

Case information

Case ID	300017060
File Reference	HGH/B/LA/489
Name of Site	Murchison House, University of Edinburgh, King's Buildings, West Mains Road, Edinburgh

Local Authority	City of Edinburgh Council		
National Grid Reference	NT 26415, 70759		
Designation No. (if any)	N/A		
Designation Type	Listed Building	Current Category of Listing	N/A
Case Type	Designation		

Received/Start Date	2015 [University of Edinburgh Estates Review]
Decision Date	13/04/2016

1. Decision

In our current state of knowledge, we consider that the building meets the criteria for listing at category B. The building has been designated (listed).

Current Statutory Address	N/A
Proposed Statutory address	Murchison House, King's Buildings, West Mains Road, Edinburgh

2. Designation Background and Development Proposals

2.1 Designation Background

The Southside/Newington Ward 49, Edinburgh, where this building is located, was resurveyed in 1997. There is no known previous listing review of this building.

2.2 Development Proposals

There are no known development proposals.

3. Assessment

3.1 Assessment information

Murchison House was considered for review as part of the Edinburgh University Estate Project, 2015-16.

Murchison House was visited on 23/06/2015. The exterior and interior were seen.

3.2 Assessment against designation criteria

An assessment against the listing criteria was carried out, see **Annex A**.

The designation criteria are found in the Scottish Historic Environment Policy (SHEP), pp. 71-85. <http://www.historic-scotland.gov.uk/shep-dec2011.pdf>

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ANNEX A – Assessment Against the Listing Criteria*

Murchison House, King's Buildings, West Mains Road, Edinburgh

1. Description

Allan Pendreigh, Property Services Agency, 1971-77. 5-storey, irregular H-plan building constructed for the Institute of Geological Science, and located beside Blackford Hill golf course at the northwest corner of the University of Edinburgh, King's Buildings campus. Two staggered modular blocks of pale yellow brick are linked by a central cross-corridor running north to south. Each block has horizontal bands of (replacement) metal-frame glazing units running the length of each floor level. Full height stair towers with angular glazed roofs flank each block to the east and west.

The interior of the building was seen in 2015. Beyond the refurbished foyer and reception area is a passenger lift serving all five levels of the building. The concrete structural frame of the building is expressed throughout the interior of the building as exposed octagonal columns. Internal walls between each column are exposed yellow brick with corbelled brick details within the stairwells. The library is the principal internal space, sited over two floors with an upper gallery level and a central stair well. Stair, window and gallery handrails are polished tubular metal.

The landscaping immediately around the building was established in the late 1970s by the University of Edinburgh Grounds Department, including a small pond to the west courtyard.

2. Assessment Against the Listing Criteria (SHEP, 2011) pp74-75

Criteria for determining whether a building is of 'special architectural or historic interest' for listing under the terms of the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 [www.legislation.gov.uk/ukpga/1997/9/contents]

To be listed, a building need not meet all the listing criteria. The criteria provide a framework within which judgement is exercised in reaching individual decisions.

2.1 Age and Rarity

The site for Murchison House (leased from the University of Edinburgh on their King's Buildings Campus on the south side of the city) was agreed upon in 1967. Murchison House was designed between 1971 and 1977 for the Natural Environment Research Council. The commission was undertaken by the Architects Division of the Property Services Agency, created as an autonomous government agency in 1972 after the Ministry of Public Buildings and Works had been absorbed into the Department of the Environment. Michael John Mannings was the Superintending Architect on the project. Ministry architect, Allan Pendreigh (1932-2012) was closely involved in the design of Murchison House, and was probably the

lead designer. Construction began following a turf-cutting ceremony in 1971. Progress was interrupted for two years by 'foundation difficulties, labour disputes and the energy crisis of 1973-74' (Greig, p.3). The contractors were Peter Cameron (Builders) Ltd during the initial period 1971/72, succeeded by Bardolin Scotia Ltd in the latter construction phases. Staff of the British Geological Survey, the oldest national geological survey in the world, began to occupy the building from 1975 and Murchison House was officially opened in June 1977 by the geologist Sir Frederick Henry Stewart. The exterior form of the building has changed little since that time. The bellying windows were replaced in the 1990s with powder-coated metal units with wider frames than the original units but the building otherwise large retains the same design and profile as it was first constructed.

Public investment in science and technology was a priority of successive governments in the post-war period and this had a significant impact on the expansion of universities and related organisations, with many institutions reorganised and often centralised. Murchison House was purpose built to house the specific functions of the Institute of Geological Science that were formerly dispersed over several offices across Edinburgh and in England. Proximity to emerging scientific disciplines in marine geology and North Sea oil exploration was critical to research and related commercial services being located in Edinburgh.

While institutional buildings prior to the Second World War generally tended towards formal and monumental architectural designs, a less formal architectural approach was gradually applied to many public buildings and building programmes during the post-war period, especially seen in health, education, infrastructure and town planning. Many of these projects were the product of forward-thinking central and local government architects departments.

The modular design philosophy and unusual composition of Murchison House is also indicative of some of the more innovative designs for office buildings of the period, which were exploring new ways to arrange working areas in flexible modules, using irregular and stepped plan forms and connecting buildings with their landscape. Centraal Beheer at Apeldoorn, Netherlands, by Herman Hertzberger of 1967-72 was a watershed of office design and considered the building as larger number of equal spatial units 'like islands strung together' (Lüchinger, *Herman Hertzberger: Buildings and Projects 1959-86*, p. 87).

Murchison House is also in keeping with contemporary architectural theory and practice in Scotland, which, by the late 1960s and 1970s, tended toward layered or stepped elevations and were concerned with natural and historic context such as White House Visitor Centre Stirling (1971) by Edwin Johnston and Nicholas Groves-Raines or The Scottish Widows head office (1972-76) by Basil Spence, Glover and Ferguson (listed at category A, LB50213), Dalkeith Road, Edinburgh. The latter adopts a geologically inspired hexagon plan structure partly influenced by its location, with the Salisbury Crags forming a backdrop. The 1975-77 Bonar Hall at Dundee University (listed at category B, Listed Building: 52165) by Isi Metzstein and Andy MacMillan of Gillespie, Kidd & Coia is a notable example of a contemporary building adopting a similar informal approach to design with a staggered, asymmetrical plan-form and contrasting yellow brick with projecting modular window units.

Similarly, Murchison House is unique in plan-form and conception, and the prismatic massing of architectural elements suggest naturally occurring geological formations which would clearly resonate with the building's intended users. See Architectural or Historic interest below for more information.

2.2 Architectural or Historic Interest

Interior

Interior design and fixed decorative schemes can add to the case for listing. The choice of octagonal supporting columns throughout the interior appear to suggest naturally occurring geological formations such as basalt rock or crystal. The library is the principal interior space of architectural interest, with the gallery level and central stairwell appearing largely identical to photographs taken in 1977. The tubular steel fittings and fixtures are period features, pointing to 'High Tech' architecture and also reflecting the scientific function of the building.

Plan form

The innovative and architecturally distinctive stepped or staggered H-plan design of Murchison House is successful in breaking down and reducing the overall mass of the building in terms of its appearance, as well as contributing to the functionality of the building. The massing of components makes effective use of a relatively constricted site, maximising the amount of daylight available to internal spaces throughout the day.

The internal planning of buildings is instructive and can be ingenious although it may not be evident on the exterior. The use of brick walls between each internal supporting column, designed to be non-load bearing so that they could be removed and replaced where required, is a forward-looking element of the building design, allowing changes to internal spaces to adapt to future requirements of the staff. Internal space has been designed to specifically accommodate units within the IGS building, with room is given over to exhibition spaces near each unit. These factors are considered to add to the interest under the plan form heading.

Technological excellence or innovation, material or design quality

Exceptional structural form can be significant. The structural design and plan form of Murchison House appears to deliberately reference naturally occurring geological formations, particularly those of basalt rock and crystalline forms. The horizontal bands of bellying windows, with units jutting out at seemingly irregular angles, are suggestive of layers, or strata, of rock. Octagonal supporting columns inside the building are a further geologically-influenced design reference. The modular H-plan design is referred to by *The Buildings of Scotland, Edinburgh* as a 'strong composition' (p.488).

Ministry of Works architect, Allan Pendreigh is likely the principal contributor to the design of Murchison House. Pendreigh worked directly for George Pearce, head of the architectural section at the Ministry of Works, with earlier projects including the

tetrahedron design and structural detailing of the 1963 glasshouse additions at the Royal Botanic Gardens in Edinburgh (listed in their own right at category A, LB49216). The glasshouse design was an inspired solution to support the specific functions of the building, and a similar architectural approach is at work at Murchison House. Other buildings Pendreigh worked on include the Supreme Courts, Parliament House and the National Library of Scotland. He was also an accomplished artist.

The Gazetteer for Scotland website indicates that Murchison House was an 'award-winning creation' although further details were not available at the time of the assessment (2015). The present property manager at Murchison House has drawn attention to the high level of energy efficiency of the building for its age. Murchison House received a 'gold level' award from City of Edinburgh Council in 2005 in recognition of its significant positive impact on the local environment. These factors relate to the material and design quality of the building.

Setting

The context in which a structure sits can be a critical factor in its evaluation and invariably accounts for its form. Murchison House occupies the northwest corner of the King's Buildings science campus, adjacent to the golf course near the base of Blackford Hill. The ancient volcano of Arthur's Seat and the prominent geological sill of Salisbury Crags are visible from the library and upper floor windows to the northeast. The Royal Observatory on nearby Blackford Hill is prominently visible in views from the west side of the building.

The King's Buildings campus is a grouping of bespoke, multi-period educational buildings. The grounds directly around the building were landscaped and planted in the late 1970s by the University of Edinburgh Grounds Department, including a small pond to the west 'courtyard' and grass banked areas.

Regional variations

There are no known regional variations.

2.3 Close Historical Associations

There are no known close historical associations known at present.

Close associations with nationally important people, or events whose associations are well-documented, where the physical fabric of the building is also of some quality and interest, can be a significant factor.

The building is named after the eminent Scottish geologist and explorer, Sir Roderick Murchison (1792-1871), who was appointed Director-General of the Geological Survey of Great Britain in 1855 and was also responsible for the establishment in 1871 of a chair of geology and mineralogy at the University of Edinburgh, the first in Scotland.

The relatively young field of geological science has strong historic associations with the City of Edinburgh, partly contributing to the decision to centralise the national functions of the geological science institute in Edinburgh. The Scotsman James Hutton (1726-1797), known as the 'father of geology', investigated and recorded the geology of Salisbury Crags in Edinburgh, the earliest known example of geological conservationism in the world.

3. Working with the Principles of Listing (SHEP 2011, p76)

In choosing buildings within the above broad headings particular attention is paid to:

- a. special value within building types*
- b. contribution to an architecturally or historically interesting group*
- c. the impact of vernacular buildings*
- d. authenticity*

When working with the principles of listing Murchison House has particular interest under a and d.

a. Murchison House is an example of a bespoke, late-Modernist public office building of innovative design, in an educational context. The geological references inherent in the design of the building add to its special interest in architectural terms.

d. The exterior form of the building is largely unaltered since 1977. The window units were replaced with powder-coated metal units, of a thicker frame dimension than the originals, during the 1990s but this change has not altered the character of exterior elevations of the building.

4. Summary of Assessment Against the Listing Criteria**

Murchison House is an innovative and unique example of late-Modern office design with an inventive plan form, strong prismatic composition and massing of architectural elements, reflecting its intended use for geological research and services. The relocation and consolidation of the Institute of Geological Science in Edinburgh is of particular significance to the emerging North Sea oil industry in the 1970s.

In our current state of knowledge, Murchison House may meet the criteria for listing.

5. Category of Listing

Categories of listing are non-statutory and buildings are assigned a category (A, B or C) according to their relative importance following the assessment against the criteria for listing.

Category definitions are found at: www.historic-scotland.gov.uk/heritage/historicandlistedbuildings/listing

The definite design quality of its innovative plan form and strong composition as outlined above, and when comparing it to other listed examples of post-war buildings, Murchison House is considered to be of more than local significance in terms of post-war architecture in Scotland. In comparison to other buildings that are listed of a similar date, it is considered that category B, denoting regional significance, may be the most appropriate category of listing.

6. Other Information

N/A

7. References

Canmore

<https://canmore.org.uk/> CANMORE ID: 181043

Printed Sources

Greig D.C. (1977) *Murchison House*, Edinburgh: Scotprint Ltd for the Institute of Geological Sciences

Gifford J. et al, (1984, reprinted 1991) *The Buildings of Scotland – Edinburgh*, London: Penguin Books Ltd, p.488

Glendinning M. (1997) *Rebuilding Scotland: The Postwar Vision, 1945-75*, Edinburgh: Tuckwell Press, p.123

Lüchinger, A. (1987) *Herman Hertzberger: Buildings and Projects 1959-86*, Arch-Edition The Hague, p. 87

The Edinburgh Geologist, Issue no 1 - Spring 1977, Greig D. C, 'Murchison House'.

Online sources

http://www.scottisharchitects.org.uk/building_full.php?id=408417, Dictionary of Scottish Architects, Institute of Geological Sciences site details [accessed, 03/09/2015]

http://www.scottisharchitects.org.uk/architect_full.php?id=405392, Dictionary of Scottish Architects, Allan Pendreigh, biographical details [accessed, 03/09/2015]

* This assessment is based on our current state of knowledge and has been prepared for the purpose of consultation or to provide a view on the special interest of a building. This assessment is a consultation document and will form the basis of any

new or updated listed building record should the structure be listed. The content of this assessment may change to take into account further information received as a result of the consultation process.

** A building may be found to meet the listing criteria but in some circumstances may not be added to the list. See 'When might Historic Environment Scotland list a building' at www.historic-scotland.gov.uk/historicandlistedbuildings/whatwelist