Schedule of Condition

Windows and Doors

at

Saltash Library

9th November 2022

Jon Ramage BSc(hons) MRICS
Info@atlanticbuildingconsultants.co.uk
Tel: 01637 622304
ABC623

Atlantic Building Consultants Ltd
9 Penhale View
Cubert, Newquay
Cornwall, TR8 5FW

Contents

1.0 Introduction

We have been instructed by Saltash Town Council to prepare a schedule of condition of the windows and doors to the Grade II listed building Saltash Library, Callington Road, Saltash, PL12 6DX. Instructions were received on 6th October 2022. The schedule of condition will be used to support a planning and listed building consent application for the following works:

Replacement of existing curtain walling, windows and doors with new aluminium framed units, internal refurbishment to remove existing Reception and Office spaces to provide an open plan multi-use functional space, upgrade of existing WC facilities and provision of an Accessible WC, associated works to replace finishes and renew internal decoration.

The designs and application will be prepared and submitted by Bailey Partnership. This document should therefore be read in conjunction with the associated details and plans submitted with the application.

Our inspection took place on Wednesday 9th November 2022. The weather at the time of inspection was overcast but dry and this was preceded by a period of wet weather. The building was occupied and in ongoing use as a public library.

The building faces approximately west and compass referencing is used within this report.

2.0 Use of this report

This report has been prepared as a Schedule of Condition in a written and tabulated format. The report focused on the windows and doors to the principal elevations, but excludes fenestration to the rear east extension, which is not relevant to the purposes of the instruction. Key elements of the building are described with an outline of their condition. We have included an additional column which gives recommended repair and maintenance works. Photographs taken during our inspection are also appended to this report.

3.0 General description

Saltash Library is known to have been constructed between 1961 and 1963 following designs prepared by Royston Summers of the county architects department. The building represents high-quality post-war architecture with a brutalist design, inspired by Le Corbusier.

The main roof is a principal feature of the building, being a cast concrete butterfly design. Main walls are rough cast rendered with full height glazed curtain screens set between cast concrete and slender steel columns. Windows are a mixture of aluminium framed casements to the glazed screens and steel crittall set within roughcast masonry walls.

There is an extension to the rear or east which is understood to have been added in 1992 by Cornwall Council. This is excluded from this inspection and report.

4.0 Special Note

This report does not purport to be a full structural survey but is a report executed following our limited inspection. We cannot confirm that any area that was not inspected is free from defect, rot or deleterious materials.

5.0 Third Parties

This report is prepared for the sole use of our Client's and their agents. No responsibility may be taken for any third party acting upon or relying upon this report. No part of the report maybe published without our prior consent.

6.0 Schedule of Condition

The schedule of condition has been prepared in a tabulated format and refers to illustrated elevations with number references, included within this section and within appendix 1. Elevation drawings have kindly been provided by Bailey Partnership. The tabulated schedules are included in appendix 2. The following sections summarise the key findings of our inspection.

6.1 West Elevation Glazed Curtain Walling (columns 1-9 & 12-13)

The west elevation windows are split into three principal bays with a large glazed section to the north side, the entrance area with concrete piers stepped forward and a further smaller full height glazed bay to the south of the entrance area. The glazing is described from north to south with numbered columns as indicated on the elevation drawing figure 1.

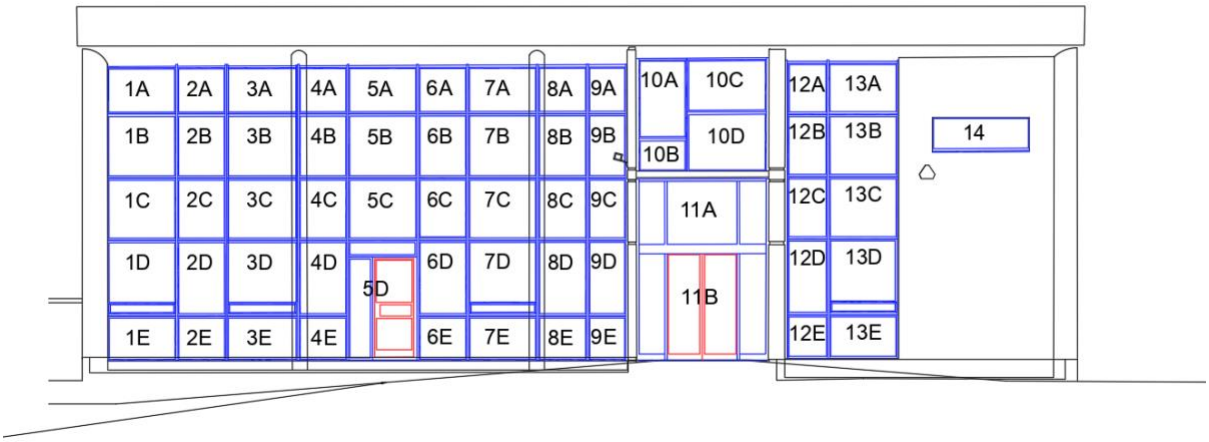


Figure 1: West elevation

The glazed curtain walling to the principal elevation is formed with slender aluminium frames inserted between vertical steel columns. Set forward from the glazing are 2 shuttered concrete elliptical piers. Column 1 to the north side abuts the projecting roughcast rendered masonry wall externally, and a rough plastered internal wall. The external reveal shows signs of disturbance to the render, where presumably repairs have been made in the past. There is a bullnosed hardwood timber lining forming the external reveal, butted directly against the fenestration. This showed signs of minor rot at its base but was otherwise intact. The lining is painted in white, and the paint is heavily peeling throughout. The lining has been formed in three principal sections with diagonal scarf joints, and would be easy to repair in situ. The southern reveal against column 9 is formed with a similar painted hardwood lining set against the shuttered concrete wall. The timber linings could be retained but will require low level scarf repair and redecoration.

The columns of glazing are divided with box sectional steel columns running the full height from the concrete slab base up to the cast concrete roof structure. The steel appears to insert into the concrete top and bottom and performs an important structural role in supporting the curtain walling. The steel columns show signs of corrosion through white paint, although were

generally considered serviceable. These will require removal of loose paint and redecoration in an appropriate galvanising paint.

The glazed screens are primarily double glazed, although the original installation would have been single glazed. Slim line double glazed panels have been inserted to the majority of the original windows, presumably by Cornwall Council in the latter part of the 20th century. This has been achieved by removing the L section aluminium beading and either cutting down or replacing with lower profile beading. The reduced beading then accommodates the slightly thicker, slim line double-glazed units, which are held in place with a mixture of putties, mastics, resins and mechanical fixings. The fixtures are all heavily degraded and prone to draughts, with many of the double-glazed units misted over.

The frames are also prone to flex in high winds and do not sit square between the columns in some cases. This will lead to draughts and water ingress, both of which have been reported by the caretakers of the building. The structural integrity of the framing is considered to have been comprised by the replacement glazing, which uses more slender beads. Furthermore the external surfaces of the aluminium frames are beginning to corrode. Progressive corrosion to the casements can be expected over the coming years, which will eventually lead to complete failure of the window systems.

There are several opening windows including centre pivot casements at high level on the west elevation controlled by a cable winding system. There are also low level top hung casements to the west screen. The hinges, catches and winding systems are all largely defective.

There is an entrance door to the centre of the west glazed screening. This is considered to be an original fixture, although again the original single glazing has been replaced with slim line double glazed units, by altering the depth of the beading in the same way as described above. The hinges to the door have broken in the past and been crudely replaced with a new set of surface mounted hinges. The door could not be opened at the time of inspection and the location of the key is not known. The door shows the same level of corrosion as the surrounding window casements. The glazed curtain wall is considered to have reached the end of its useful life.

6.2 Full Height Entrance Bay (columns 10-11)

The entrance bay is set between two cast concrete piers rising full height and separated with a horizontal cast concrete slab.

The construction and condition of the original windows in column 10 is equivalent to the flanking curtain walls, with aluminium casements retrofitted with double glazing. The upper screen is split into staggered glazed screens in an asymmetric design with hardwood reveals, to match the principal curtain walling. The upper screen is set back from the principal entrance and is in line with the adjacent curtain walls which flank the entrance bay. There is degradation to glazing, putties and frames, and the screen is considered to have reached the end of its useful life.

The entrance lobby is formed with a double set of doors being a sliding modern aluminium entrance door and automatic opening inner door. The doors and frames are modern, although internal glazed screens either side and above the inner door appear contemporary with the main windows in the principal northern bay. These are all fitted with single glazing, with deeper section aluminium casements to the replacement fixtures. The replacement doors and windows to column 11 were generally serviceable.

Figure 2: South elevation

6.3 Steel Crittall (windows 14-16 & 18-20)

Steel crittall windows are installed within deep external reveals to the office, WC and store areas at the southwest and north west corners of the building (see figures 1, 2 & 3). These are painted white and have asymmetrically configured mullions and single glazing. The steel crittall windows appear to have retained their original appearance and painted colour, although have become somewhat degraded with age. Window 18 has also been heavily modified within insertion of a steel louvre grill, to facilitate ventilation into the boiler room. In many cases the openers and catches have seized or are difficult to operate and the frames are showing signs in initial corrosion. Decorative finishes are also severely degrading. The single glazed steel crittall windows will be prone to condensation and heat loss. Consideration should be given to replacing the windows to reduce future maintenance and energy loss.

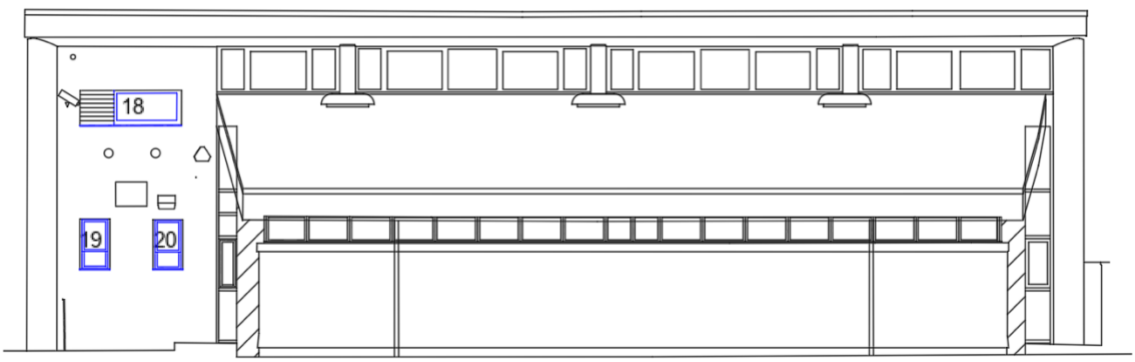


Figure 3: East elevation

6.4 Projecting Bays (columns 17 & 21)

The projecting bays to the north and south walls are set between the roughcast rendered walls with hardwood timber linings (see figures 2 & 4). The glazed casements are divided with steel box sectional columns, which are fixed to the concrete upper roof structures, although do not penetrate the lower level concrete slabs. These are painted white with flaking paint over galvanised steel, matching those to the principal curtain walling. Improvements to the columns are recommended to include brushing back loose paint and corrosion and decorating with galvanising paint.

The glazing to the bays is also formed in the same configuration as the principal curtain walling, with a mixture of original single and replacement double glazing. Again the glazing beads have been replaced with reduced section beads to double glazed replacements.

It is noted that the south bay comprises mainly the original single glazing, with only some areas replaced with double glazing. There is an entrance door at ground floor level to the south bay, which matches the description of the principal elevation door, and was operational.

The north bay is intersected by higher ground levels at the north end of the building, where the external ground rises above internal floors with a retaining wall built into the structure.

It is noted that all casements within the outward faces of the bays are beaded externally with glazing set back into the frames in a reverse configuration when compared to other windows throughout the building. This has presumably occurred due to difficulties in inserting the glazing internally within the bay window during construction. The external beading presents a security risk, where glazing could potentially be removed externally without significant damage or noise.

The glazed bays display similar levels of degradation to the principal curtain walling, with corrosion to casements, seized openers, degrading putties and beads and misted double glazing. Again these are considered to have reached the end of their useful lifespans.

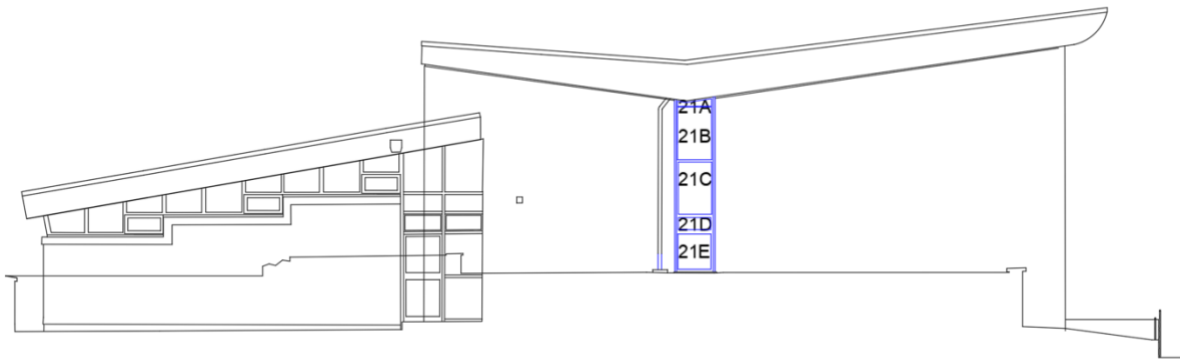


Figure 4: North elevation

6.5 Conclusion

The principal glazed curtain walling and bays to Saltash Library are in excess of 60 years old and are showing signs of severe degradation. These have also been adapted and modified in the past, which has further compromised the integrity of these fixtures. The aluminium casements are now considered to be beyond repair and have passed the end of their useful lifespans. It is recommended that they are replaced as part of cyclical maintenance to the building. The steel columns which divide the glazed screens could potentially be retained, subject to appropriate refurbishment and ongoing maintenance.

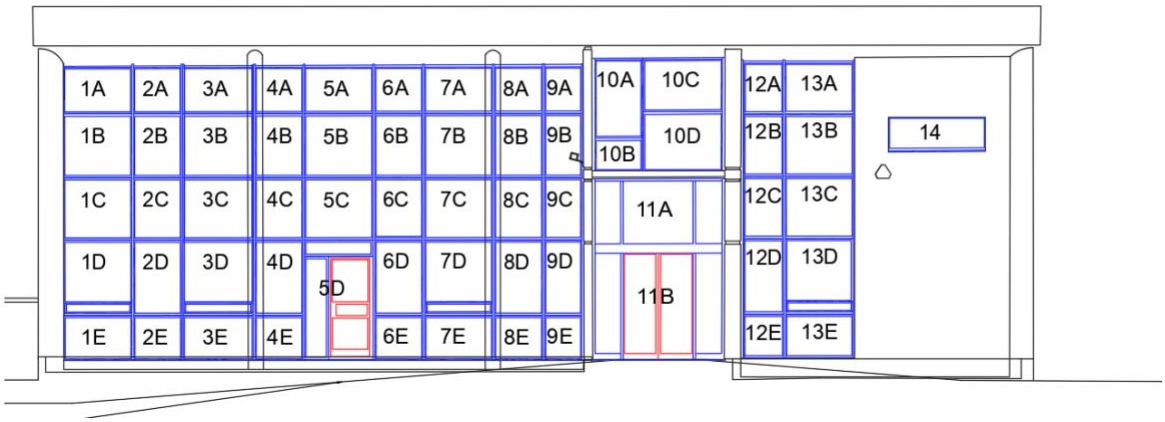
Replacement of the glazed curtain walling and bays provides an opportunity to upgrade the buildings thermal efficiency and overall performance. Equivalent aluminium glazed units would not be available off the shelf, and bespoke manufacture would lead to excessive costs and compromised structural integrity. It is recommended that modern aluminium double glazed units are installed to match the existing fenestration layouts. These would have slightly deeper sections to the frames, which would improve the overall durability and performance. This will allow for appropriate maintenance of the building and upgrade of thermal efficiency whilst maintaining the buildings architectural integrity.

Steel crittall windows to southern end of the building are also beginning to degrade and require urgent maintenance. Whilst immediate replacement is not considered necessary, these will likely reach the end of their useful lives in the coming decade. Replacement of steel crittall windows could potentially be undertaken using modern replicas by the same suppliers, to retain the architectural integrity of the building.

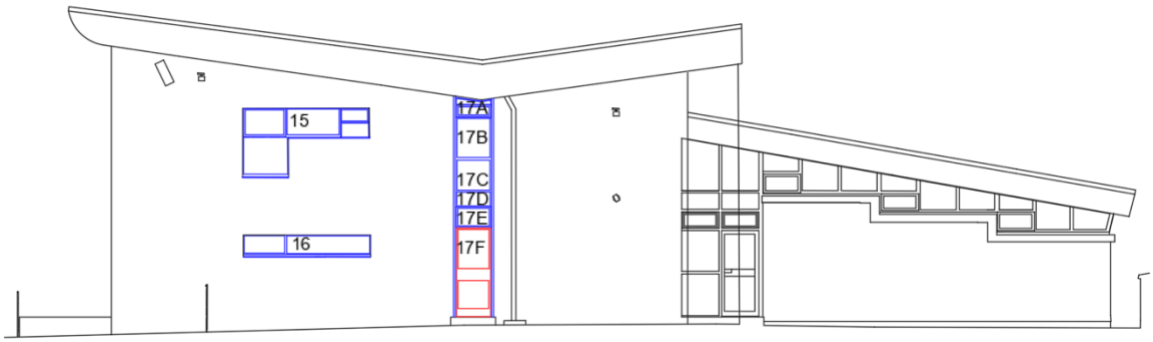
The existing main entrance door has been replaced relatively recently and is considered suitable for retention, subject to ongoing routine maintenance.

Jon Ramage BSc(Hons)MRICS
Chartered Building Surveyor
ABC623

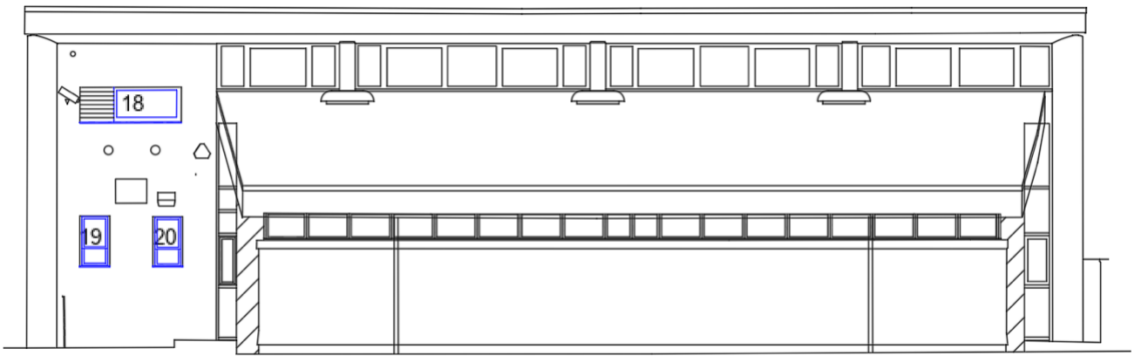
7.0 Appendix 1 – Labelled Elevations



West elevation



South elevation



East elevation

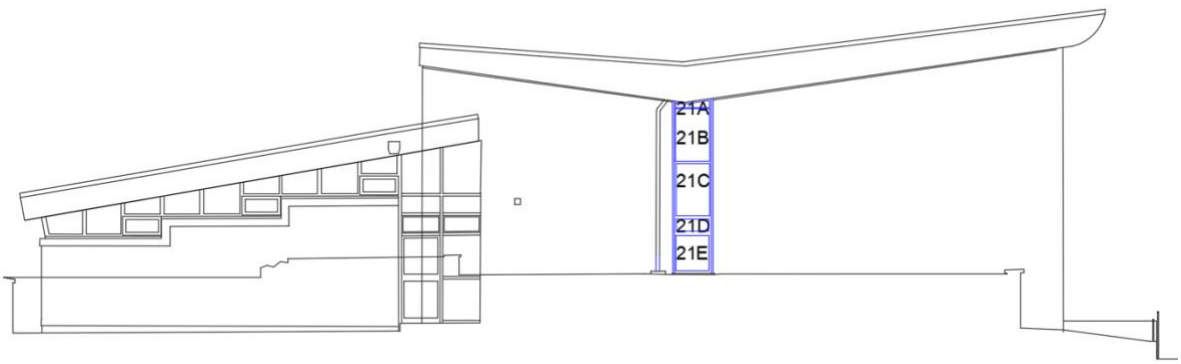


Figure 4: North elevation

8.0 Appendix 2 – Tabulated Schedules of Condition

8.1 West Elevation

Ref	Description	Condition	Recommended Repairs
1A	Aluminium framed casement with centre pivot opener controlled with cable wound mechanism to south reveal. Slim line double glazing inserted and sealed with putty.	Opening casement seized shut. Corrosion to external surfaces of frame. Double glazing misted.	Replace casement, glazing and opening mechanism.
1B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Double glazing misted.	Replace casement and glazing.
1C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
1D	Aluminium framed split casement with a transom at low level and top hinged opener to base. Slim line double glazing inserted and sealed with silicone mastic.	Corrosion to external surfaces of frame. Hinges and catch to opener stiff but operational. Both panes of glazing misted over.	Replace casement and glazing.
1E	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty. Banafix window safety film fitted externally.	Corrosion to external surfaces of frame. Glazing putty degrading. Window film bubbled.	Replace casement and glazing.
2A	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame.	Replace casement and glazing.
2B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Double glazing misted.	Replace casement and glazing.
2C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
2D	Aluminium framed fixed casement with slim line double glazing inserted and sealed with silicone mastic.	Corrosion to external surfaces of frame.	Replace casement and glazing.

2E	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty. Banafix window safety film fitted externally.	Corrosion to external surfaces of frame. Double glazing misted. Glazing putty degrading. Window film bubbled.	Replace casement and glazing.
3A	Aluminium framed casement with centre pivot opener controlled with cable wound mechanism to south reveal. Slim line double glazing inserted and sealed with putty.	Opening casement seized shut. Corrosion to external surfaces of frame.	Replace casement, glazing and opening mechanism.
3B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Double glazing misted.	Replace casement and glazing.
3C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Double glazing misted.	Replace casement and glazing.
3D	Aluminium framed split casement with a transom at low level and top hinged opener to base. Slim line double glazing inserted and sealed with silicone mastic to fixed pane and putty to opener.	Corrosion to external surfaces of frame. Hinges and catch to opener stiff but operational. Hinges crudely replaced with surface mounted fittings. Both panes of glazing misted over.	Replace casement and glazing.
3E	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty. Banafix window safety film fitted externally.	Corrosion to external surfaces of frame. Double glazing misted. Glazing putty degrading. Window film bubbled.	Replace casement and glazing.
4A	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
4B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
4C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
4D	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.

4E	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty. Banafix window safety film fitted externally.	Corrosion to external surfaces of frame. Double glazing misted. Glazing putty degrading. Window film bubbled.	Replace casement and glazing.
5A	Aluminium framed casement with centre pivot opener controlled with cable wound mechanism to south reveal. Slim line double glazing inserted and sealed with putty.	Opening casement seized shut. Corrosion to external surfaces of frame.	Replace casement, glazing and opening mechanism.
5B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.
5C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.
5D	Glazed door with hinge to southern side contemporary with glazed screen and set within aluminium frames with fan light at top and side panel and two panel glazed door with central aluminium transom section. Glazing formed with single glazed panels set in putty to door and side panel with aluminium battens. Double glazing to fan light. Banafix film to door and side panel.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing to fanlight misted. Door locked with no key available at the time of inspection. Door hinges have been replaced with new hinges crudely screwed to frame adjacent to original hinge.	Replace casements, door and glazing.
6A	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
6B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.
6C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.
6D	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.

6E	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty. Banafix window safety film fitted externally.	Corrosion to external surfaces of frame. Double glazing misted. Glazing putty degrading. Window film bubbled.	Replace casement and glazing.
7A	Aluminium framed casement with centre pivot opener controlled with cable wound mechanism to south reveal. Slim line double glazing inserted and sealed with putty.	Opening casement seized shut. Corrosion to external surfaces of frame.	Replace casement, glazing and opening mechanism.
7B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
7C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
7D	Aluminium framed split casement with a transom at low level and top hinged opener to base. Slim line double glazing inserted and sealed with silicone mastic to fixed pane and putty to opener.	Corrosion to external surfaces of frame. Hinges and catch to opener stiff but operational. Both panes of glazing misted over.	Replace casement and glazing.
7E	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty. Banafix window safety film fitted externally.	Corrosion to external surfaces of frame. Double glazing misted. Glazing putty degrading. Window film bubbled.	Replace casement and glazing.
8A	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
8B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
8C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
8D	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.

8E	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty. Banafix window safety film fitted externally.	Corrosion to external surfaces of frame. Double glazing misted. Glazing putty degrading. Window film bubbled.	Replace casement and glazing.
9A	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
9B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
9C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
9D	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
9E	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty. Banafix window safety film fitted externally.	Corrosion to external surfaces of frame. Double glazing misted. Glazing putty degrading. Window film bubbled.	Replace casement and glazing.
10A	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
10B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
10C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
10D	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.
11A	Modern powder coated aluminium symmetrical frames with central and margin lights. Fitted with single glazed panels in rubber seals. Cornwall Council logo etched to central light.	Intact and serviceable.	Clean and renew seals within 5 years.

11B	Modern powder coated aluminium symmetrical frames with central automatic opening sliding door. Fitted with single glazed panels in rubber seals.	Intact and serviceable.	Clean and renew seals within 5 years. Ensure opening mechanisms and runners are regularly lubricated and serviced.
12A	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
12B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
12C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement and glazing.
12D	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.
12E	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.
13A	Aluminium framed casement with centre pivot opener controlled with cable wound mechanism to south reveal. Slim line double glazing inserted and sealed with putty.	Opening casement seized shut. Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casement, glazing and opening mechanism.
13B	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.
13C	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.
13D	Aluminium framed split casement with a transom at low level and top hinged opener to base. Slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Hinges and catch to opener seized shut. Both panes of glazing misted over.	Replace casement and glazing.
13E	Aluminium framed fixed casement with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casement and glazing.

14	High level horizontally orientated fixed steel Crittall window with single glazing. Painted white and set in deep reveals.	Window intact but paintwork degrading.	Ensure decorations are renewed on a 3-4 year cycle. Consider double glazing for improved thermal efficiency.

8.2 South Elevation

Ref	Description	Condition	Recommended Repairs
15	High level asymmetric horizontal L-shaped steel Crittall window with single glazing and an asymmetric layout. Painted white and set in deep reveals. Two top hung openers giving ventilation to the first floor office.	Window intact but paintwork degrading. Hinges and catches to openers very stiff.	Ensure decorations are renewed on a 3-4 year cycle. Ease and lubricate hinges and catches. Consider double glazing for improved thermal efficiency.
16	Ground floor asymmetric horizontally orientated steel Crittall window with single glazing. Painted white and set in deep reveals. Single top hung opener. Security bar system to the internal reveals. Rendered reveals to the steel Crittall windows were generally intact at the time of inspection indicating that these windows are original.	Window intact but paintwork degrading. Hinges and catches to seized and inoperable.	Ensure decorations are renewed on a 3-4 year cycle. Ease and lubricate hinges and catches. Consider double glazing for improved thermal efficiency.
17A	Row of 5 windows forming a projecting bay with side cheeks and margin lights. Aluminium framed casements with single glazing fixed with putty. The central flat front to the bay is split with a transom where the upper section is shaped to the v of the butterfly roof. The lower section is a top hung opener.	Corrosion to external surfaces of frame. Glazing putty degrading. Opener serviceable but stiff to operate.	Replace casements and glazing.
17B	Row of 5 aluminium framed casements with single glazing sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casements and glazing.
17C	Row of 5 aluminium framed casements with single glazing sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casements and glazing.
17D	Row of 5 aluminium framed casements with single glazing sealed with putty. Glass obscured due to first floor level.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casements and glazing.

17E	Row of 5 aluminium framed casements with a mixture of single glazing and slim line double glazing inserted and sealed with putty. Transoms to side panels drop lower past door beneath.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casements and glazing.
17F	Door to centre set within aluminium frames with low level lights to each side. Glazed door with central aluminium transom section. Glazing formed with single glazed panels set in putty to door and side panels with aluminium battens. Banafix film to door and side panel.	Corrosion to external surfaces of frame. Glazing putty degrading. Door serviceable but lock and catch are stiff.	Replace casements, door and glazing.

8.3 East Elevation

Ref	Description	Condition	Recommended Repairs
18	First floor asymmetric horizontally orientated steel Crittall window with single glazing. The southern light has been replaced with a steel louvre to provide continuous ventilation to the boiler room internally. The adjacent light to the north is a centrally hinged hopper with catch. Painted white and set in deep reveals.	Window intact but paintwork degrading. Hinges and catches to stiff but serviceable. Louvres basic but serviceable.	Ensure decorations are renewed on a 3-4 year cycle. Ease and lubricate hinges and catches.
19	Steel Crittall window with obscure single glazing lighting the WC on the ground floor. Top hung opener with a modern lock internally. External galvanised steel security grill secured to the external wall.	Window intact but paintwork degrading. Hinges and catches to stiff but serviceable.	Ensure decorations are renewed on a 3-4 year cycle. Ease and lubricate hinges and catches.
20	Steel Crittall window with obscure single glazing lighting the WC on the ground floor. Top hung opener with a modern lock internally. External galvanised steel security grill secured to the external wall.	Window intact but paintwork degrading. Hinges and catches to stiff but serviceable.	Ensure decorations are renewed on a 3-4 year cycle. Ease and lubricate hinges and catches.

8.4 North Elevation

Ref	Description	Condition	Recommended Repairs
21A	Row of 5 windows forming a projecting bay with side margin lights. Aluminium framed casements with slim line double glazing inserted and sealed with putty. The central flat front to the bay is split with a transom where the upper section is shaped to the v of the butterfly roof.	Corrosion to external surfaces of frame. Glazing putty degrading. Double glazing misted.	Replace casements and glazing.
21B	Row of 5 aluminium framed casements with slim line double glazing inserted and sealed with putty.	Corrosion to external surfaces of frame. Glazing putty degrading.	Replace casements and glazing.
21C	Row of 5 aluminium framed casements with slim line double glazing inserted and sealed with putty. The central flat front to the bay is split with a transom where the upper section is a top hung opener.	Corrosion to external surfaces of frame. Glazing putty and battens degrading. Double glazing misted. Opening window seized and inoperable.	Replace casements and glazing.

9.0 Appendix 2 – Photographs

West elevation

Southwest corner

South elevation

South elevation

North elevation

North elevation

West elevation

North elevation

Window columns 1, 2 & 3

Window/door columns 4, 5 & 6

Window 1E

Window 1D

Window 1D

Window 2E

Window columns 2, 3 & 4

Window 3D

Window columns 8 & 9

Window 4D

Window columns 7, 8 & 9

Window columns 8 & 9

Door 5D

Window 7D

Window 7E

Window column 9

Window 9E

Window 9E

Window 11A

Window column 10

Window columns 10 & 11

Window columns 12 & 13

Door 11B

Door 11B

Window 12D

Window 13D

Window 12E

Window 13E

Window columns 12 &13

Window 14

Window 15

Window 16

Window 16

Window 16

Bay window 17

Bay window 17

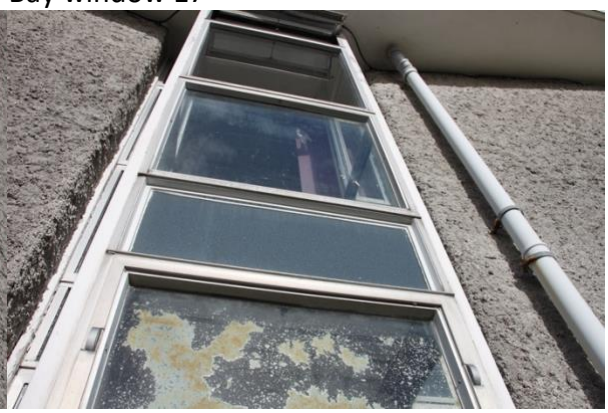
Door 17F

Bay window 17

Window 17F

Bay window 17

Window 17E



Window 17D

Window 17F

Window 17C

Window 18

Windows 19 & 20

Window 19

Window 20

Bay window 21

Bay window 21

Bay window 21

Bay window 21

Window 21D

Window 21B

Window 21D

Window 21B

Window 21E

Window 21D

Window columns 1 – 9

Window 1D

Window columns 1 & 2

Window 3D

Windows 1C, 2C & 3C

Window 4D

Door 5D

Window 3D

Door 5D

Window 3D

Door 5D

Window 6D

Window 7D

Window 7D

Window 3B

Window 8B

Winding mechanism

Door 11B

Door 11B

Window 11A

Window 11A

Window 11A

Window 11A

Window 12D

Window 13D

Window 13C

Window 13B

Winding mechanism

Window 12B

Window column 10


Window 14

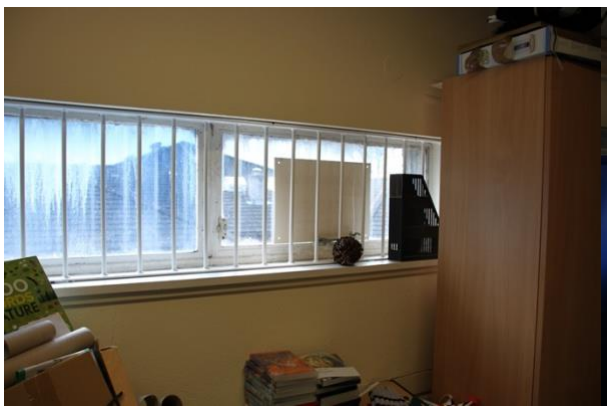

Window 14


Window 15


Window 15


Window 15


Window 16


Window 16


Window 16

Window 17B

Window 17C

Windows 17A, 17B & 17C

Door 17F

Door 17F

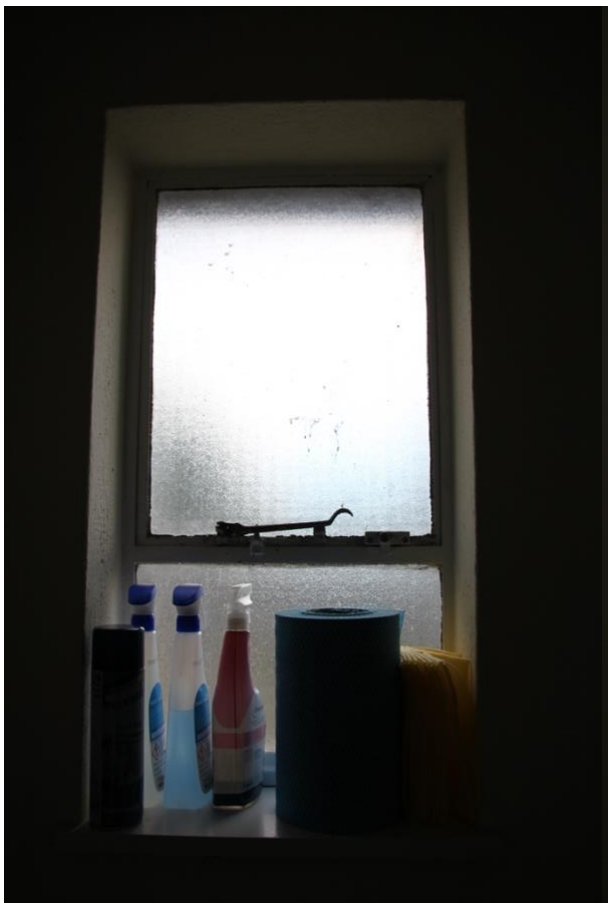
Window 17E

Window 17C

Window 17F

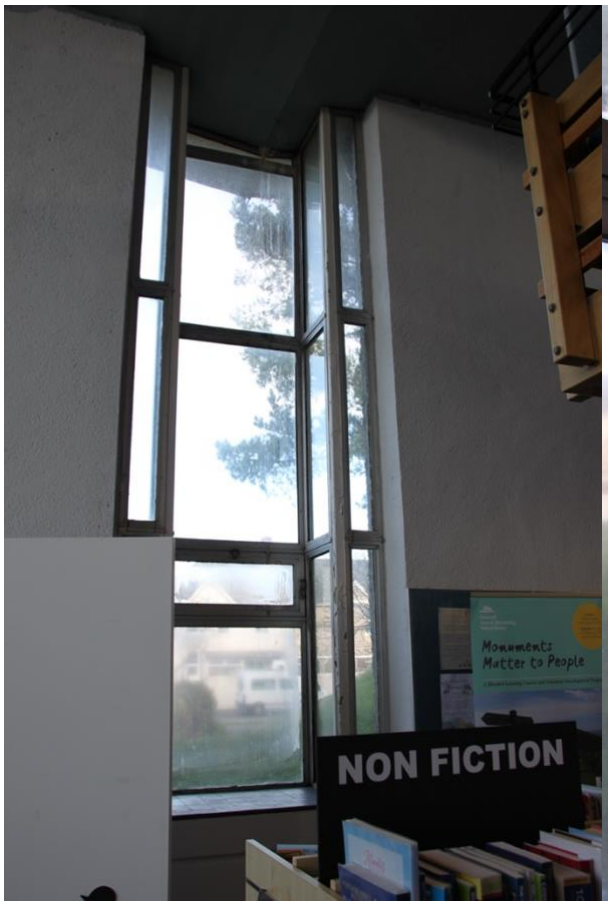
Window 18

Window 18



Window 19

Window 20



Bay window 21


Window 21E


Window 21E


Window 21C


Window 21B


Window 21C

Window 21C

Window 21C