughout the annex were concealed at the time of inspection by wood-strip finishes, ceramic tiling, etc and this meant that no inspection of floor surfaces was possible. It would appear, however, that the upper floor is of traditional suspended timber joist type, with boards laid over, whilst the ground floor is of solid, concrete slab type. The floors were found to be generally level and firm underfoot. The floor within the garage should be set 100mm below the adjoining floors within the habitable space to comply with Building Regulations. (This is a safety precaution, required in the event of a fuel spillage in the garage area). In this instance, the garage floor is at the same level as the habitable space and the Building Regulations have therefore been contravened. With this in mind, it will be interesting to establish whether or not the build has been approved and signed-off by the local authority, under the Building Regulations.) Correction of this would be very expensive/disruptive. On the basis that you intend to convert the remaining garage to habitable space, however, this should not be a particularly significant factor but we cannot confirm whether Planning Permission for this proposal will be forthcoming and would urge you to seek further, specialist advice – particularly if your purchase is dependent on this.

Services

As far as the service installations are concerned, our inspection was a limited, superficial one and compliance with the relevant regulations may only be confirmed by reference to specialists' tests.

Mains electricity is supplied to the annex and the consumer unit is located within the hall cupboard. A minority of the miniature circuit-breakers is labelled but the labels are barely legible. Clear labelling is required to comply with the Building Regulations. We noted a number of areas of concern in relation to the electrical installation and whilst the following is not intended to be an exhaustive list, these include:

- A loose wire hanging adjacent to the consumer unit (we do not know whether this is live – **see photo 77).**
- Non-compliant labelling of circuit-breakers, as noted above.
- Loose/un-fixed surface cabling serving the surface-mounted power points in the garage **(see photo 78)** and the flood-lighting. Potentially unsafe block connectors are also exposed.
- Exposed wiring hanging from ceilings, where light fittings have yet to be installed.
- Exposed connector block used on the plinth lighting, underneath the wall cupboards in the kitchen.
- The possibility of damage to electrical cabling due to squirrel infestation within the mansard roof cavities.
- The absence of an RCD (safety cut-off device) to protect the higher-rated circuits (although a device of this type is fitted adjacent to the Jacuzzi bath).

In view of the above, you must commission an electrician to undertake a full test of the installation (and the supply brought out from the main house) before exchange of contracts and provide a quotation for all necessary works.

Mains gas is connected to the annex, via a copper pipe which is visible on the external wall of the annex. This should be labelled as 'gas pipework' to comply with the regulations and no labelling is currently provided. The eternal supply pipe may be traced forwards, alongside the PVC drainpipe, within the planter that adjoins the right-hand boundary in front of the annex, but it then disappears and presumably runs underground, across to the meter in the study or to some other point of connection with the main building. We strongly recommend that this gas supply is checked by a Gas Safe registered engineer before exchange of contracts, to confirm that it complies with the relevant regulations.

Hot water and central heating to the annex is provided by a self-contained heating system, using a 'Worcester 35CDi II gas-fired combination boiler. This is located in the garage and has a powered flue. It was in operation at the time of our inspection but no testing was undertaken. We did note, however, that the digital clock is secured with duct tape **(see photo 79),** which is unlikely to comply with the manufacturer's instructions. Central heating is provided by means of modern panel radiators; some of which are fitted with thermostatically-controlled valves. (Thermostatic valves will need to be installed to radiators that are not currently fitted with them). Pipework is in plastic, with push-fit connectors where visible. A loose radiator in the bedroom should be re-fixed to the wall. Much of the pipework has been concealed behind plasterboard dry-linings but it is exposed on the surface of walls in a number of locations (particularly in the garage) and is unsightly **(see photo 80)**. Better concealment will be required if you intend to convert this area to habitable space – and an additional radiator will be required within the front section. Staining within the first floor dining area indicates that a radiator valve has leaked in the past but this appeared to be dry at the time of our inspection. You must sure that a completed and signed Benchmark Logbook is passed onto you, i relation to the installation of this boiler. We strongly recommend that the entire heating installation is tested by a Gas Safe registered engineer prior to exchange of contracts, however and that a quotation is supplied for all necessary works. Once any necessary works have been completed, a Gas Safety Certificate should be supplied. If confirmation of servicing within the last 12 months is unavailable, the boiler should also be serviced.

Mains water is supplied to the property and the pipework is located above ground level, where it approaches the annex from the front and is surface-mounted along the right-hand flank **(see photo 54)**. It is only partially insulated, however, and additional lagging will be required to prevent freezing. The water appeared to be turned off at the time of our visit and the location of the isolating stopcock should be confirmed by enquiry of the vendor. We were unable to confirm the depth to which the water supply pipe is buried and we do not know whether it is deep enough to provide protection from frost.

The sanitary fittings appear modern but as the water supply had been disconnected, no form of checking or testing could be applied. The fittings comprise a Jacuzzi-style bath, a pedestal wash-hand basin and a 'back-to-wall' WC. The WC installation appears very basic, however, and cistern is supported by electrical flex. The purpose-made cistern lid is missing (and has been replaced by a rudimentary wooden lid - **see photo 81)**. This causes us to wonder about the quality of installation/construction in concealed areas and again, therefore, we recommend that the entire installation is checked by a heating engineer/plumber and that quotations are supplied for all recommended works, before exchange of contracts.

The annex is connected to the mains drainage system via the above-ground PVC pipework visible on the right-hand flank, which runs within the planter, adjacent to the right-hand boundary. Please see our further comments in this respect, within the main body of the Report. The vertical section of the pipework exits through the side of the mansard. The rubber/aluminium gasket at this junction should be concealed beneath the tiling **(see photo 82).**

End of Appendix A