

Solar Panel Installation

Role: To install photovoltaic panels at Tiverton Museum of Mid Devon Life
Location: Tiverton Museum of Mid Devon Life, Devon
Status: Contractor
Reporting to: Pippa Griffith, Museum Director
Period of contract: Fixed term, ideally to be completed before February 2025 (dependent upon external factors such as planning permission and prior roof replacement work – see below for details).

Introduction

This brief sets out the requirements for installing photovoltaic panels on site at Tiverton Museum of Mid Devon Life. The aim is to be as self-sufficient as possible with our electricity generation to reduce reliance upon the national grid.

The site uses approx. 27,000 kwh electricity per year. However, as part of this project we have installed some measures to reduce our electricity consumption (which will have taken place and usage levels will be reviewed before this installation contract is awarded).

1. Background

1.1 Tiverton Museum is a vibrant, award-winning and much-loved museum that provides extensive displays on the history of Mid Devon; a lively events programme, including temporary exhibitions, guided walks, talks, holiday craft activities and lots more. The museum contributes to the local economy as a key visitor attraction and works closely with its local community. We offer a range of activities for schools and families and are an important resource in an area where poverty and geographical factors increase the risk of isolation. The museum makes it possible for teachers and parents to access good quality learning opportunities outside the classroom. We also provide a successful reminiscence service for older people in care and residential homes, and a monthly memory group based at the museum. The museum runs the town's Tourist Information Service and is engaged with plans to develop tourism within Mid Devon through a new venture Visit Mid Devon.

1.2 Tiverton Museum has secured a National Lottery Heritage Fund grant, for a project 'Strengthening our foundations; building our future'. The overall project includes essential development work to strengthen the organisation's resilience and determine the longer-term redevelopment plans through several strands of work, including:

- To make capital changes to our building to reduce our electricity consumption (with positive outcomes both for environmental sustainability and financial resilience). This work has included completing the upgrading our lighting to LEDs, and installation of motion sensors in all gallery areas so the lights only come on as needed.
- This contract of installing photovoltaic panels to reduce reliance upon the national grid.

This project has two phases of impact. The first is to make essential, immediate changes to the museum by increasing volunteer capacity and significantly improve our environmental sustainability.

The second will contribute to medium term plans for a capital redevelopment project. A capital redevelopment will allow the museum to make the most of its large site to improve the visitor experience, provide space for events and activities and maximise commercial income whilst improving the building and collections care conditions. A feasibility study for this was carried out in 2018, followed by a revised concept plan in 2021. The re-development is an exciting project that will enhance our galleries and create new areas for community events, activities and learning. We see the new Tiverton Museum as playing a major role in the regeneration of the town, enabling people to engage with Tiverton and Mid Devon's heritage through new interpretation, displays and programming that focuses on community life, past, present and future.

2 Objective

An experienced photovoltaic installer is required to provide a proposal for the installation of photovoltaic panels at Tiverton Museum of Mid Devon Life. The museum wishes to be as self-sufficient as possible with our electricity generation to reduce reliance upon the national grid, and be environmentally sustainable. The proposal should take the following into account:

- Electricity consumption: The site uses approx. 27,000 kwh electricity per year. However, as part of this project we will be installing some measures to reduce our electricity consumption (which will have taken place and usage levels will be reviewed before this installation contract is awarded).
- Roof size: it is anticipated that the panels will be installed upon the roof of the museum's Alford gallery. This is a late 20th century detached single-storey range (232 sq m). Part of this contract will be to undertake a structural survey of the roof prior to installation. The contractor must ensure that the roof can safely bear the weight of the panels.
- Due to the main museum building being Grade II listed and within a conservation zone, we have been advised by the Conservation Officer to have panels with black frames (rather than silver). The cabling into the listed building (where the electricity supply enters the building) needs to be approx. 20cm above the ground within armoured cabling and with limited entry holes through the walls.
- Wiring will have to go through some public gallery spaces, so all planned installation must be as neat and unobtrusive as possible. The work in gallery spaces must be undertaken with minimal disruption to public access, and must be undertaken with care especially around the museum's collections.
- To provide a battery to store energy for onsite consumption.
- Due to the funding for this coming from the National Lottery Heritage Fund, we will need to follow all of their guidance for creation of renewable energy.
- The tender must include all associated costs (such as structural surveys, scaffolding, VAT etc).
- The proposal document should outline annual usable capacity of electricity energy storage device, expected PV self-consumption with monthly breakdowns. This document (and any final reports) should include NLHF logos / stamps as laid out in the document 'Acknowledging Your Grant'.

It would be very helpful if you could provide an idea of your lead in time / availability for installing late 2024 / early 2025. The museum is working on a timetable based on replacing the roof before the panels are installed (like for like, or a similar longer lasting material). This

summer we are working on obtaining planning and listed building consent to replace the roof and install the panels by end October (at the latest).

3. Selection Criteria/ Consultant Skills

The contractor should be experienced with a proven track record in installing photovoltaic panels and batteries. If subcontractors are going to be used their experience and knowledge must be included in the tender document.

We require demonstrable understanding and experience in:

- Installation of photovoltaic panels for business use.
- Ideally experience of working on historic buildings.
- Setting and delivering realistic programme of works on time and to budget.
- For the work to be certified under the Microgeneration Certification Scheme.

4. Timetable

- Closing date for tenders is 06/09/2024
- The candidates will be shortlisted by the Director and the Trustees.
- Appointment will be made by 27/09/2024
- The work should take place once the roof has been replaced, approx. between November 2024 and February 2025.

5. Costings and payment schedule

The tender costs should include travel and all other costs associated with the work.

Payment schedule to be agreed in advance.

6. Proposal

Your proposal to undertake this project should include:

- Credentials for the company and all those who will have input into the work.
- Examples of similar projects undertaken.
- A methodology of how you propose to meet the requirements of the brief.
- A programme indicating how you would deliver the project and key dates for tasks.
- A costing breakdown.
- Details of two referees for whom you have done similar work.

Please email applications to Pippa Griffith, Director at director@tivertonmuseum.org.uk. For an informal chat please contact Pippa on 01884 256295.