

PROPOSED PV INSTALLATION
TO
BACHELORS ROW
TOM QUAD STAIRCASES 5, 6 and 7
AT
CHRIST CHURCH
OXFORD

**NOTES IN SUPPORT OF A SUBMISSION FOR
PLANNING AND LISTED BUILDING CONSENT**

Ref: D/9/0786

December 2023

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9-0786-40-P – Existing and Proposed Roof Plans

9-0786-41-P – Photo Voltaic (PV) Panel Fixing Points & Section

Archive drawings for 1962 Alterations to what was then known as the Dundas Set

Playne and Lacey and Partners drawings reference 443-

102- Plan of main block

103- Sections

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1.00 **GENERAL BACKGROUND INFORMATION AND DRAWING LIST**

1.01 The following notes are to be read in conjunction with the Photographic Record and the following drawings and documentation:

Sidleys' Drawings (reference 9-0786) detailing Proposed alterations:

9-0786-40-P – Existing and Proposed Roof Plans

9-0786-41-P – Photo Voltaic (PV) Fixing Points & Section

Archive drawings for 1962 Alterations to what was then known as the Dundas Set

Playne and Lacey and Partners drawings reference 443-

101- Floor and Roof plan

102- Plan of main block

103- Sections

104- Sections

105- Sections

106- Window Schedule

The statement “do not scale from the drawing” is included in accordance with our quality policy and is aimed at the contractor, as we do not wish the contractor to scale from drawings, as this can lead to problems in the construction phase. You will note that on the left hand side of the drawing there are 11 graduation marks. These form “the metric reference graduation”. This is required as paper is a natural product and may have some degree of dimensional instability. Subject to you using the graduation marks we confirm that you may scale from the drawing submitted. An additional scale bar has been added to the drawings submitted for this Pre-application submission.

General Description and Listing

1.02 The North end of the West range of Tom Quadrangle, which comprises Staircase 5, 6 and 7 and includes the Porters Lodge and JCR, has a Grade I Listing. An extract from the Listing is reproduced below:

This building forms part of The Great Quadrangle and is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

National Grid Reference: SP5141605984

Details

SP 5106 SW 8/453E SP 5106 SE 9/453E SP 5105 NW 12/453E SP 5105 NE 13/453E

CHRIST CHURCH The Great (or Tom) Quadrangle

12.1.54. I Collegiate: (a) west; and south sides, 1526 (John Lubbyns and Henry Redmayne, masons); the north range circa 1668 (refaced C19). Includes Tom Tower, lower part 1526 (since refaced in Taynton stone), upper part 1681-82 by Wren with Christopher Kempster and the Oxford Robinsons, masons; top storey above clock refaced and much of west front restored by

W.D Caröe, 1909-12, in Clipsham stone; terrace and steps, 1842 by Sir Francis Chantrey.

(b) East side, circa 1546, mainly refaced. (c) North side, late C17, refaced in C19. Altered 1962-63 and 1971. (d) Kill Canon Gate, late C17, raised by one storey 1876-78. (e) Staircase and tower in south range. Early C19 stone staircase (Wyatt, 1805) with Gothic fan-vault built between 1630 and 1640; top belfrey stage of staircase tower, 1879 by G F Bodley. Ante-room between tower and hall mainly early C16.

(g) Hall on first floor, 1529, with modern (1878) parapet and pinnacles; rooms beneath remodelled and roof of hall (originally made probably by Humphrey Coke) restored in 1720.

There are eleven wrought-iron lamp-brackets with round lanterns in the Quadrangle. The raised footpath round the Quadrangle, the remains of the Cloisters, is included in the listing. The wrought iron lantern in the Main Gate is included in the listing.

Listing NGR: SP5141406032

1.03 This document relates to the installation of Photo Voltaic Cells on the roof of Bachelors Row.

Pre Application Submission Reference 20/03160/LBPAC

1.04 The works detailed in this application were the subject of a Pre-Application Submission reference 20/03160/LBPAC.

1.05 The following items, which formed part of the Pre-application Submission are **excluded** from this application:

Alterations and Refurbishment

- 1 A separate Listed Building Consent Application was made in respect of these works as follows:

Alterations and refurbishment to Bachelor's Row including: shower accommodation; thermal upgrades; framed single glazed windows; roof structure and coverings; lighting protection; trace heating; leak detection; man-safe system of Tom Quad Stairs 5, 6 and 7. Removal and infill of the high level windows.

Consent was granted reference 23/00297/LBC. These works are nearing completion for the main roof and second floor corridor.

Accessibility

2. The introduction of ramped access and accessible WC to the Junior Common room and refurbishment of sanitary accommodation. and upgrading fire rating to doors onto the escape routes. This is currently being reviewed as part of an overall accessibility review of the JCR and GCR accommodation. A separate application will be submitted for these works.

- 1.06 The report from the Conservation officer on The Pre- Application submission in respect of the possible PV array is detailed below:

“I wish to confirm that the proposed works may be acceptable in heritage terms, if they are unlikely to be visible from publicly accessible viewing points (as well as from other parts of college and its environs. Your information has suggested that the photovoltaic panels may not be visible or would be hardly so, thus they would probably not affect the setting of heritage assets and probably would preserve or enhance the character or appearance of the conservation area. Your information has also shown that the roof is modern and in itself has little heritage significance. The roof is also hidden by a parapet, for the most part.

Energy Efficiency and Historic Buildings: Solar Electric (Photovoltaics) (historicengland.org.uk)<<https://historicengland.org.uk/images-books/publications/eehb-solar-electric/heag173-eehb-solar-electric-photovoltaics/>>

This is an officer's informal advice and you should be aware that at application stage, the council will have heed to consultation responses.”

Photographic Record and Visual Impact Assessment

- 1.07 Refer to the Photographic Record in Appendix C for details of the roof and Appendix D for The Visual Impact Assessment.

Archaeological Report

- 1.08 Refer to Keevill Heritage report dated 3 October 2023 contained in Appendix E.

DESIGN AND ACCESS STATEMENT

- 2.00 **USE**

Existing Use

- 2.01 The building is in the ownership of The Dean and Chapter of The Cathedral Church of Christ in Oxford of The Foundation of King Henry the Eighth.
- 2.02 The area of the proposed alterations is the flat roof of which is being recovered under a separate consent reference **23/00297/LBC**. This includes fully supporting the RAAC (Reinforced Autoclaved Aerated Concrete) plank roof structure.
- 2.03 The building has been altered in the past, including a substantial reconstruction of the second floor and associated roof structure in the 1960's. This included the replacement of the structure and fabric at second floor level with only the external walls retained (Refer to the attached Archive drawings Playne and Lacey reference 443 Numbered 102-105).

User Requirements

- 2.04 Christ Church are committed to maximising energy efficiency and reduce their carbon footprint within the challenges of maintaining the protection of their historic buildings. The roof of Bachelors Row was reconstructed in the 1960's and has been identified as a site for the installation of PV's without adverse effect on the adjacent historic structure and fabric.

3.00 **AMOUNT OF DEVELOPMENT**

- 3.01 The proposed works are detailed on the drawings listed in item 1.01 of this document.
- 3.02 The amount of development is the minimum required to achieve the user requirements.
- 3.03 Original features and fittings are retained and protected. The mounting detail for the PV's have been designed to be retrospectively installed on the new lead Roof coverings installed in 2023 and is a wholly reversible solution. Fixing bases have been provided below the lead to allow for this installation. The introduction of Photovoltaic panels on the roof is to be detailed in such a way as to allow the panels to be removed in order to check the condition of the roof covering below. All fixings are to be matt black. The structural assessment has determined that the additional load can be accommodated.
- 3.04 The area of alterations to the building, which is the subject of this application, was reconstructed in its entirety in the early 1960's.
- 3.05 The proposals have been developed in consultation with Price and Myers, Structural Engineers. Refer to the structural report in Appendix B- *"It is understood that the college would like to install PV panels upon the roof. Such an installation is viable provided that no additional load is placed upon the RAAC panels either during installation or afterwards. Therefore installation should be from a scaffold deck which spans over the roof. PV panels should be supported on a sub-frame which spans onto beam lines."* The support detail subsequently designed by Price and Myers accommodates the PV fixings now proposed.
- 3.06 The photographic schedule within Appendix C and The Visual Impact Assessment in Appendix D details the roof and includes images taken of the existing roof from the following key viewing points:
- St Marys Church
Carfax Tower
The Westgate Shopping centre

4.00 **LAYOUT AND SCALE**

- 4.01 The proposed layout and scale of the alterations is detailed on the drawings submitted with the application. The whole of the proposed installation is located on the roof structure formed in the 1960's and presents a reversible solution.

5.00 **ACCESS**

- 5.01 A mansafe roof access system has been provided under recent re-roofing works to maintain the roof coverings. The same system will be utilised for the maintenance of the Photo Voltaic installation.

6.00 **CONCLUSION**

- 6.01 The West range of Tom Quadrangle is a significant group of buildings. The building is Grade I listed.
- 6.02 The building has been altered significantly in the past with the replacement of the second floor, roof structure and fabric in the area of the proposed works, taking place in the 1960's. The array is located behind the parapet wall.

- 6.03 Christ Church have identified the need to maximise energy efficiency and reduce their carbon footprint. It is submitted that the proposed installation has minimal impact on the historic structure and fabric of the Grade I listed building and the views across the historic skyline of Oxford.
- 6.04 The proposed scheme meets the long term needs of Christ Church, whilst recognising the importance and historic significance of the building, with minimal intervention.