CAMELLIA HOUSE

description; the earliest known cast-iron pre-fabricated glasshouse in the world, dating from 1823, designed by Jeffry Wyatville.

status; listed building grade II*, within the Wollaton Park Conservation Area.

surviving fabric; the building is unique for its combined technologies of cast-iron fabrication (by Jones & Clark, Birmingham) and its heating system (designed by Harrison of Derby). Walls; cast-iron Doric columns to front external walls, supporting a cast-iron cornice and frieze using Renaissance Revival strapwork motifs, finished with cast-iron urns (many replaced). 10 subsidiary glazed panels between columns, fabricated from cast-iron forming the principal mullions and transoms, with copper glazing bars, each panel divided into 4 & finished with pairs of glazed arched heads. West end and rear walls are mostly brick masonry (rendered), but the east end is entirely fabricated from cast-iron and finished with a large triangular pediment. Both this and the west end contain cast-iron doors. Internally to the west, the date of construction (1823) in Roman numerals. To the south terrace the Camellia House is finished with a large stone wall and seat, with similar Renaissance Revival details and pair of triangular pedimented niches. To the rear a boiler room (not accessible). Internal structure; semi-circular alcove at the north side with niche for a statue at the west end. Fluted columns with capitals of lotus leaves support the roof structure. These are hollow and many act as internal rainwater pipes, transporting rainwater from the roof to the boiler. Roof; vaulted elliptical panels of cast-iron in ribbed sections, covering the walkways beneath, supported by the external Doric and internal fluted columns and transverse I-section cast-iron beams. Internal glazed hipped roofs with copper glazing bars. Floor structure; stone flags provide walkways between Camellia beds. These are interspersed with cast-bronze floor vents and cast-iron grilles. These are part of a hidden system of ducts for carrying water in cast-iron pipes around the building.



documentary information; "1823; The New Conservatory built, where the old Green House stood" (Middleton Collection Hallward Library - Mi LM 36/1), Smith 2001 (p.8-9) datestone in interior, N. Pevsner "The Buildings of England" p.279





management issues;

alterations; cast-iron urns have been replaced and several appear to be fibreglass copies. Much of the original glass in the roof has been replaced with "Lexan", a type of Perspex, which has discoloured white/opaque.

<u>vulnerability</u>; maintenance is minimal and the structure requires regular continual maintenance and more effective monitoring to deal with any issues of vandalism immediately so that the impression is not one of abandonment.

<u>condition</u>; due to wilful vandalism copper glazing bars have been ripped out and glass has been smashed. The cast-iron columns were repaired in the 1980's but these have further rusted and many need significant repair or replacement. There are integral design faults with the structure that can only be overcome by an effective programme of maintenance and by judicious techniques of preparation and repair of cast-iron. To the terrace, some of the cappings to the niches have been displaced. <u>further investigation</u>; key decisions on the maintenance of the structure, as well as immediate and long-term repair need to be informed by expert fabric conservation consultant's opinion.