# BUILDING CONDITION SURVEY REPORT

## In Respect Of

**xxxx**

## On Behalf Of

**xxxx**

ADM
June 2019

Barn 1 The Chequers The Green Gazeley Newmarket Suffolk CB8 8RF
Tel: 01638 750019 Email: contact@bsinitiative.co.uk
Company No.6633912

Directors
Andrew Moulsdale BSc FRICS & Oliver Goodson BSc (Hons) MRICS

## 1.00 INSTRUCTIONS.

In response to your instructions received by email dated xxxx we can confirm that we have inspected the property, which is currently fully occupied, carpeted and furnished and consists of a detached single storey educational building constructed shortly after the year 2000. In this report on the structural and general condition of the property, prepared in the context of the type and age of the premises, we have endeavoured to identify the defects found during our inspection and draw your attention to those items which, in our opinion, are likely to give rise to exceptional expenditure in the future. This report, which may not be copied without our authority, is presented strictly for your own use to consider future repairs and maintenance and for no other purpose.

## 2.00 INSPECTION.

Our survey was carried out on a single visit on xxxx at which time the weather was dry and bright. In order to discover evidence of present or potential defects to enable us to report as outlined above, our inspection extended to all areas accessible to both the interior and exterior of the premises without carrying out damaging exposure works or the use of long ladders.

There are, of course, in any building many elements which remain concealed or inaccessible after initial construction and cannot therefore be effectively inspected subsequently. We are bound to point out therefore, that we have not inspected woodwork, steelwork, concrete or other parts of the structure and fabric of the premises which were covered, unexposed or inaccessible and we cannot therefore report that such parts of the property were free from rot, corrosion or other defects etc. Where water ingress has occurred the risk of the development of rot is much increased. If it develops, dry rot can spread quickly through timber sections of a property and infect brickwork thus resulting in significant damage and extensive and costly repair works. Dry rot can also spread from an initial source of water ingress and affect other timber structures in close proximity. We recorded no evidence of the existence of dry rot.

We have not instigated any disruptive or intrusive investigation such as excavation of trial pits, exposure of concealed timber structures or lifting of floorboards, which would have required the assistance of tradesmen and the approval of the vendor. We have however sought to assess the overall condition and structure of the building and report to you as outlined above. We would also confirm that we have not tested hermetic seals to double glazed windows and cannot confirm the condition of these components.

Asbestos is often contained in many components of buildings but is often concealed in the structure and fabric of the building. Where material is evident and could possibly contain asbestos we have highlighted recommended remedial works. Most asbestos cement and boarded surfaces do not pose any prejudicial risk to health if left undisturbed but where material is potentially dangerous this has been detailed. We have not however carried out testing of any material to confirm if asbestos exists within its construction. Given the age of the property the use of asbestos in its construction is not anticipated.

In accordance with your instructions, we have not tested any of the service installations, incoming mains, wastes, drains or other such elements of the property and accordingly therefore we cannot report on their safety adequacy and standard of installation. We have however reported our findings in outline later in this report to assist your instructions to specialist contractors if further information is required.

## 3.00 PREMISES.

We assume that you are familiar with the premises, which effectively consist of a single storey educational building constructed shortly after the year 2000. The building has a number of intersecting pitched roofs main roof weathered by concrete interlocking tiles. The main external walls appear to be of cavity brick construction. The ground floor is predominately of suspended concrete construction.

## 4.00 SECURITY.

The premises have adequate he security provisions however in our opinion improvements are recommended and the existing facilities be comprehensively reviewed in conjunction with your insurers to ascertain that their precise requirements are complied with.

## 5.00 MEANS OF ESCAPE & FIRE PRECAUTIONS.

The means of escape and fire precautions appertaining to buildings of this age and nature are covered by various statutes and the Building Regulations. The property appears to have been constructed and subsequently maintained in compliance with these Acts and is considered to be acceptable although upgrading of the fire alarm system is recommended within the foreseeable future. This essential system should be regularly maintained and tested as this will provide an early warning in the event of the development of a fire.

## 6.00 THERMAL EFFICIENCY.

In view of the age and nature of the property it is anticipated that the thermal insulation to the external elements of the dwelling are not fully compliant with current Building Regulations and therefore heat loss will be in excess of modern standards.

Improvement to the insulation levels within the main roof space above the suspended ceiling is strongly recommended to improve the energy efficiency of the building.

The retention of older double glazed windows is such that the energy efficiency of these is not strictly in compliance with current standards although the air gaps are considered to be acceptable. The windows remain in fair condition and upgrading is not warranted at this time.

The introduction of more energy efficient LED lighting should also be contemplated.

## 7.00 ELEMENTS OF CONSTRUCTION.

### 7.01 Roofs.

The property has numerous intersecting roof pitches, which are generally weathered with concrete interlocking tiles. Based on a visual inspection the ridge and hips to the roof hold good alignment with little evidence of any undue movement or deflection and on this basis therefore we are satisfied that they remain structurally stable, as illustrated below.


We endeavoured to gain access to assess the roof structure, however this was concealed by suspended ceilings with insulation located above generally with a polythene vapour barrier beneath, which prevented sight of the roof structure.

We anticipate that the roof structure is a complex arrangement of timber trusses, possibly with steel supports, however we cannot confirm our suspicions in this regard. Based on our external inspection and the evidence available to us at this time, we are of the opinion that the roof remains structurally stable. Within the plant room galvanised holding down straps are evident, which secure the wall plates to the walls, in accordance with good codes of practice as illustrated below.

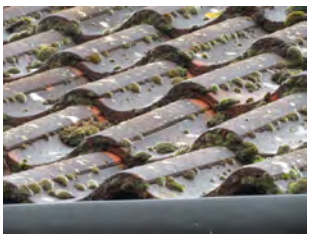

The tile coverings appear to be the original installations and remain generally in fair condition, considering their age and nature. It is apparent, however, that maintenance is now required and the ridge and hip tiles in particular are poorly pointed as illustrated below.





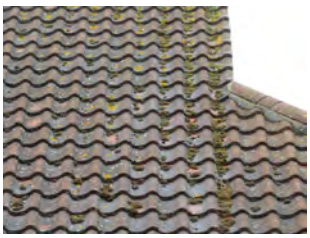

It is apparent that one hip has required works and the tiles have been replaced in this instance, as illustrated below, suggesting that failure of the ridge and hip tiles could well occur during extremely inclement weather. Removal of all ridge and hip tiles, rebedding and repointing is therefore strongly recommended as part of a maintenance programe in respect of the roof.

The roof tiling itself generally remains in fair condition, however there is evidence of the early stages of tiles slipping from position with the original tile colour evident where the tiles have moved, as illustrated by reference to the following photograph.



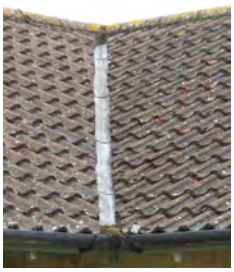
In other locations adjacent to the valley gutters tiles have fallen from position more extensively and could potentially result in water ingress as a consequence, as illustrated below.

Overhauling of the tiled roof sections are therefore essential to conserve the integrity of the property and cleaning of moss growth and weeds, which are evident to many roof slopes as illustrated below, should be undertaken shortly.


At the intersection of various roof pitches lead lined valley gutters have been formed in accordance with good codes of practice.

The lead valley gutters generally remain in fair condition at this time, as illustrated below.

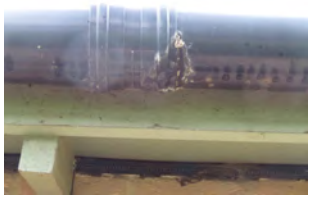


It is apparent, however, that debris is becoming entrapped within the valley gutters, particularly at the junctions with the main uPVC gutters, as illustrated by reference to the following photographs. Blockage of the gutters is causing overspilling to occur during periods of rainfall and as part of the works in overhauling the roof cleaning of the valley gutters and replacement of the parging to the tiles and valley gutter junctions should be undertaken.



We were unable to gain sight of the membrane likely to exist beneath the roof tiling, however we anticipate that this is microporous in nature. We recorded no vents within the main slope to prevent condensation and this perhaps indicates that a microporous membrane, such as Tyvek has been utiliesed although we cannot confirm our suspicions in this regard.

To the eaves and extremities of the property ventilation appears to be provided between the soffits and to the underside of the exposed rafters where a mesh inset guard has been incorporated to the ventilation slot, as illustated by reference to the following photographs. We recorded no evidence of condensation within the roof void, however we could not inspect this and therefore we cannot confirm our suspicions in this regard. The apparently undamaged polyethene vapour barrier will also assist.




Internally we recorded little or no evidence to suggest of water penetration to the roof except within one instance around a mechanical extract fan to a kitchen area where staining and water damage to the ceiling tiles were evident, as illustrated below.

This minor water ingress suggests that a lead cowel detail around a penetrating vent has begun to fail although where evident, these generally remained in good condition. Minor repairs are therefore to be anticipated in this regard.

The soil and vent sleeve to the roof, as illustrated in the following photograph, is poor and a potential source of water ingress and an improved detail in this regard is recommended.

To the verge detail the tiles are held in place by clips and a mortar fillet, as illustrated below. The tile clips appear generally to remain in good condition, as does much of the mortar fillets, however some replacement mortar is recommended as part of the overall maintenance of the building and the roof in particular.

Within the roof structure there are a number of gable ends which are generally weathered with uPVC. The plastic components appear to remain in fair condition at this time, although they are badly weathered and would benefit from cleaning, as illustrated below. Replacement of the uPVC components may well be anticipated within the foreseeable future.

The exposed rafter feet, soffits and the timber purlin above the main entrance, as illustrated below, generally remain in fair condition but would benefit from redecoration in due course.

## 7.02 Rainwater Goods.

Rainwater from the main pitch roofs are discharged to uPVC guttering attached to the timber fascias to the roof generally, as illustrated below.

The guttering appears to be the original installation and there is evidence of numerous leaks to joints, as illustrated particularly by reference to the following photographs.

In a number of instances the gutter sections have become disconnected at joints which will also result in leaks occurring during periods of rainfall, as illustrated below.

Over spilling has also occurred beneath valley gutters where a build-up of debris has been identified and recorded previously but illustrated again by reference to the following photographs.


Clearly failure of gutters results in leaking which can cause damage and saturation to the brickwork and result in water penetration internally and much increase the risk of rot developing. We recorded no particular evidence of this; however it is essential that the gutters are cleaned, overhauled and all leaking joints sealed.

The content of the gutters is discharged via uPVC downpipes which run to back inlet gullies. In a number of instances connections to the gutters are loose and misplaced, as illustrated by reference to the following photograph.

Where connections and spigot outlets remain intact there is evidence of leaks to the joints within the downpipes, as illustrated particularly by reference to the following photographs. Overhauling of the gutters and downpipes is therefore essential. Works of this nature should be undertaken in the near term to prevent over spilling of water and leaks, which could cause damage to the building.

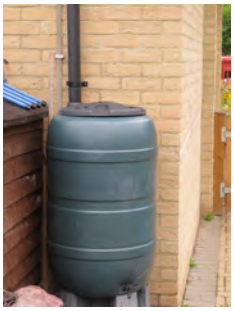

The plastic rainwater goods were not generally of the highest order and there is evidence of sun leaching causing discolouration to the plastic downpipes in particular. The overall quality of the installations was not of the highest order and are prone therefore to deterioration.

Replacement of the gutters with powder coated aluminium or better quality uPVC components may well be considered prudent to minimise long term maintenance costs. We anticipate that the rainwater goods are approximately 20 years of age and in our opinion they are approaching the end of their useful life and replacement may well be considered more cost effective over a longer period than repairing and maintaining the existing installations.

The downpipes appear to discharge into uPVC gullies, although these were generally concealed from view. Where visible within the shingle French drain to the extremities of the building they are evident as illustrated below.

We cannot confirm if the gullies run to a soakaway or to a combined underground drainage system. We recorded no evidence to indicate that the underground drainage installation serving the rainwater gutters operate in anything other than an appropriate manner. It would however be prudent to carry out a CCTV survey of the drainage runs if detailed drainage plans are not in existence. A CCTV survey would also assess the condition of the underground drainage installation. The use of uPVC materials is such that we anticipate the drains generally to remain in fair order. Where vitreous clay sections have been utilised some misplaced joints and radial fractures may be evident. Cleaning of the underground drainage installation is strongly recommended as part of normal maintenance procedures.

In one instance rainwater is collected in a water butt, possibly for use within the rear garden area as illustrated below. Regular drainage of the water butt will be required during periods of heavy rainfall.



### 7.03 Walls and Structure.

The main structure to the building appears to be provided by cavity brickwork walls which support roof loadings and transpose these down to the foundations. A single steel column was also recorded to support a projecting section of roof. All roof loads are transposed to the external walls.

During the course of our survey we were unable to gain sight of the foundations, from which the walls were raised and cannot confirm their nature, extent and condition. We anticipate that these are of deep strip concrete formation and we anticipate that they were approved by Building Control during the construction of the property. Externally the walls in all instances held good alignment, with little evidence of any undue movement or deflection and we are satisfied therefore that they remain structurally stable. We recorded no evidence of subsidence affecting the property and the geology of the area is such that the development of subsidence is unlikely, however it cannot be ruled out. Appropriate levels of subsidence cover should be maintained, as part of the general building insurance.

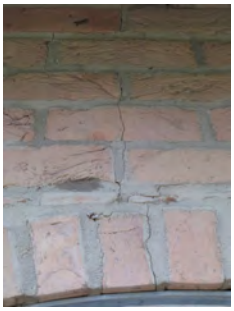
In some areas to the property there are a number of developing trees and shrubs and at least one larger Sycamore tree has been pollarded recently, as illustrated below.

Other trees which are increasing in height, as illustrated by reference to the following photograph, perhaps should be pollarded to minimise their water uptake requirements.

Growth of trees in close proximity to the building could undermine the foundations and result in shrinkage or desiccation of clay sub-strata, much increasing the risk of subsidence. Failure of underground drainage installations can also result in the development of subsidence.

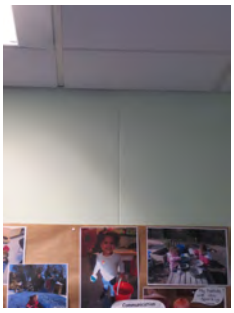
The cavity brick walls are generally well aligned, and the brick bond is illustrated by reference to the following photograph.

To the front elevation there is a large circular window and immediately above this there is a near vertical hairline crack within the brickwork, illustrated by reference to the following photograph.

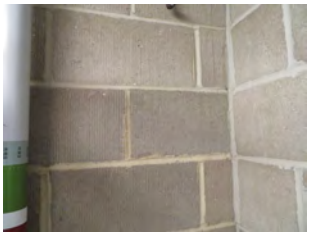


In our opinion this is indicative of thermal expansion. Expansion joints have been constructed within various sections of the property and generally at junctions of return wall, as illustrated below. The mastic seals to the expansion joints remain generally in fair condition at this time, but in due course replacement must be anticipated.

Expansion joints appear to have been formed internally within various areas of the property, as illustrated by reference to the following photograph. Externally we did not record any evidence of other fractures to the brickwork and we are satisfied that the external brick skin remains stable and generally in good condition given its age and nature.

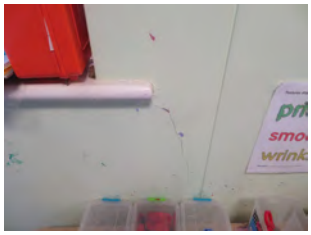


In a cavity brick load bearing wall the load of the building is generally accommodated and transposed via the internal block skin. The blockwork was generally concealed from view but within plant rooms this was evident and is illustrated below in keeping with buildings of this age and nature.



The lightweight blockwork is prone to thermal expansion, however the expansion joints to the internal skins appear generally to operate as designed and no significant expansion fracturing was recorded.

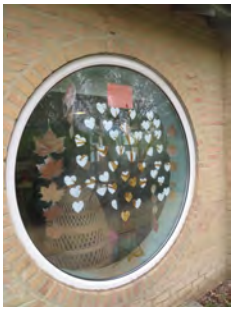
In various sections of the property we recorded minor hairline cracking above and below window openings, as illustrated by reference to the following photographs.

The extent of movement, in our opinion, is in accordance with normally anticipated parameters for buildings of this type, age and nature. The movement indicates perhaps slight bedding down or settlement of the foundations and also differential movement and thermal expansion at the junctions of the lintels over the windows and also beneath the window openings which represents the weakest part of the wall.

The movement appears not to be progressive and it is our view that the building remains structurally stable. Repairs to the fracture and the damaged plasterwork internally is to be anticipated, although continued minor movement to the extent of that recorded at the time of our survey must be anticipated thereafter for the foreseeable future.

The window openings, in all instances, generally remain well aligned and to the curved window a flat strap provided support to the curved arch at upper sections, as illustrated below.




The windows in all other openings are spanned by means of Catnic lintels which provide support to flat brick arches, as illustrated by reference to the following photograph.

Within the plant rooms the metal Catnic lintels were clearly evident and are illustrated by reference to the following photograph.

The use of these lintels is in keeping with building practice at the time the property was constructed and in general they provide adequate support and we are satisfied that the window openings remain in good order. The absence of any significant movement to the window arches reaffirms our assessment of the overall structural stability of the building.

Some slight hairline cracking was evident at the junction of the brick arches and the main walls, as illustrated below. In our opinion this is indicative of minor differential movement and is of no significant concern.

During the course of our survey we were unable to gain sight of the cavity between the external brick skin and the internal block skin. We cannot therefore confirm the condition of cavity trays, cavity wall ties and the existence of thermal insulation. During the course of our survey we recorded no evidence to indicate the omission or failure of these components, which generally we believe remain in good order. Weep holes are evident above windows suggesting that cavity trays were appropriately installed at the time the property was built, as illustrated by reference to the following photograph.

We recorded no evidence of water penetration to the window heads, which given the overhanging roof is considered unlikely in any case.

We recorded no evidence to suggest of failure of cavity wall ties and in general we are satisfied that the cavity walls remain in good condition. An intrusive investigation could be carried out to provide further information regarding the nature and condition of the cavity within the wall.

Externally the damp proof course was visible in various locations. In some instances the damp proof course is located close to ground level, being just above the ventilating air brick, as illustrated below. A reduction in external ground levels may well be considered prudent.

Steps in the damp proof course were evident in various locations, as illustrated below. Again the external damp proof course is at lower level than we would prefer to see.

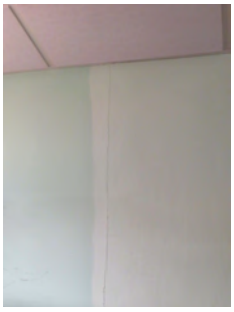
The damp proof course, as illustrated by reference to the following photographs appears to be a plastic or Visqueen based product which provides good life expectancy and is generally of good quality. Reference to the previous and following photographs suggests that the damp proof course remains in good condition with no evidence of dampness and deterioration to the brickwork above the damp proof course, whilst below damp proof course deterioration is clearly evident.

The pointing to the brickwork generally remains in good condition, although some deterioration was recorded at lower levels. The brickwork below ground level appears perhaps to be not frost resistant and this could result in some spalling or crumbling of the surface over time. The introduction of a protective sand cement rendered plinth to brickwork below damp proof course level may be considered prudent, as a means of protecting the damp brickwork from frost damage. At present no significant remedial works are required.

Random moisture meter readings were taken internally during the course of our survey and in all instances the moisture content within wall plaster and skirting was well within normally anticipated parameters, as illustrated below. We are satisfied therefore that the damp proof course remains in good order and significant remedial works are not anticipated in this regard in the foreseeable future.

The walls and partitions internally within the property are generally of masonry construction, probably blockwork similar to the inner skin of the cavity walls, and in all instances these hold good alignment with little evidence of any undue movement or deflection. We are satisfied therefore that they remain structurally stable.

Within the staff room an opening has been infilled and a stub partition constructed between two separate block sections. As a consequence vertical fractures were recorded, which are indicative of differential movement between the material, as illustrated by reference to the following photograph. This movement is in keeping with normally anticipated parameters and generally remains in good condition.



Occasional hairline cracking was recorded to wall plaster above door openings, as illustrated below. Again, in our opinion, this is not indicative of structural movement and is of no significant concern. Minor damage of this type is likely to occur to the wall plaster over time.

The plasterwork to the walls generally remains in fair condition and the fractures which we recorded are generally of hairline nature. Filling and redecorating may well be required in the relatively near term and would improve the appearance, although reoccurrence of the cracking to window openings, in particular, is to be anticipated over time.

Occasional sections of cracked and blown wall plaster were recorded, as illustrated below. Minor replastering may well be required from time to time.

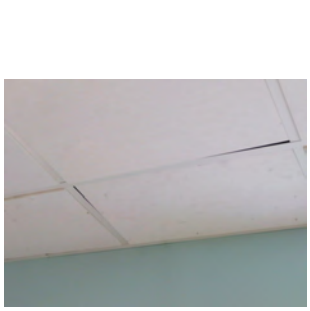
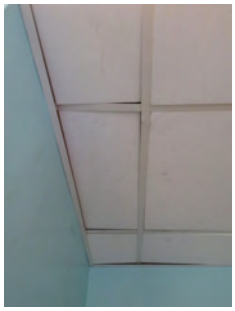
**7.04 Ceilings.**

The ceilings throughout the internal areas of the property are formed by suspended metal grids incorporating fibrous tiles. The grids are suspended generally from the frame above, as illustrated below.



In all instances the suspended ceilings held good alignment with little evidence of any undue movement or deflection, as illustrated below.

We recorded evidence of minor damage and poorly seated tiles within the suspended ceilings, as illustrated by reference to the following photographs. Minor repairs and improvements to the ceilings may therefore be warranted and replacement of the water damaged tile within the kitchen area should also be undertaken in the near term. Beyond this, significant improvements to the ceilings are not warranted within the foreseeable future and in our view they remain structurally stable.

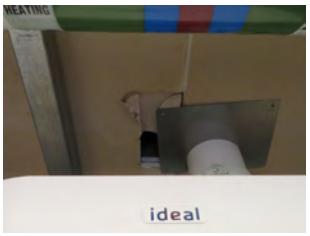




Within the plant rooms plasterboard ceilings have been formed and attached presumably to the underside of a timber frame. The ceilings are not skimmed to a finish, however there is no concern in this regard.

Fire protective strips have been incorporated to the extremities of the ceilings to protect the roof structure above, which is generally considered to be acceptable. In one instance a section of the fire protective strip was missing, as illustrated below. Reinstatement of the plasterboard should be carried out in this regard.

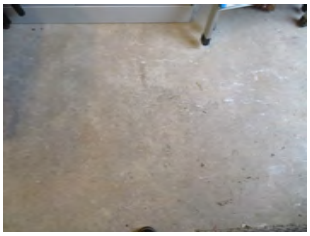

We would also advise that the plasterboard utilised in the construction is not now considered adequate to provide half hour fire resistance. Upgrading of the ceilings within the plant rooms to incorporate 15mm fireline board is therefore recommended, as an improvement to the overall ceilings within the plant rooms.

It would appear that boilers have recently been replaced and the fire protective ceiling around the flues has been damaged, as illustrated below. Replacement of the ceiling and the incorporation of new 15mm fireline board overboarding the existing is therefore recommended.


## 7.05 Floors.

The floor to the property appears to be of a suspended precast concrete construction with a structural toping and floor finish applied thereafter. The floors within the plant room are believed to be of solid construction, although these may also be suspended in nature, with the concrete evident by reference to the following photograph.

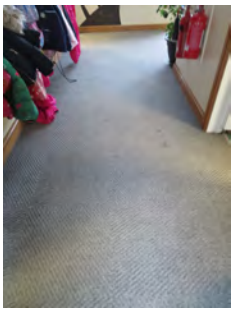


In all instances the floors held good alignment with little evidence of any undue movement or deflection and we are satisfied that they remain structurally stable. Slight movement was recorded on the application of load, however this is well within normally anticipated parameters. We were unable to gain sight of much of the concrete structure of the floor and cannot confirm that it remains in good condition, as we believe. We do not anticipate any significant remedial works being required in the near term.

Sub-floor ventilation is provided to the floors in various areas with air bricks being recorded, as illustrated below. The number of air bricks are perhaps limited and improvement in this regard could be undertaken, although this is not essential in our view.



Internally the floor coverings remain in fair condition, however the carpets within the main corridor area are becoming a little worn and stained, as illustrated by reference to the following photographs. Whilst it is not essential replacement of carpets may well be anticipated in due course.

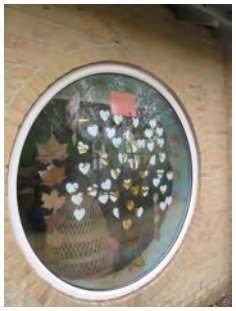


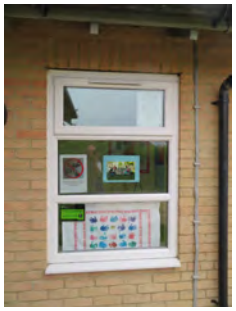

Within the main bathrooms and classroom areas vinyl floor covering has been utilised. Different coloured vinyls were evident and in general these remain in fair condition, although there is evidence of damage beginning to occur at junctions with failure of the welded seams, as illustrated below.

Repairs to floor coverings and renewal of carpets may therefore be considered prudent and could be undertaken within the foreseeable future.

**7.06 Joinery.**

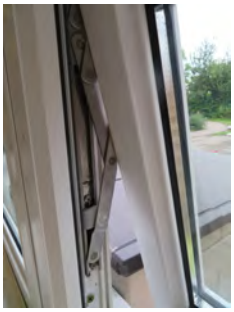
The windows to the property appear to be the original double glazed uPVC components with round and more normal rectangular windows recorded and illustrated below.



In general the windows remain in fair condition, considering their age and nature. The mastic seals at the junctions of the window frames and brickwork are beginning to deteriorate and could potentially facilitate water ingress, as illustrated below. Replacement of mastic seals should therefore be contemplated as part of general maintenance works in respect of the building.

Opening mechanisms generally appear to be operational, as illustrated by reference to the following photograph.



The energy efficiency of the windows and the air gaps are not strictly compliant with current standards and heat loss therefore will be in excess of that currently considered appropriate, as illustrated below. The windows are approximately 20 years of age and whilst they remain in good condition replacement must be anticipated within the next 5 to 10 years. We recorded no evidence of failure of the hermetic seals, but this may well be anticipated in due course.

Repair and maintenance will extend the life expectancy of the windows, but replacement within a 10 year time frame is likely to be anticipated.

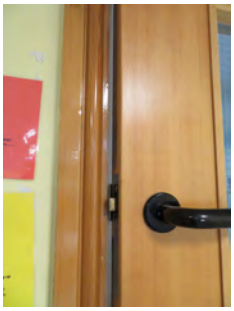
Access to the main building is provided via timber doors within a glazed screen, as illustrated below.

The doors and screen remain in fair condition, although they would benefit from decoration. The double glazed units within the doors and screen are not strictly compliant with current regulations in terms of energy efficiency and improvements in this regard should be undertaken. The air gaps are relatively slight, as illustrated below.

Similar timber doors lead out from other areas of the building into the garden and playground areas and in all instances the doors remain in fair condition, albeit minor repair and redecoration is to be anticipated.

The doors internally are generally ½ hour fire resistant units consisting of timber and glazed sections, as illustrated below.

The doors remain in fair condition considering their age and nature; however a number are ill-fitting and difficult to close as illustrated below. The intumescent strips and smoke seals are also a little aged and replacement of these may well be warranted. Overhauling of the doors and furniture may be considered within the foreseeable future, although at present we are generally satisfied that these remain in fair condition.

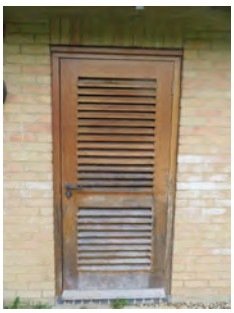


The secondary joinery components internally within the building remain in good order and no significant remedial works are anticipated in the near term.

### 7.07 Decoration.

Externally the décor to the building is limited to exposed timber soffits and timber doors and frames. Redecoration appears to have been applied relatively frequently, however the metal post supporting part of the cantilevered roof structure to the front of the building would benefit from redecoration, although it is galvanised and structural deterioration due to a lack of decoration is unlikely.


The louvred doors to the plant rooms remain in fair condition, but again a lack of decoration and maintenance is resulting in deterioration, as illustrated below. Redecoration of the building is therefore necessary and should be undertaken within the near term.



External decorations must be considered as cyclical in nature and should ideally be undertaken every 3 to 5 years to conserve the integrity of timber and ferrous components, failure to redecorate regularly much increases the risk of rot and deterioration to timber and ferrous components.

The decoration internally remains in fair condition, although we have advised of cracked and blown wall plaster. The décor is a little deteriorated and would benefit from redecoration, although this is not essential at this time.

### 7.08 Gardens, Boundaries and Paths.

Access to Burwell Early Learners is gained from the communal parking area via a concrete paved pathway, which exhibits many cracked, blown and uneven slabs as illustrated below.


Similar paths then extend towards the front of the unit, as illustrated below.

A number of slabs have been replaced and these are now odd and unmatching. Other remaining slabs are cracked, uneven and settling downwards, as illustrated below.

In our view the pavings are in poor condition and represent a potential trip hazard. Replacement of the uneven paving, particular to the main entrance areas is essential and should be undertaken in the near term.

A French drain runs around much of the extremities of the building and the shingle in this area is facilitating weed growth, as illustrated below. Treatment of the shingle with weed killer is recommended to prevent growth within the French drain area. An ACO drain has been incorporated in front of the main entrance, however this is in poor condition and is extensively choked with debris, as illustrated below. Cleaning of the drain is therefore required.

To the rear of the property brick paved areas have been utilised for playground facilities, which generally remain in fair condition as illustrated below.

A number of the sections are beginning to deteriorate with weed growth evident to joints, as illustrated below.

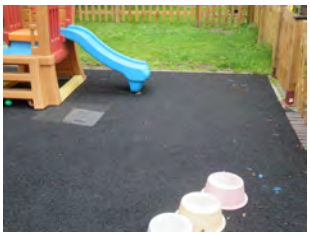
Localised sunken sections are also beginning to develop, as illustrated by reference to the following photograph.

Cleaning, resanding of joints and relevelling of sunken sections should therefore be carried out within the foreseeable future.

To the main area tarmac paths and playground facilities are provided, as illustrated below.

In general these remain in fair condition, but resurfacing may well be anticipated in due course.

Soft paving surfaces have been provided in some areas for playgrounds, as illustrated below. Minor damage was recorded but in general these remain in good condition.



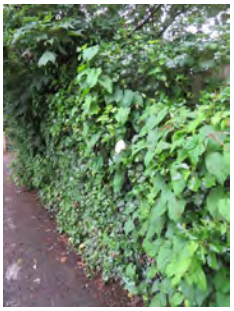
Individual playground areas are separated by timber fences supported on met post details bolted to the concrete, as illustrated by reference to the following photograph. The fences are relatively flimsy in nature and the like expectancy is limited and accordingly replacement may well be required within the foreseeable future.

Much of the rear areas are laid to lawn, which remains in fair order, although clearly it is not in pristine condition given the use by the children. Improvements may well be required over time.

Flowerbeds and shrubbery areas were recorded, which generally remain in fair condition. In some instances the weed retardant fabric is exposed and this potentially represents a trip hazard which should be addressed as a matter of urgency. The introduction of additional bark mulch is therefore strongly recommended.

The boundary fences to the parameter vary but generally consist of fairly basic wire fencing with metal posts, as illustrated below.

Many of the fences are overgrown with creeper and shrubbery in front, as illustrated by reference to the following photographs.



Improved cultivation and maintenance of the fences is required. In one area the wire is loose, and a timber fence located in front of it is missing sections of the panelling, as illustrated by reference to the following photograph. Minor maintenance is therefore recommended.

## 8.00 SERVICES.

As stated in the preambles to this report, we have not tested any of the service installations, incoming mains, wastes or, drainage facilities. We have however reported our findings following our visual inspection of the property under the various headings below; so that you may gain an understanding of the nature, extent, condition, and adequacy of the installations to which the premises benefits.

It would appear that the mechanical and electrical infrastructure is of good original installation quality and it appears to be regularly maintained. Details of maintenance contracts should be assessed and specialist reports on the equipment may be considered prudent.

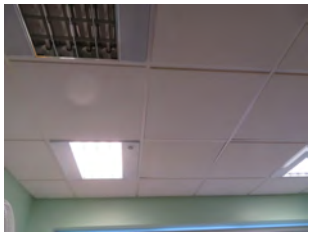
### 10.01 Electrics.

The electric meter is located in the front service cupboard at which point the incoming head and distribution boards were recorded, as illustrated below.

Some circuitry notification was provided but, in our opinion, this could be improved as illustrated below.


PVC sheathed twin and earth cables generally run from the electrical distribution boards to the various facilities throughout the school. In general the electrical infrastructure remains in good order, although there is no evidence to report when the last periodic inspection test was carried out. We would therefore recommend that a NICEIC registered contractor carries out a periodic inspection test on the electrical installations in the near term. Minor defects and short comings may well be identified which should be addressed.

Internally within the property we recorded a number of light fittings which were inoperable at the time of our inspection, as illustrated below. This may be due to failure of the motion sensors or individual bulbs within fittings and repairs should be carried out as part of normal maintenance. The introduction of more energy efficient LED lighting should also be considered.




Emergency lighting facilities were also recorded and considered to be operable however testing and upgrading may be required in due course.

Basic power facilities exist generally throughout the internal areas, which appear to be appropriate and suitable for use. Once again minor improvements may well be required.

The property has a fire alarm system which is relatively basic but adequate, in our view, for the nature of the property particularly given its single storey nature and the numerous fire doors which provide egress from the building in an emergency. Regular testing and maintenance of the smoke detection system and fire alarm system is essential and should be carried out on a regular basis. Weekly testing should also be instigated, and a regime and monitoring programme undertaken. Replacement of the fire alarm system is to be anticipated within the foreseeable future.

Basic mechanical extract fans exist within toilets and kitchens. These appear to be serviceable, but cleaning and testing is recommended.

### 8.02 Gas.

The gas supply to the building is located in the rear service cupboard with a supply and meter evident by reference to the following photograph.

Gas supplies are generally restricted to within the plant room and appear to be in good order with no evident gas smells recorded at the time of our survey. Testing of all gas fired appliances and the provision of a suitable Gas Safe Certificate is strongly recommended and works of this nature should be undertaken in the near term.

We would advise that the boilers appear to have been replaced recently, however no carbon monoxide meter has been installed which, in our opinion, is in contravention of good codes of practice. The installation of a hardwired carbon monoxide meter within the boiler room is therefore strongly recommended.

### 8.03 Central Heating and Mechanical Installations.

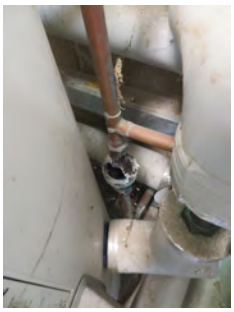
The plant within the main mechanical plant room generally remains in fair condition and was clearly of good quality and specification when first installed. In general it remains in good condition at this time, however there is some evidence of minor leaks and deterioration occurring from time to time to junctions and from pipework, as illustrated below.

The maintenance regime should be assessed, and all mechanical installations tested to ensure that these remain in good and proper working order.

The heating systems generally appear to remain functional, although these were not in operation at the time of our inspection.

Hot water is stored within a pressurised Megaflo type calorifier located in the plant room and illustrated by reference to the following photograph.

There is evidence of a build-up in pressure resulting in overflowing into the tundish within the plant room, as illustrated below. Servicing of the pressurised cylinder is therefore strongly recommended.



Hot water is distributed generally via copper pipework which is pumped to the various plumbing and sanitary facilities. The pumps within the plant room generally appear to be of good modern order and remain generally in good condition, as illustrated below.

Cold water enters the building within the mechanical plant room and then is pumped directly to the various sanitary facilities. We recorded no evidence of a cold water storage tank, although we cannot confirm that this is not housed within the roof area. Our inclination is that all supplies are run directly from the incoming main to the sanitary facilities.

The incoming main, as illustrated below, is earth bonded in accordance with good codes of practice. The pipework generally remains in good condition and we recorded no particular leaks.

The sanitary facilities to the building are relatively limited and consist of childrens' toilets and occasional kitchen facilities, as well as a disabled facility as illustrated below. Regular repair and maintenance are required, but beyond this significant remedial works are considered unlikely.

The disabled toilet facility was generally serviceable although the main light was inoperative. Improvements to the disabled toilet must be anticipated in due course.

**8.04 Drainage.**

Drainage from the plumbing and sanitary facilities generally runs via uPVC pipework into the mains plastic soil stacks. Bottle traps and pipework were evident to some sanitary facilities, as illustrated below.

The main soil stacks are all located within ducts internally within the building and could not be inspected. Ventilation of the soil stacks was recorded externally, as illustrated by reference to the following photograph.

The contents of the soil stack discharge into the underground drainage installation. During the course of our survey we were able to lift one inspection chamber towards the front of the building which revealed a combination of plastic and predominantly vitreous clay drainage pipework. The underground drains appear to remain in fair condition, however there is some evidence of blockage and deposits within the drainage systems.
A full jet wash clean of the underground drainage installation is strongly recommended, together also with a CCTV survey so that the condition of the underground drains can be determined.

## 8.05 Lightening Protection.

The building is fitted with a lightening protection system, although it is not a high risk of lightning strike building in our view. A standard lightening protection system runs to earth pits which were recorded around the building, as illustrated by reference to the following photograph.

Testing of the lightening conductor systems by specialist contractors should be carried out and any recommendations for improvements implemented as soon as possible.

## 11.00 SUMMARY.

The building generally remains in fair condition since its construction soon after the year 2000. In general the building has performed well since first construction, however there is some evidence of deterioration which now requires repair and maintenance. It may be prudent to prepare a planned maintenance programme going forward so that costs can be anticipated, and expenditure programmed to management levels.

In general the building holds good alignment with little evidence of any undue movement or deflection and we are satisfied therefore that it remains structurally stable. We recorded some minor evidence of hairline cracking to plasterwork internally and to the brickwork externally, however in our view this is generally indicative of slight settlement or bedding down after initial construction, together with thermal and differential movement and is not indicative of subsidence. We cannot rule out the development of subsidence in the future and it is imperative that the appropriate buildings insurance cover, with suitable subsidence protection, is maintained at all times.

We are satisfied that the building remains structurally stable and significant remedial works are not required in the near term. We would however recommend that the roofs and gutters are overhauled in particular in the near term to ensure that these are returned to a sound watertight condition.

Externally the windows remain in fair condition but replacement of these components within the next 10 years is perhaps to be anticipated.

Redecoration of timber and ferrous components to the building should be considered and undertaken within the relatively near term.

Improvements to the main paving areas leading to the building should also be carried out in the near term to minimise the risk of trip hazards. Improved cultivation to hedges and shrubbery around the building will also be required.

Internally the building remains in fair condition, commensurate with its age and nature. Minor repairs and improvements to floor coverings and suspended ceilings must be anticipated, together with redecoration of the property.

The mechanical and electrical installations generally appear to be in good condition and were originally of good quality design and installation. The components in some instances are approaching the end of their useful life and it appears that the boilers have been replaced recently. Regular servicing, repair and maintenance of the mechanical infrastructure is necessary to conserve its integrity. Testing of the mechanical and electrical installations should be undertaken on a regular basis in accordance with good codes of practice. The implementation of NICEIC electrical test and Gas Safe tests are essential and if these have not been carried out within recent times they should be implemented as a matter of urgency.

The underground drainage installation appears to operate appropriately, however jet wash cleaning and a CCTV survey of the underground drainage installation is strongly recommended.

We trust that the above provides the information which you require, however, to assist further we have provided an outline schedule of the necessary works which should be contemplated within the near term, which is incorporated within Appendix A. If we can be of any further assistance, or you wish to discuss the content of this report, please do not hesitate to contact the undersigned.

**Andrew Moulsdale BSc FRICS**
**Director**
**BS Initiative Limited**

# Appendix A

## Schedule of Recommended Remedial Works Within The Near Term

1. Remove and rebed ridge and hip tiles, repointing as required.
2. Clean out valley gutters and make good flaunching at junction with tiles.
3. Overhaul roof tiles, replacing broken, missing and slipped tiles as necessary.
4. Clean and overhaul perimeter uPVC guttering, sealing all leaking joints, leaving all sound and free flowing. Alternatively replace guttering and downpipe with new powder coated aluminium installations.
5. Wash down uPVC gable end cladding panels.
6. Decorate timber doors and exposed soffit details to main roof, as well as metal support posts.
7. Relay paving slab areas replacing broken slabs and leaving all sound and level.
8. Overhaul gardens, fences and shrubbery.
9. Introduce new 15mm fireline board overboarding to existing plasterboard within plant rooms and reinstate missing fire protection to extremities.
10. Replace leaking collars to ventilation pipework at junctions with main roof.
11. Carry out NICEIC periodic inspection test.
12. Carry out Gas Safe inspection and provide certificate.