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VICTORIA HALL - GLOSSOP

Condition Survey

Client: Client representative: Dates of Inspection: HIGH PEAK BOROUGH COUNCIL Paul Hare - Assets Manager 02.07.14 and 16.07.14

A1 - Commission and Brief

Bench Architects were commissioned by *High Peak Borough Council* to undertake a building condition survey at Victoria Hall - Glossop.

The survey does not make any detailed assessments of structural or environmental services components as these are undertaken by <u>www.hlengineers.co.uk</u> and <u>www.daviespartnership.com</u> consultants.

Nevertheless, structural or environmental services documentation is included to allow the consultants to undertake: -

- STRUCTURAL assessments regarding repair and alteration interventions and associated builders work.
- S ENVIRONMENTAL SERVICES strategic sustainability review; internal environmental conditions and formal sustainability targets; building lifespan and future climate parameters; site waste management plan (SWMP); BRAD part L assessment.

The condition survey is approached as follows:

- 1. A review of all key components (where accessible) including: Roofs/Roof Structure/Rainwater Goods. Chimney stacks. External Walls. Arched openings. Extensions. Brickwork. External Joinery. External Decorations. External areas including gravel/paving. Drainage. Roof Voids. Ceilings. Internal Walls/Structures. Floors. Kitchens. Bathrooms. Internal Joinery. Staircases. Windows. [*Other items evident within the Victoria Hall have also been assessed*].
- 2. The production of a high level report on the current condition of the building based on findings.
- 3. An assessment of items categorised as follows:
 - 3.1. Repairs/capital replacement is required immediately in order to ensure the integrity of the building is maintained.
 - 3.2. Provision of the lifespan of all elements and to predict their <u>failure-date</u> in order to establish a maintenance plan over a 5 / 10 / 15 / 20 year period.

The report is in sufficient detail to allow <u>www.appleyardandtrew.com</u> to price the findings/recommendations.

EXECUTIVE SUMMARY

Most of the structure's defects are almost all associated with water ingress or the action of water and frost.

Previous incompatible building alterations have also contributed to the decline.

See **SECTION C** - below for a detailed condition survey with prioritized recommendations.

A2 - Location and History

The *1888 Free Library* and *Public Hall* occupy a quiet position on a triangular site formed by Fauvel Road / Talbot Street and Fitzalan Street.

Joseph Dempsey Doyle, writing in the October 1954 - 'Glossop Chronicle' and 'Co-operative Home Magazine' comments upon the turbulent nascence of the library, and the difficulty in selecting a suitable location -

The donors of the Library had great difficulty in getting the local authority interested in the building and had assumed that their gift would be well received by the Council and *Lord Howard*, the Landowner. They had engaged a firm of architects and had plans drawn up and estimates made before the site for the new building was agreed.

The plans and estimates of construction came to nearly $\pounds 1,000$ more than the original amount donated and, as no money was promised by the Council, they each raised their offer to $\pounds 2,500$.

1. **MARKET SQUARE LOCATION** - The original site chosen was opposite the Market Ground, the Glossop Brook still ran un-culverted across the south side of the Market Ground and Victoria Bridge was un-widened.

Improvements to access and public safety would have to be made before building could begin and the foundations would cost an additional $\pounds 1,000$. Further causes for concern was that the users of the free library and the people at evening classes would be disturbed by the noise of the market and the fairs and 'Wakes' on the market ground over the brook.

- 2. **ELLISON STREET LOCATION** The next site considered was at the top of Ellison Street on part of the old Glossop cricket ground behind the site of King Edward Avenue. It was close to a main road, not far from the Victoria centre and the station. When this proposal was put before Lord Howard by Francis Hawke, his Agent, he refused to consider it as he wished to keep land to the east of Norfolk Street, and in view from the Hall, clear.
- 3. **HOWARD STREET LOCATION** The Agent suggested that a site on Howard Street might be convenient but the closeness of the railway station and goods yards would be loud and smoke-filled.
- 4. TALBOT STREET LOCATION Finally a 'compromise' triangular site on Talbot Street was suggested.

From this point there was a rush to get the foundations dug and walls in place so that the commemorative stones could be laid on the same day [30.07.1887] as the **Queen Victoria's Jubilee**, in conjunction with the Public Baths and Hospital by the Wood family.

Neither the Council nor any individual member would sign the contract for the library and so it was left to *Councillor Partington* to sign it alone.

As the donation was now $\pounds 1,000$ less the plans were altered and only two entrances were provided instead of four and costs rose by over $\pounds 700$ to meet the price of deep foundations and raised architects' fees.

Other cost cutting measures soon deleted decorative masonry features, reduced the height of the tower and substituted cheaper slates and hall floorboards, but then to retain the quality of the build, an extra £350 was found to keep to the plan.

When the final bill, excluding furniture, came to £5,200 *Partington* found him-self liable for the balance. He went to the Council and announced the situation he was in and suggested that, if the Victoria ratepayers would adopt the **1855 Public Libraries Act**, a penny rate could go towards running the building.

A3 - Architect and Design

Architectural patronage was normally through the buildings donors - principally *H. Rhodes, Esq.*, of Thorncliffe Hall, Hollingworth, and Captain Partington, of Easton, Glossop -

Contemporary Architects operating in Glossop at the time of the Libraries construction include: -

- → *Hadfield and Weightman* Sheffield [Lord Howard patronage]
- → The Rev Ward of Whitfield's architect son. Fitzalan St's church 'Mr Roberts', Contractors Robinson Fielding
- → Mr Lindley of Hyde and building by Robinson and Son of Hyde rebuild of Fitzalan St church in 1892.
- \rightarrow George Hawks

[Refer - to bibliography and Derbyshire Record Office for sources].

A4 - Glossop Library and Public Hall - Listing & Trade Directory Descriptions

S English Heritage - Listing Text - NGR: SK0341294423

GLOSSOP - SK0394 TALBOT STREET

921-1/10/31 (West side)

Victoria Hall and Public Library

Date Listed: 22 May 2000 English Heritage Building ID: 484734

Grade II

"Concert hall and public library. 1887.

Coursed rock-faced millstone grit with ashlar dressings and Welsh slate roofs with coped gables and kneelers.

STYLE: Gothic Revival.

PLAN: cruciform plan, the main range containing library to ground and hall to first floor, with entrances in east and west wings that to east with bell tower.

EXTERIOR: 2 Storeys. Chamfered plinth and chamfered sill bands. Square east bell tower has steps and ramp to 4centred arch doorway in moulded ashlar surround with double panel doors and over-light, flanked by single dated foundation stones, above 2 single light windows and rectangular plaque with coat-of-arms inscribed:- 'Aldermen and Burgesses of the Borough/ Virtus, Veritas et Libertas.'

Above again single pointed arch bell opening to each face with tracery and louvres. Topped quatrefoil parapet, projecting corner pinnacles with ball finials and square spire with finial and **lucarnes**.

Main north front has 5 window **canted-apsidal** end with 4 window sides, divided by single storey pilasters topped with ball finials. Blind quatrefoil panels between floors, topped with blind arcaded and coped parapet. Side windows single light, apsidal windows paired in chamfered surrounds with dividing mullion. Central bay topped by pedimented gable with ball finial and escutcheon inscribed:- 'Public Library Glossop'

To west entrance to Victoria Hall similar to east entrance with 2 similar windows above topped with gable.

Remaining elevations with similar detailing, basement level apparent to rear south facade.

INTERIOR: has main entrance hall with glazed tiles bearing heraldic motif and inscription. Tower contains staircase to first floor hall. Opposing entrance from west with wooden staircase.

Ground floor library retains moulded architraves to panelled doors and engaged pilasters support encased wide beams. Plastered and painted.

Built to commemorated Queen Victoria's Jubilee, donated by H Rhodes and Capt Partington, foundation stones laid 30 July 1887".

ষ্ট্ৰ <u>T. Bulmer & Co Directory of Derbyshire</u> (1895)

"The Public Hall and Free Library was the gift of **H. Rhodes, Esq.**, of Thorncliffe Hall, Hollingworth, and **Captain Partington**, of Easton, Glossop, who each contributed £2,000 towards its erection. It is situated at the corner of Fauvel street and Talbot street, on a site presented by Lord Howard. The style of architecture is light and pleasing, resembling the late Gothic work erected during the reign of James I. The front projection is octagonal, and from one side rises a tower, with pinnacles at each corner and a slated spire. The external walls are faced with parpoints, and the quoins, lables, and strings are surmounted by a very fine parapet in ashlar work. The library and reading room on the ground floor is a large apartment, measuring 72 feet by 36 feet, well lighted, and fitted throughout in pitchpine. Above is the Public Hall, capable of accommodating upwards of 1,000 persons. These several gifts of the Park, Hospital, Baths, and Public Hall were given to the Victoria in commemoration of the jubilee of Queen Victoria, and the memorial stones were laid with great jubilation on the 30th July, 1887".

ষ্ঠ <u>Kelly's Directory of Derbyshire</u> (1898)

"The Free Library and Public Hall, Fauvel road erected in 1887 by Herbert Rhodes esq. and Capt. Edward Partington, at a cost of about £4,400, on a site given by Lord Howard of Glossop, is a building of stone in the Gothic style, containing a reading room and library of 5,000 volumes, lecture hall and a public hall: over the main entrance a tower with pinnacles rises to a height of 80ft.".

B1 - BIBLIOGRAPHY - [select sources with much thanks to *Mike Harding Brown* - Glossop Historian]

- → The Illustrated London News (TBC) p. Building News (TBC) p. -
- → Glossop Chronicle 1st January 1887 1887 newspapers Glossop Chronicle/Glossop Times 1869-1901
- → D3700/1/3- council minutes c1887-1888
- \rightarrow <u>D2448/A/PI 33/1-2</u> 'foundation stone ceremony' architect's name the architect may be listed amongst the dignitaries attending the foundation stone laying **30th July 1887** or even prior to the building being completed].
- → <u>D5162/8/18</u> + <u>D5162/8/28</u>= Attested copy gift of a piece of land on Talbot Street and Fauvel Road in Glossop, Francis Edward Lord Howard, Baron Howard of Glossop to the Mayor, Alderman and Councillors of the Borough of Glossop; to be used for the erection of a public library, museum and school of art Includes plan 18 Oct (attested 27 Feb 1888)]. Victoria Hall officially opened 20th December 1888.
- → National Archives PP 1/213/28 Borough of Glossop: address to Queen Victoria on her Golden Jubilee.
- → Library Association volume 1 **1888** "GLOSSOP. The formal opening of the Free Library will not take place until the summer, but the reading-room was opened on Dec. 22. Lord Howard has presented 500 volumes".
- \rightarrow <u>D3705/124</u> Memorial service for Edward Partington, Lord Doverdale 1925
- → In Memoriam Sir Edward Partington Knight, First Baron Doverdale of Westwood Park, Co. Worcester and Glossop, Co. Derby Born 1836-died 1925. 37pp OCLC Number 499917500
- → Kelly's Derbyshire Directory 1912 Free Library & Public Hall, Fauvel road, *Miss Bessie Hodgson*, librarian
- → Kelly's Derbyshire Directory 1932 Free Library & Victoria Hall, Fauvel road, *Edward Thompson*, librarian & caretaker; The Free Library and Victoria Hall, Fauvel road, erected in 1887 by Herbert Rhodes esq. and Lord Doverdale J.P. at a cost of about £4,400, on a site given by Lord Howard of Glossop, is a building of stone in the Gothic style, containing a reading room and library of 5,000 volumes, lecture hall and a public hall: over the main entrance a tower with pinnacles rises to a height of 80 feet.
- → D3705 Papers of the Howard family, Barons Howard, of Glossop-
- → <u>www.britainfromabove.org.uk</u>

B2 - INITIAL TIMELINE / LORD DOVERDALE

The following schedule lists known construction works, principal repairs and alterations from 1897-2014.

Item	Date	Work description:	Cost	Ref.	Source
1.	1887	Glossop Chronicle - 1 st January 1887 - dispute over site	-	-	Glossop Library
2.	1887	30 th July 1887 JUBILEE GIFTS foundation stone ceremony	-	-	Mike Harding Brown
3.	1888	27 Feb 1888 - Attested copy gift of a piece of land on Talbot Street	-	D5162/8/18	Derbyshire Record Office
		and Fauvel Road in Glossop, Francis Edward Lord Howard, Baron		<u>D5162/8/28</u>	
		Howard of Glossop to the Mayor, Alderman and Councillors of the			
		Borough of Glossop; to be used for the erection of a public library,			
		museum and school of art.			
4.	1888	Victoria Hall officially opened 20 th December 1888	£4,400	Vol 1	Library Association
5.	1888	Library Association volume 1 - 1888 - "GLOSSOP. The formal		Vol 1	Library Association
		opening of the Free Library will not take place until the summer, but			-
		the reading-room was opened on Dec. 22.			
6.	1890	Hamnett 1890 - The estimate of the cost of the building was $\pounds 4,250$.	£4,250	-	Mike Harding Brown
		Mr. Herbert Rhodes contributed £2,000, and Captain Partington the			
		rest. Lord Howard gave 300 volumes of books and 100 guineas;			
		James Sidebottom, £50 and barometer; W.S. Rhodes £50; Mr. Edwin			
		Shaw, a piano value £50; and other gentlemen minor gifts. The cost			
		of furnishing was £408. The Library was opened on Saturday,			
		December 20th 1888. The public Hall is 98 ft. long and 36 ft. wide			
		and will accommodate 1,000 persons. The Reading Room and			
		Library is 72 ft. long and 36 ft. wide. The Lecture Hall and			
		Museum is 36 ft. long and 23 ft. 6 in. wide. The Library was			
		augmented by a valuable gift of interesting books, value £100, Lieut.			
		Col. Sidebottom being the donor. The Reading Room is well			
-	1010	patronised, and the Hall supplies a <i>long felt want</i> .			
7.	1912	Kelly's Derbyshire Directory 1912 - Free Library & Public Hall,	-	-	Derbyshire Record Office
0	1022	Fauvel road, <i>Miss Bessie Hodgson</i> , librarian			Desharehim Descard Off
8.	1932	Kelly's Derbyshire Directory 1932 - Free Library & Public Hall,	-	-	Derbyshire Record Office
		Fauvel road, Edward Thompson, librarian & caretaker			



Sir Edward Partington (1836–1925), JP, DL, 1st Lord Doverdale by John Singer Sargent

Partington was born in Bury, England and arrived in Glossop in 1874. He, with his partner *William Olive*, bought the *Turn Lee Mill* from *Thomas Hamer Ibbotson*. He bought it to try out a modern method of paper manufacture using the sulfite process. He expanded rapidly with mills in Salford and Barrow in Furness.

He merged with Kellner of Vienna and was created *Lord Doverdale* 6 January 1917. His factories in Charlestown created nearly a 1000 jobs.^[1] He employed a thousand workers in his Charlestown Mill, 1 in 12 of the working population. He was a Unitarian and a Liberal. He was a Deputy Lieutenant of Derbyshire. He was made a Baron in 1917. Partington died on 5 January 1925. Also of *Westwood Park* in the County of Worcester.

^[1] Birch, A.H. (1959) - Small Town Politics, A Study of Political Life in Glossop. Oxford University Press

C - CONDITION SURVEY

The scope for the Victoria Hall Condition Survey is as described in section A1 above, and Bench Architects letter dated 06.06.14 as agreed by HPBC.

Detailed appraisal of the building condition has allowed the following synopsis of **repairs/maintenance** [*R/M*]; **reordering/alteration** [*RE/A*]; and **enhancement** [*E*]:

1. <u>SITE & BOUNDARIES</u> -

1.1. **Abutting Surfaces**: Historically the abutting landscape comprised of neatly laid sandstone paving. Post 1965 the sandstone paving has been replaced with tarmac [Ref. H02-H06].

The installation of tarmac has raised levels against the building including entrance steps and plinth ventilation grills [Ref. **W03.01 & W05.03**]. *Some areas of the tarmac have been heavily patched [Ref.* **18-20**].

- [*E*] *<MC-5 years >* Selective reinstatement of paving.
- [*R/M*] *<MC-3years >* hot zinc metal spray & powder-coat cast-iron ventilators [*W1.19*].
- 1.2. **Hygroscopic Filtration**: It is important that rain/surface water is transported away from the building into below ground drainage systems. This will reduce dampness and damage mechanisms in the masonry walls.

On the south east corner (below windows WG.1-3 and WL.9) there is a build-up of earth against the building with ensuing internal physical damage and salt damage caused by water migration. This indicates inadequate waterproofing/tanking.

A large number of gullies (serving both groundwater and rainwater pipes) are blocked with litter/debris and vegetation. [Ref. 13, 14, 15, 16, 20]; [E1.19-20]; [E2.4].

To the south are several large trees which spread at high level almost to within touching distance of the building.

- [*R*/*M*] <*MC-Immediate* > The elevation adjacent to the trees should be monitored. The tree canopy should be regularly pruned to limit growth.
- [*R*/*M*] <*MC-Immediate* > clear debris and blockages from all gullies.
- [*RE/A*] *<MC-5 years >* refer to sections 6.1 and 7.1 below for retrofit Lower Ground Floor waterproofing/tanking.
 - 1.3. Southern Curtilage & Railings: The curtilage wall was originally higher with composite cast and wroughtiron trefoil railings centred between ashlar piers. [Ref. H02-H06]. The reconstructed curtilage wall comprises canted ashlar copings on a single or double course of rubble-wall.
- [*R*/*M*] <*MC-10 years* > generally the curtilage walling is sound but will require repointing and re-bedding [Photos L&C08-09].
- [*E*] <*MC-5 years* > Review railing reinstatement in conjunction with enhanced building security [??]

1.4. Eastern Library Entrance:

The library entrance originally comprised of three steps with a canted ashlar balustrade. [Ref. H05-H07]. [Legislation - Building Regulations Approved Document K & M; Equality Act 2010; Equalities Act 2010 (Disability) Regulations 2010; BS 8300:2001 'Design of buildings and their approaches to meet the needs of disabled people - Code of Practice'].

A chevron-tamped concrete wearing surface ramp and steps with coursed rubble/cant-ashlar coped walling with simple tubular steel balustrade (paint now perished) was installed post 1975. 2no 'cycle-parks' have been installed against the north face of steps. New (relocated) rainwater goods with raised gullies were installed across the **Partington Foundation Stone** with ensuing damage to the string & label courses.

- [*R/M*] <*MC-5 years* > Sweep debris from tarmac to expose wall plinth, repoint coping/masonry joints to wall base.
- [E] </ C-5 years > Steam Clean (DOFF) masonry; fungicidal treatment to improve wall appearance.
- [*R/M*] <*MC-5 years* > Prepare, degrease and decorate balustrade to BS 6150:2006. Ensure *colour/contrast* complies with equality legislation.

[*RE/A*] *<MC-5 years >* The ramp gradient (*<*1.20) and rise (+600mm) does not comply with current legislation neither does the colour contrast between building element. Upgrading the access detail should be considered in conjunction with a holistic access strategy for Victoria Hall.

1.5. Western Entrance to First Floor Assembly:

The first floor assembly-room entrance comprises eleven steps with a canted ashlar balustrade. [Ref. H06 and W01.01-02; W05.01-05]. Although a central balustrade has been installed to divide the over-width flight [BRAD-K item 1.15c Diagram 15] the staircase provides inadequate access to the building.

There are open joints to the ashlar balustrade quoins and copings.

There are open joins and plant growth to the steps and three ashlar treads have fractured and require repairs [W05.01-05].

- [*R/M*] *<MC-5 years >* Clean debris from tarmac to expose wall plinth, repoint coping/masonry joints to wall base.
- [E] </ C-5 years > Steam Clean (DOFF) masonry; fungicidal treatment to improve wall appearance.
- [*R*/*M*] <*MC-5 years* > Ashlar steps steam clean (DOFF) masonry; mask, repoint joints, repair delaminated patches.
- [*R*/*M*] <*MC-5 years* > Prepare, degrease and decorate balustrade to BS 6150:2006. Ensure *colour/contrast* complies with equality legislation.
- [*RE/A*] *<MC-5 years >* Enhanced access should be considered in conjunction with a holistic access strategy for Victoria Hall.

2. <u>ROOFS</u> -

2.1. 1887 Roof - Structure and Finishes:

The principal roof structure comprises ten **arched-braced-trusses** supported on masonry **corbels**. At the **canted-apsidal** north end the roof is supported on four half-trusses, [H09-H10].

The east/west roofs are simple braced trusses.

Secondary roof structures - include purlins, rafters, trimmers, ridge and wall-plates.

The roof slates are random-width diminishing course *Cwt-y-Bugail* [?] or *Burlington/Westmoreland* or *Cornish* light green/grey slates. Slates diminish from the largest at the eaves '*Duchesses'* 24"x 12" - 610 x 305mm to ridge slates *Small Doubles* 12"x 6" - 305 x 150mm (and occasionally smaller). The ridges have roll-top Staffordshire *Blue ridge tiles* and the pitched roof valleys are lead lined, [Site Survey].

The northern apsidal roof <u>had</u> mitred hip-slates * with concealed lead soakers* capped with a wrought-iron ringed (Celtic) crucifix finial* (*items now destroyed), [H02-H06].

Other features (also now lost) included: a) **St. Andrew's cross tower finial**; b) **2no chimneys** capped with trefoil ashlar entablature on roofs **M01** and **M16**, (the **boiler chimney** between **M12/M13** has also lost its entablature); c) a flag-pole at the southern gable, [H02-H06].

The perimeter roof drainage is provided via a stepped lead parapet gutter with catch-pits.

2.2. Post 1975 Re-Roofing General Comments / Current Condition:

The c1975 and subsequent roof repairs have been ill-considered.

Significant roof features have been destroyed including the **crucifix-finials**, **chimney stacks** and **flag-pole** noted above, [H02-H06].

A non-vapour permeable felt has been installed with high-level UPVC slate ventilators.

Concrete hip-tiles have been installed over the original mitred hip-slates and concealed lead soakers, [M02-M05.7/8; M10-M12.1].

Repairs have been executed with ill-matching, incorrectly sized slates fixed with lead tingles which have failed [M01.3; M02-M03.1/4/5; M02-M05.2/4/6; M12-M15.3/4/5/6].

The roof has been poorly maintained with scaffold components left on the roof; lead-valleys and parapet gutters trafficked with ensuing slate breaks; seasonal debris and vegetation left blocking parapet-gutters, catch-pits and rainwater goods.

2.3. Re-roofing Natural Slate Roofing:

- [*R/M*] <*Immediate*> Emergency roof repairs should immediately be undertaken to reduce water ingress to the interior and further damage to the building-structure: -
 - \rightarrow Clearance and unblocking of all parapet-gutters, catch-pits and rainwater goods.
 - → Replacement of slipped/cracked/broken slates with correctly sourced/sized slates fixed with <u>www.owens-slate.com</u> Jenny Twins® or <u>www.geniusroofsolutions.com</u> HallhooksTM.
- [R/M] <MC-1 year > completely re-roof in 65% new matching random-width diminishing course [UK or Spanish sourced] light green/grey slates complete with reinstated roll-top Staffordshire Blue ridge tiles and lead-sheet flashings. Works to BSEN 12326-1+2; BUT NOTE a particular supplier's product that has evidence of durability in the prevailing climatic and environmental conditions must be confirmed. Accompanying commercial document should confirm: producer/supplier; location of mine or quarry; date of sampling & date of testing; Product description & commercial name; Dimensional tolerances; Nominal thickness; Characteristic modulus of rupture (MoR); Water absorption; Freeze thaw; Carbonate content; Non-carbonate carbon content; Exposure to fire, reaction to fire & release of dangerous substances -

Extra-over 100% new matching random-width diminishing course [UK or Spanish sourced] light green/grey slates.

Outline specifications comprise -

- \rightarrow Vapour permeable *breathable underlay* and accessories i.e. <u>www.proclima.com</u>.
- \rightarrow BS 5534 Slate battens fixed with stainless steel annular-ring-shank nails.
- \rightarrow Slates fixed with Copper Slate Nails
- → Reinstate the northern apsidal roof mitred hip-slates * with concealed lead soakers* capped with a wrought-iron ringed (Celtic) crucifix finial* (*items now destroyed), [H02-H06].

2.4. Renewing Lead Sheet Gutter Lining/ Lead Sheet Flashing & Weatherings:

Sufficient and persistent parapet gutter and catch-pit blockages/leakages have occurred to necessitate the removal of the stepped **lead parapet gutter** with **catch-pits** and the examination and analysis of the underlying timber structure/substrate for decay. Interior water damage from parapet gutters is evident in photographs [F1/2/3/4.1,4,5; F11/12.10-19; F13.02]

- [R/M] <Immediate> Emergency investigations lifting select lead parapet gutter sections and catch-pits should immediately be undertaken to investigate damage to the timber substrate and building-structure. A specialist timber surveyor should be employed.
 - → General narrative and assessment of the constructional arrangement of the timber elements within the built fabric (e.g. how are timber elements within the building assembled, joined, supported etc).
 - → Visual inspection and assessment of all visible fixed timber elements within the built fabric, organised by building (and by room where applicable). To include all internal and external timber elements, both structural and decorative.
 - → Non-intrusive testing of accessible timber elements using moisture testing, knock testing etc, where deemed necessary.
 - \rightarrow Intrusive testing of accessible timber elements using decay detecting micro drills or similar techniques, where deemed necessary.
 - → Where possible, any voids (for example floor or roof voids) are to be accessed for the purpose of surveying timber elements which may not be otherwise accessible. Where possible, endoscopes / borescopes are to be used to access voids with minimal intervention.
- [*R/M*] <*MC-1 year* > *Renew Lead Sheet Gutter Linings* [provisional specification]:
 - → Remove Existing Lead Sheet Flashings And Gutters For Renewal. Remove from site for recycling. Scrap value of recycled material to be credited to the project.
 - → Remove timber-board sarking to determine decay (fungus or beetle infestation) in bearers and structuraltimber; including wall-plates, rafter-feet, truss-bearings etc. A timber survey with detecting micro drills will be required.

- → Allow a provisional sum for removing debris and cleaning down for fungus or beetle eradication; decontamination including C52 Fungus and Beetle Eradication by sprayed, injection, paste treatment or Hot Air Treatment to PD CEN/TS 15003:2012.
- \rightarrow Allow a provisional sum for (engineer-designed) structural timber repairs with *Douglas fir or Pitchpine* and associated stainless steel fixings and strengthening.
- → SUBJECT TO OPENING UP lower section of gutter and chute to sumps may be directly bedded onto a lime mortar screed. Preparation of existing substrate, as specified. Upper sections of gutter on white-wood gutter boards.
- → Timber Board Sarking *European whitewood*.
- → Lead Gutters And Outlets Lead Sheet Type *Sand cast lead sheet*. Chalk slurry applied in two coats to underside of lead sheet with second coat after any necessary bossing but before fixing lead in position. All work as recommended by English Heritage 'Lead roofs on historic buildings'.
- \rightarrow E/o AirtrakTM eaves 'layboard' ventilation at the lead/slate interface.

2.5. Trace Heating to Roofs and Gutters:

The cycle of snow and ice melting and refreezing may have formed ice dams that prevent water from draining during a refreeze cycle. The built-up ice, snow and water can lead to serious damage. Installation of trace heating will provide a continuous drain path for melting ice and snow to flow (through the parapet-gutter and into the catch-pits and down-pipes).

[*RE/A*] *<MC-1 years>* Install, test, commission a 15-25 W/m self-regulating cable gutter heating system, complete with controller, dedicated consumer unit and RCD distribution panel. Note requirement for Adaptive Flashings for roof cable entries.

2.6. Thermal Upgrading:

Refurbishing a building will have an influence on its thermal and moisture balance, and hence the interior climate. The aim of an energy efficiency upgrade is to improve the airtightness and reduce the heat flows from inside to outside in winter and vice versa in summer.

Thermal upgrading provides the following advantages and in economic terms the right time is in conjunction with the repair of the roof:

- **A** *Realisation of a holistic concept for thermal performance and building services.*
- A Minimisation of thermal bridges.
- **a** Claiming subsidies.
- A Maintaining and increasing the value of the property.

A Thermal upgrade of the roof will be determined by abutting constructions.

The predominance of adjoining gables prevents the installation of insulation above the rafters and would alter the external appearance of the building.

Amble interior ceiling height allows the installation of <u>insulation between and below rafters</u>. In the assembly-room the common rafters are sufficiently spaced above the **arched-braced-trusses** to accommodate insulation without visual harm.

[RE/A] <MC-1 year > Install the following [provisional] warm roof system to provide a U-value of 0.16 W/m².

- \rightarrow Surviving lathe/lime plaster to <u>raking slopes</u> will require removal.
- → Lathe/lime plaster to <u>flat ceiling soffits</u> is to be repaired and consolidated insitu and Thermafleece (sheep's wool) installed between and over the ceiling joists.
- \rightarrow 175mm [?] Thermafleece full installed between rafters.
- \rightarrow <u>www.proclima.com</u> Intello membrane (fully taped).
- \rightarrow 60mm Homatherm USD-Q11 under-rafter T&G wood fibreboard insulation with approved washer fixings @ 8no/m².
- \rightarrow 9mm hydraulic lime meshed basecoat with 3mm premix topcat.

 \rightarrow Vapour permeable paint finish - internal silicate paint / plant or clay based emulsion paint.

2.7. Roof Access:

Once repairs have been executed - a planned and safe maintenance regime must be undertaken.

The roof and parapets are currently accessed from **heavy lead-covered roof-hatches**. This form of access is inadequate to complete inspection and maintenance, [M1.2/3/5; M2-M3.1/3/6; M12-M15.2].

- [RE/A] <MC-1 year> Install the following [provisional] enhanced roof access hatches and
 - → L10C 4no 537 x 1153 mm, egress/ access thermally broken conservation rooflights.
 - → N25 Contractor designed *external anchorage/fall arrest systems* to BS EN 353-1&2. A typical system consists of a permanently fixed cable or rail to which is attached the guided type fall arrester. This mobile anchorage point runs along the cable or rail, travelling past the cable/ rail attachment points without the need for unfastening and refastening. A lanyard attached to the guided type fall arrester and the user's body harness completes the system.

2.8. North Gable Access:

A ladder bridging the north gable was installed in the 1970's. This ladder is now heavily rusted, [M2-M5.7/8; M10-M12.1].

[*R*/*M*] <*MC-1 year* > Dismantle steel-ladder and fixings stays for workshop repair. Preparation Sa3, Zinc Thermal Spraying, Epoxy Paint System. [Alternative - carefully dismantle and dispose of ladder].

2.9. Roof Ladders and Timber Duckboards

The softwood roof ladders are decayed.

The softwood duckboards within the parapet gutters are decayed; and are an impediment to cleaning the gutters. There are trapped leaves, fresh vegetation and other debris underneath duckboards impeding the free-draining of the roof. [M1.4; M2-5.7; M12-M15.3/4/5/6].

Traditionally duckboards were considered useful as they allow a space for melting snow to flow away.

- The gutter heating system specified in item 2.5 above provides free-draining of the roof. Exposed leadwork is easier to scrutinize and clean than leadwork concealed by duckboards.
- Competent roofers provide their own access-ladders. Reinstatement of the existing laddering should not be required.

2.10. Lost Architectural Features

[*E*] *<MC-1 year>* Of the lost roof-features only the northern apsidal wrought-iron ringed (Celtic) crucifix finial would be economic or practice to reinstate, [H05-H06].

Note added 02.09.14 following roof void inspection -

- 2.11. Much of the lime-torching from the original slated roof had been left as debris on the lath and plaster ceiling within roof void this requires clearing.
- 2.12. Ditto builders-work masonry from a new ventilation system into the south gable.

3. EXTERNAL WALLS (Rainwater Goods / external services) -

3.1. Masonry Sources:

Four principal stones used in the construction -

- → *Parpoints locally sourced walling stone* (formed from cropped flags) with a brick core.
- → *Principal buff ashlar sandstone* for the quoins, labels (hood-moulds), strings and parapet. There are numerous local ashlar quarries, which include: *Bray Clough, Glossop Low, Blackshaw, Moorside, Mouselow, Shire Hill* and *Lees Hall*.
- → The *parapet trefoil-balustrade* is polychromatic with alternating courses of Orange/Buff and Green Grey ashlar.
 - A <u>Orange/Buff ashlar</u> Cheshire Basin Wirral *Thurstaston Hard Sandstone*.
 - S Green Grey ashlar Shropshire Grinshill Stone.

3.2. General Masonry Repair Specification [Problems associated with weathering and decay]:

Generally the masonry and locally sourced coursed sandstone rubble walling (brick-cored, solid, through-bonded, mortar-jointed masonry) which appears robust and without significant deformation. <u>There are localized areas of</u> <u>masonry failure</u>.

There are distinctive patterns of weathering and decay to the masonry which include- decayed joints, delamination and powdering/ scaling of sandstone; failure of thick skins (up to 50mm); deep weather out of layers; shallow spalls; and organic growths. There are also occasional small spalls/cracks around fine joints caused by localized compression fractures.

As noted by **HL Structural Engineers Ltd** - "A contributing factor to the damage to the face of the stonework is thought to be the historic remedial re-pointing. The original ash/lime mortar joints appear to have been re-pointed using a cement based mortar. This has resulted in the hard cement mortar effectively sealing the relatively porous original joints and preventing egress of moisture and moisture vapour. The moisture is then effectively trapped in the wall and the consequence of this is that the moisture tracks through the stonework. This action makes the stone more susceptible to frost action eventually causing the stone to fragment, become loose and fall from the building".

The following masonry components are defective -

- 3.2.1. Chamfered plinth damaged by rwp insertion [N1.2B]; salt and moisture-damage [N2.4]; [W1.14]
- 3.2.2. *Return Quoins & Kneelers damaged by hard cement pointing and parapet catch-pit leakages [E1.4-6]; [N3.3].*
- 3.2.3. Ground Floor chamfered sill bands salt and moisture-damage below W.15-16 [W1.13-15];[W]
- 3.2.4. Ground Floor / Lower Ground Floor Window Ashlar Damage to window ashlar WG.4-5 and quoins caused by hard cement pointing [E2.4-]; [WG11-16]; [N2.5]; failure cill/quoin window WG.21 [W1.12]; [W2.02-10]
- 3.2.5. Blind quatrefoil panels between floors with labels (hood-moulds/strings) Softening of quatrefoil panels caused by weathering/atmospheric pollution, [E3.17-19]; Failure of hood-moulds to WF.9/WF.10 aprons [E3.20, 22]; failure above WG17-18 [W1.6-10]; [W1.11]; [W1.17-18, 20] [W4.2] to south elevation string above WG.29-30 [S2.3] and WG.27 [S2.2]; damaged by soil pipes [W2.11]
- 3.2.6. First Floor Window Ashlar Damage to window ashlar WG.4-5 and quoins caused by hard cement pointing [E3.15-18]; [N1.3A-4]; [W1.11]
- 3.2.7. Strings and parapet with blind balustrade arcaded coped parapet with ball finials. Softening of balustrade masonry caused by weathering/atmospheric pollution, [E3.3-10] [W1.3]; ball finial plinth cracked between SF.16-17 [N2.10]
- 3.2.8. Central bay topped by pedimented gable with ball finial and escutcheon inscribed:- 'Public Library Glossop'
- 3.2.9. <u>East Gable</u> leaking soil pipe caused damage to *hood-moulds* [E1.13, 17, 31]; Damage to window ashlar WF.1-3 and quoins caused by hard cement pointing [E1.21-27]; [E1.32-27]; [E2.4, 5]
- 3.2.10. *West Gable* damaged strings see item 3.2.5 above.
- 3.2.11. South Gable damaged strings see item 3.2.5 above.

3.2.12. **TOWER** - 4-centred arch doorway in moulded ashlar surround with double panel doors and over-light, flanked by single dated foundation stones, above, damaged hood-moulds [N1.2A]2 single light windows and rectangular plaque (damaged N1.5) with coat-of-arms inscribed:- 'Aldermen and Burgesses of the Borough/Virtus, Veritas et Libertas.' Above again single pointed arch bell opening to each face with tracery and louvres (centre-piece of trefoil has dropped along with rendered masonry infill N1.7, 13). Topped quatrefoil parapet, projecting corner pinnacles with ball finials and square spire with finial and lucarnes. Failure of thick skins of tower-parapet masonry [E2.9, 12-17]

The above defects are caused by acid attacks on the calcareous matrix of the stone; damage due to repeated crystallisation of soluble salts during wetting and drying cycles; general wetting and drying cycles/frost damage.

A full assessment of the extent of the loose and friable stone should be carried out, and annotated on rectified photographs or photogrammetry or on a digital survey with supporting reference specifications.

- [*R*/*M*] <*MC-2 years* > Only in the case of severely damaged masonry are patch repairs or restoration mortars specified. [*The reinstatement of the ashlar back to the original undamaged profiles is assumed to be unaffordable*].
- [*R*/*M*] <*MC-2 years* > In lieu ubiquitous protection and stabilization of the masonry is provided by Steam Cleaning (DOFF system); fungicidal treatment, repointing and Siloxane treatment.
- [R/M] <MC-2 years > <u>REMOVAL OF HARD CEMENTITOUS POINTING</u>, filling minor cracks and repointing in lime or hydraulic-lime mortar and Siloxane treatment has the benefit of improving the strength of the walls by restoring full cross-sectional areas and retaining (weak) bedding mortar. It also reduces weather penetration and subsequent decay by the exclusion of moisture, organic growth and salts.

3.3. Spot Repairs and Masonry Renewal [Problems associated with building detail and maintenance]:

HL Structural Engineers Ltd report "Whilst there are areas of localised cracking and movement, in general structural terms there does not appear to be any evidence of significant settlement or movement of the primary structure. The walls appear sound, the roof structure generally appears to be in reasonable condition and there was no visual evidence of any significant structural distress internally.

However there are a number of defects to the building which are almost all associated with water ingress or the action of water and frost. Past inappropriate building alterations have also possibly contributed to the general deterioration".

There is severe localized deformation Crack damage/distortion to the following areas:

- → There are a small number of sections of severely cracked and loose parapet and adjacent stonework, particularly -
- \rightarrow SE elevation kneelers to the parapet. This is associated with the parapet gutter and catch-pit blockages, [E1.4-6].
- \rightarrow Adjacent coping stones have become dislodged [E1.7-12].
- [R/M] <Immediate > Emergency investigations lifting select lead parapet gutter section and catch-pits should immediately be undertaken to investigate damage to the timber substrate and building-structure. The above in conjunction with the reconstruction of the upper section of quoins/walling, kneelers and coping stones.
 - 3.4. Lead Weatherings: associated only with roof components.

3.5. C40 Bird Preventive Device Installation: none exist.

3.6. Cast-Iron Rainwater Goods:

The original square/rectangular section rainwater goods have been renewed with 4" circular cast-iron pipes **Carron Company -** Falkirk, Stirlingshire [the company went into receivership in 1982], green painted. The wooden Bobbins and cast-iron are decaying, pipe nails are rusting, sealants have decayed, and paintwork delaminating with rust initiated.

Significant damage was caused to the labels (hood-moulds) on the renewal and relocation of the rainwater goods.

[R/M] <MC-2 years > Replace existing rainwater goods and hoppers to original square/rectangular section. Preparation Sa3, Zinc Thermal Spraying, Epoxy Paint System. Reassemble with stainless steel fixings/nylon separation washers and bobbins.

3.7. Lightening Protection:

There is no Certification within Hp1004-01 Servicing Record? The Electricity at Work Regulations 1989 state that lightning protection systems should be tested in accordance with the relevant British Standard (BS 6651:1999 or BS EN 62305, at maximum intervals of twelve months.

[*R*/*M*] <*Immediate*> BA recommends that the system is tested at eleven month intervals in order to take account seasonal variations in resistance.

4. EXTERNAL WINDOWS, VENTILATORS and DOORS -

For longevity all external joinery items should be dismantled for workshop repair/redecoration. (BS EN 927-1: 1997)

4.1. External Doors - Ground Floor :

DG.1 is an original paired door - six-panelled bolection moulded with a four-centred arched five-paned fanlight. The transom has been severely damaged and the door is in need of redecoration. A crude PVC bulk-head light and internal emergency exit signage disfigures the fanlight. [N1.2].

DG.15 as DG1 but in sounder condition. [W5.2].

[*R*/*M*] <*MC-2 years* > Removing doors for workshop repairs, upgraded/repaired ironmongery; weather-sealing and redecoration.

4.2. External Doors - Lower Ground Floor :

External Ledged-framed and boarded doors **DL.1** and **DL.8** - open to small paved areas with steps up to the outside grassed area, [LG3.1; S1.2-3; S3.2-4].

There is no threshold or drainage between the door and the paved area.

- [RE/A] <MC-2 years > provide a stainless steel drained threshold-channels to comply with Building Regulations Approved Document K & M; Equality Act 2010; Equalities Act 2010 (Disability) Regulations 2010; BS 8300:2001.
- [*R*/*M*] <*MC-2 years* > Removing doors for workshop repairs, upgraded/repaired ironmongery; weather-sealing and redecoration.

4.3. Casement/Hopper, Fixed Windows and Tower Louvres :

Some original 1886 casement and hopper windows survive with flat drawn sheet glass. Timber generally sound but paint delamination, putty & sand-linseed edge sealants decayed. The hoppers and casements are generally difficult to operate or inoperable. Poor weather sealing.

A large number of windows (particularly to the apsidal library and hall elevations) have been replaced with crude square section joinery.

The tower timber-louvres require repair and redecoration.

Refer to the following images [South - S1.2a-4; S2.2-3] [East - E1.14, 21-30; E2.9-10,18; E3.11-15; E3.21-22] [North - N1.4, 7] [West - W2.13].

- [*R*/*M*] <*MC-2 years* > Remove windows for workshop repairs, upgraded/repaired ironmongery; weather-sealing and redecoration [note paint colour matched low modulus silicone sealant in lieu of putty].
- [*R*/*M*] <*MC-2 years* > Removing the tower timber-louvres for workshop repairs and redecoration
- [*RE/A*] *<MC-2 years >* Extra-over: installation of 10-12mm slim profile double glazing.
- [*RE/A*] *<MC-2 years* > Extra-over: electric actuators in lieu of cord operated sky-light openers.

4.4. Basement Windows :

Basement windows generally glazed sashes. Boiler room window LW.1 has been smashed and temporary sheettimber boarded.

- [*R/M*] *<MC-2 years* > refurbish and redecorate sash-windows.
- [R/M] <MC-2 years > Renew LW.1 window with recessed framed louvers (integral insect meshes). 1) Galvanized steel polyester powder-coated; or, 2) hot-zinc sprayed polyester powder-coated / or, 2) hardwood/Accoya factory painted.
- [*RE/A*] *<MC-2 years* > Extra-over: installation of 10-12mm slim profile double glazing.

INTERIOR: -

5. <u>STAIRCASES</u> -

5.1. Basement Stair LG20: [LG.20/1,3]

A steep c.47° 'general-access' staircase with Rises and Goings non-compliant with BRAD K1 links the lower and ground floors.

[RE/A] <MC-2 years > Alternative staircase provision is required to comply with Building Regulations Approved Document K & M; Equality Act 2010; Equalities Act 2010 (Disability) Regulations 2010; BS 8300:2001.

5.2. West Stair CA25: [F15.1,2]

Access to the first floor is provided by stairs, situated in wings on the east and west sides of the building.

The timber-framed and boarded staircase comprises of maximum [16 rise?] *flights with half and quarter-turn landings.*

The rise, goings and landings are clad with beige linoleum and edged with applied aluminium/brown Upvc stair nosings. The decorative finish is gloomy with very little contrast between components.

The newels with tapering-fluted cast iron moulded bases and ball finials.

The balustrade is of wrought-iron and cast-iron panels (wrought-iron foliage, cast-iron sunflowers and arched spandrel panels) with a moulded sides/curved top hardwood handrail.

In order to comply with BRAD K2 a modern top-up balustrade has been added to raise the guarding to 1100mm.

A modern continuation hand-rail has been provided to the landings.

[E] *AC-5 years* > Renew M50 Rubber/Linoleum floor coverings. Reinstate an appropriate decorative scheme based on historic paint analysis and *visual contrast* "between the wall and the ceiling, and between the wall and the floor. Such attention to surface finishes should be coupled with good natural and artificial lighting design" - BRAD M - 3.11.

5.3. East Stair CA25: [F5.1-6]

Description is as west staircase.

6. FLOOR CONSTRUCTION AND FINISHES -

6.1. Lower Ground Floor:

This area is unoccupied [?], but was recently used by a youth club with various play and meeting spaces, offices, kitchen and toilets. The majority of areas within the lower ground floor are suffering from water absorption, structure-damaging salts and biological damage.

- → LG.4-6; LG.18, 21-22 retain saturated Stone Slab Paving on rubble/lime-clinker some asphalt covered.
- \rightarrow LG.1-3; LG.13-17 are of painted concrete ground bearing slab construction.
- \rightarrow LG.7-8; are of ceramic tiles on a concrete ground bearing slab, [LG.7-8].
- \rightarrow *LG.9-11;* comprises of rubble and soil filled sub-floor voids under the main library, but with an area of biologically damaged timber boarded flooring adjacent to the entrance door [*LG9-11.1-6*].

[*RE/A*] <*MC-2 years* > Rehabilitation of the Lower Ground Floor should not occur without the installation of a comprehensive waterproofing and insulant system. Refer to **BS 8102:2009**, examples include: -

- S BS 8102 Type A internal barrier protection i.e. Foamglas® compact floor system with a mastic asphalt or cement screed with underfloor heating. Or, waterproof/vapour permeable restorative plaster with insulant top coats. CLAWS J10/J20/J30/M20/M21.
- S *BS 8102 Type C- insulated drained cavity system* i.e. **J40** impermeable flexible sheet materials laid or applied under or to floors and walls to exclude ground water, dampness and where necessary, radon or other gases.

A *Radon survey* and (if required) protection measures should be under taken in conjunction with the above.

6.2. Ground Floor:

The main entrance hall floors G4/G5 and G11, G13/G14 comprise of Victorian encaustic and geometric floor tiles [G12-G13.1-3, 5-12], laid on steel-beam filler-joist clinker concrete slabs [whose soffits are plastered and lime-washed] [LG20.4; LG.21-LG22.1-4, 6].

The tiles are generally in sound condition but exhibit the following wear characteristics -

- \rightarrow Dull dirty appearance due to over a hundred years of wear and tear.
- \rightarrow Paint spills and encrustation's of other coatings.
- \rightarrow Dirty and missing cement grouting along with few cracked and chipped tiles.
- [R/M] <MC-5 years > Execute trial cleaning areas with steam cleaning / 'Synperonic A' and 'Vulpex' spirit soap', or 'HG Extra', 'HG grease remover', or 'BAL Ceramic Floor Tile Cleaner'. The above will confirm /establish a methodology and costs for the tile conservation.
- [*R*/*M*] <*MC-5 years* > de-rust and fire protect (with M61 Intumescent Coatings) the *steel-beams* to the Lower Ground Floor filler-joist clinker concrete slabs.

The G6-G8 Library, G1-G3, G9 offices and work rooms are carpet tiled over a timber board and joist floor. <u>*The soffit is unprotected and without fire-resistance above LG9-11, [LG9-11.1-4].*</u>

The G10 toilets are floored with UPVC Sheeting, this may cover encaustic tiles.

[E] *AC-5 years* > Sheets and tiles of UPVC plastics, and carpet fixed with adhesive: [CO] - investigate floor construction. Upgrade to alternative (dust/mite free) floor finishes - M12 Cushioned Resin Flooring / M50 Cushioned Rubber Sheet Flooring / M50 Linoleum Sheet Flooring.

6.3. First Floor:

The F1-F7 and F13-F17 Kitchen /toilets/circulation areas are covered with UPVC or Linoleum Sheeting, over a sheathing ply timber board and joist floor. [LG9-11.1-4].

The F9-F10 Store and Backstage areas are covered with **Thermoplastic PVC vinyl (asbestos and naphtha) tiles.** *Note HSE guidance on removal.* [F9-F10.6]

The F11 Hall comprises a hardwood strip floor which appears in sound if soiled condition [F11-F12.12-16].

- [E] *AC-5 years* > Sheets and tiles of UPVC plastics, and carpet fixed with adhesive: [CO] investigate floor construction. Upgrade to alternative (dust/mite free) floor finishes M12 Cushioned Resin Flooring / M50 Cushioned Rubber Sheet Flooring / M50 Linoleum Sheet Flooring.
- [*RE/A*] *<MC-5 years >* Refurbish K21 Beech ex 69x20mm T&G Wood Strip Fine Flooring by fine sanding, cleaning and sealing with a matt acid-catalysed lacquer or polyurethane sealant or a *Hard Wax Penetrating Oil*. Repairs required around leaking radiators and pipe access panels.

7. WALL CONSTRUCTION AND FINISHES -

7.1. Lower Ground Floor - Rehabilitation and Masonry Drying:

Refer to item 6.1 above.

The walls are founded on shallow masonry foundations or directly onto rock.

The majority of areas within the lower ground floor are suffering from water absorption, structure-damaging salts and biological damage.

- [*RE/A*] <*MC-2 years* > Rehabilitation of the Lower Ground Floor should not occur without the installation of a comprehensive waterproofing and insulant system. Refer to **BS 8102:2009**, examples include: -
 - S BS 8102 Type A internal barrier protection i.e. Foamglas® compact floor system with a mastic asphalt or cement screed with underfloor heating. Or, waterproof/vapour permeable restorative plaster with insulant top coats. CLAWS - J10/J20/J30/M20/M21.
 - State and the set of t

7.2. Ground & First Floor - Repair existing plasterwork/internal crack-stitching:

Areas of internal wall finishes have been damaged by water ingress. [F8.5; F13.01/4/6-7]

[*R*/*M*] <*MC-* 2 years > repair plaster damaged by removal of partitions and services, new builders work etc.

7.3. Ground & First Floor - Thermal Plasterboard Dry Linings / or insulating plaster:

The masonry facades are poorly insulated and subject to condensation.

[RE/A] <MC-2 years > Where possible (*i.e. cornices not present*) - remove existing plaster. Install thermal plasterboard dry-lings to improve thermal efficiency and building U-values. Existing U-value before refurbishment 1.5 - 3W/mK after refurbishment with 50-80mm insulation = 0.38-0.7 W/mK. Insulating plaster preferred to insulated dry-lining. Standards - BS 8212:1995; BS 8000-8:1994; BS 4841-2:2006; BS EN 14195:2005; 11/30251991 DC.

Extra-over: reinstatement of cornice to first-floor circulation areas.

8. CEILING CONSTRUCTION AND FINISHES -

8.1. Lower Ground Floor Ceiling Structure:

The ceilings at this level are in a poor condition, with evidence of water ingress, and previously attempted repairs. As noted in item 6.2 above - <u>above LG9-11</u> the ground floor structure is unprotected and without fire-resistance, [LG9-11.1-4].

- [*R*/*M*] <*MC-2 years* > investigate the structural integrity and fire resistance of the LGF ceiling structures and plaster finishes. Allow a provisional sum for repairs.
- [*R/M*] *<MC-2 years >* provide *K10 fire resistant Dry Linings* to the LG9-11 Ceilings.

8.2. Ground Floor Ceiling Structure:

Ground floor library retains engaged pilasters support encased wide beams. The beam above the entrance door is supported at both ends on a consoled entablature in lieu of pilasters.

A number of ceilings illustrate damage caused by water ingress or which relate to areas of <u>water ingress / or</u> <u>leaking radiators and pipework</u> in the floors above. [G1.1-4; G8.8-10].

HL Structural Engineers Ltd report that "The first floor beams downstand below the library plastered ceiling. There is hairline cracking in the plaster boxing out of the majority of these beams. The cracking may be attributable to deterioration of end of the beams (at the junction with the wall) causing swelling and cracking. Another reason for the cracking could be creep deflection under imposed loads of the long span beams causing the plaster to crack". [**G6.1/4-5**]

- [R/M] < MC-2 years > The seating of the beams should be exposed to confirm the condition.
- [R/M] <MC-2 years > Ceiling Repairs: Lathe & Plaster Ceilings with decorative cornices and picture rails. Damage has been caused by the installation of modern partitioning and services. Make good as Conservation Reference specifications C62, C66, M20, M60. Standards BS 7913:2013; BS EN 15824:2009; PD CEN/TR 16239:2011; BS EN 13279-1:2008.

8.3. First Floor Ceiling Structure:

Inappropriate suspended ceilings with inadequate lighting standards throughout the service accommodation (toilets and kitchen) of Victoria Hall. The ceilings are stained and discoloured - with anachronistic integrated light fittings.

[R/M] <MC-2 years > Remove all suspended ceilings, make-good plasterwork and redecorate. Install high efficiency suspended Luminaires. Standards - BS EN 8212:1995; BS 8000-8:1994; BS 4841-2:2006; BS EN 14195:2005; 11/30251991 DC.

The F11 Assembly Hall has redundant ventilation system extracting to the second floor tower.

[RE/A] <MC-2 years > This geometry could be modernized and upgraded to provide an integration of heating/cooling, ventilation, air circulation /stratification. Ceiling convectors, down-flow cooling / induction units etc. Standards - BS 8212:1995; BS 8000-8:1994; BS 4841-2:2006; BS EN 14195:2005; 11/30251991 DC. [F11-F12.3/6; T1-12].

Action - Davies Partnership.

[Thermal Plasterboard Dry Linings: see item 2.6 above - thermal upgrade].

9. TOWER CONSTRUCTION AND FINISHES -

The 2^{nd} floor of the tower is constructed of timber joists supporting a timber floor. The board flooring and other surfaces are covered with pigeon guano. The tower is accessed through a hatch in the F7 toilet ceiling. []

The third floor is constructed of steel beams supporting a shallow arched concrete floor. The exposed surfaces of metal within the tower are all corroded. [T1-T3, T5-T8].

HL Structural Engineers Ltd report that - "The tower walls are masonry up to the eaves level of the steeply pitched roof structure. There are vertical ties which appear to be steel rods which are located at each corner of the tower. The upper parts of the rods are fixed to the base of the roof structure, and the lower ends of the rods are located through holes cut into large stone slabs built into each corner of the tower walls. The end of the rods has a plate and bolt to the underside of the stone slabs. The rods appear to be intended to provide a pre-stressing force to the tower masonry, improving its flexural strength" - [**HL figure 54**].

HL Structural Engineers Ltd report that - "*The tower parapet roof drainage is routed into the tower via a drain channel, to external fall pipes to the SE and NW corners of the tower.*

[02.09.14 update] The second stage of the tower floor (*steel beams supporting a shallow arched concrete floor*) is lead covered with drainage channels through the exterior walls. The base of the third floor (below the louvers) is rendered against the lead floor; the render is failing and the internal masonry requires repointing.

[R/M] <*Immediate*> ensure that the internal drainage is free from obstruction.

[*R/M*] < *MC-2 years* > **ASBESTOS** - there are asbestos components within the roof void and tower. The following components will require removal and replacement.

- \rightarrow Grills to the tower lucarnes
- \rightarrow 3no tower down-pipes and a launder
- \rightarrow Grills to the 1st F ceiling.
- \rightarrow Probable asbestos cement components in c1939 roof void fans..
- [*R/M*] <*MC-2 years* > allow for the repair, pacification and decoration of the steel structural to the tower along with any necessary repairs to the masonry and *filler-joist clinker concrete slabs*.

10. GENERAL FITTINGS, FIXTURES, SANITARY-WARE AND FURNITURE -

10.1. The Lower Ground Floor:

The Club Room has been fitted-out with the last 15 years [?] but into a damp / moisture laden environment. Most fixtures would be disposed of and renewed in as part of a refurbishment project. [LG1-3.3; LG7-8.8/9]

10.2. Ground Floor Library:

The Library fittings and administrative fixtures/furniture are functional although tired.

10.3. First Floor Assembly Rooms:

Many of the first floor fittings / tiling have been damaged by water ingress and would be renewed as part of a refurbishment project. [F1-4.1; F8-10.4/]

A design feasibility is required to ensure the long term viability of the building and refurbish the building to comply with *Equality Act 2010; Equalities Act 2010 (Disability) Regulations 2010*.

Reordered and reconfigured uses with new fittings and furniture will originate from a design-feasibility study.

11. DISPOSAL SYSTEMS -

- 11.1. **Above Ground drainage -** much of the existing above ground drainage is external <u>BS EN 877</u> 100mm Ø castiron pipe work. It is assumed that this disposal system will be retained but refurbished.
- **11.2. Below Ground drainage -** A CCTV inspection survey is required for the site specific below ground drainage. A provisional allowance should be allowed for repairing and relining defective pipework in accordance with DIN 1986-4.

12. PIPED SUPPLY SYSTEMS - Refer to Davies Partnership report.

13. MECHANICAL HEATING / COOLING / REFRIGERATION SYSTEMS - Refer to Davies Partnership report.

 $[\mathbf{R/M}]$ < Immediate > leaking radiators to 1st floor Assembly Rooms - repairs required to allow continuation of the 1st floor heating system as trace heating.

[R/M] <*Immediate*> Disconnection and draining of the hot & cold water circuits to the various toilets and kitchen at first floor including draining all roof void/tower header tanks.

14. VENTILATION / AIR CONDITIONING SYSTEMS - Refer to Davies Partnership report.

15. ELECTRICAL SUPPLY / POWER / LIGHTING SYSTEMS - Refer to Davies Partnership report.

16. COMMUNICATION, IT, CONTROL AND SECURITY SYSTEMS Refer to Davies Partnership report.

17. TRANSPORT SYSTEMS -

There is no existing lift accommodation. Design options should be reviewed to provide universal access to the Basement/Ground/First Floors of the Victoria Hall.

A small 'modern' extension to the south west elevation could provide universal access from Fitzalan Street with lifts installations designed in accordance with BS EN 81-1 and -2; BS 5655-6; BS 9999; BS EN 81-40.

18. BUILDERS WORK IN CONNECTION WITH SERVICES -

The refurbishment of a Grade II listed structure must consider the following within the scope of a conservation plan and Listed Building Application -

18.1. Protection of historic components including joinery -

18.2. Design philosophy for new services -

- \rightarrow Reuse of existing components such as the refurbished boiler plant / the reuse of cast-iron radiators.
- \rightarrow The positioning/routing/concealment of mechanical room heating / cooling.
- \rightarrow The concealment of services behind surface finishes. [Within the floor void by lifting floor boards].
- \rightarrow The integration of services into the architecture of the building.
- → The intestinal architectural featuring in order to define a new servicing element clearly different from the historic structure.

18.3. Avoidance of ill-considered or aggressive builders work in connection with services -

19. FIRE PROTECTION / DANGEROUS MATERIALS -

Refer to HM Government **Building Regulations 2010 - Approved Document B - Volume 2** Buildings other than Dwellinghouses and/or **BS 9999:2008** Code of practice for fire safety in the design, management and use of buildings.

Taking into account the buildings **Grade II** status - the following risk-assessment will be required with reference to dangerous materials / fire-protection and escape and rescue routes:

- 19.1. Dangerous substances such as <u>Asbestos</u> (used to thermally lag or reduce the combustibility of the construction) or <u>MMVF insulating materials</u> during refurbishment works in 1928 and the 1960's.
- 19.2. Escape and rescue routes
- 19.3. Fire compartmentation
- 19.4. Combustible materials in loadbearing construction and surface finishes.
- 19.5. Components and separating components,
- 19.6. Proper fire-fighting techniques.

This conservation-based research has allowed the following: -

- Better *understanding* of the importance and detail of the **VICTORIA HALL**;
- Identification of the best *conservation strategies* to protect the structures historic significance;
- Future Accurate preparation of drawings and specifications;
- Preparation of detailed repairs and alterations to allow the effective *management and maintenance programmes*.

DETAILED RECOMMENDATIONS / CONDITION OF THE FABRIC

Appendix A - CONDITION SURVEY SCHEDULES is formatted as follows: -

- **KEY** of *Condition / Action Priority / Effect / Sensitivity*
- ELEMENT
- CAWS Common Arrangement of Work Sections for building works
- Date of Component
- Component Description
- Condition / Performance
- Action / Priority Basic Maintenance
- Action / Priority Re-Ordering
- Action / Priority Enhancement
- Quantity Surveyor's Cost Plan
- Maximum Life Cycle with Quantity Surveyor's costs
- Legal / Legislation / Normative Standards

In order to assist cross-referencing report sections have been ordered elementally utilizing the same numerical references.

D - DEFINITIONS and CAVEATS

D1 - DEFINITIONS

Reconstruction: the rebuilding of a structure that no longer exists; essentially a new building or structure based on historic evidence.

Restoration: the finishing of an incomplete structure, where retained original building elements are supplemented by appropriate additions.

Deconstruction: the targeted demolition of individual buildings, blocks or districts, generally for reasons of urban planning, for example to address problems caused by unused and vacant buildings which may have resulted from economic decline.

Demolition: the removal of individual buildings or structures, often prior to the construction of a new building or structure on the same site.

Renovation / Maintenance: work carried out to an existing building or structure to maintain its value and function through competent upkeep. Generally limited to cosmetic repairs and rectification of minor defects.

Repairs / Maintenance: the replacement or repair of defective building components at regular intervals. Often results in consequential 'making-good' costs.

Refurbishment: the replacement of building elements which are intact and / or functioning but outdated, as well as those included in the Repairs / Maintenance definition. May be applied partially or to an entire building.

D2 - CAVEATS

- 1. This survey report has been prepared by *Bench Architects* on behalf of (client). Any liability to third parties is strictly excluded.
- 2. This is a general report only. This report indicates the condition of the building and identifies defects. It does not purport to be wholly comprehensive or to give definitive solutions for repair work. It is a report only and in no way is it a specification for the execution of work and must never be used for such purposes. It is not a document for the purposes of obtaining estimates from builders.
- **3.** A thorough general inspection was made of the condition and state of repair of the Victoria Hall and its curtilage. The survey process was limited to a visual, non-invasive appraisal of the buildings and / or spaces surveyed. We have *not* inspected all structural timbers, or other parts or the structure that are covered, unexposed or inaccessible: we *are* therefore unable to report that any such parts are free from defects.
- **4.** Any inaccessible areas (including, but not limited to floor and ceiling voids, the interiors of ducts and lift shafts, or locked / sealed off spaces to which access has not been provided) have not been surveyed and are therefore outside the scope of this report.
- 5. Roof areas and chimneys have been surveyed from the ground, or where safe to do so, accessed with the use of ladders.
- 6. No investigation into the presence of deleterious materials has been carried out.