

Installation of photo-voltaic solar panel system at the Morgan Centre, Crowthorne



Invitation to tender October 2024

Deadline for submissions Monday 9th December

1.0 Background

1.1 Morgan Centre

Built in the 1970s, the Morgan Centre has a flat, unshaded roof. The centre is in constant use by hall hirers, impromptu visits from members of the public and office staff. The adjacent car park is CPC owned and parking/storage areas are easy to reserve for contractors.



Morgan Centre roof from Google Earth [///wire.island.zeal](http://wire.island.zeal)

1.2 Electricity usage

For the last two financial years the Morgan Centre has been billed for approximately 10,000 units of electricity per annum. Please include payback time information using this figure when submitting your design and bid.

1.3 Consultation

CPC ran an online questionnaire in autumn 2021 and asked the public if the council should install solar panels on the council buildings. Seventy six percent of respondents agreed that they should be installed compared to 11 percent who disagreed.

Two local solar engineers have been consulted on the system specification. Their work specification is not exhaustive but stipulates the preferred requirements after extensive site visits. Bidders are expected to visit the building to both understand its use and take their own measurements.

1.4 Site visits

Bidders are encouraged to visit the site before submitting a tender. Contact projects@crowthorne-pc.gov.uk or call 01344 771 251 to arrange this.

2.0 The project

2.1 Project cost

This tender serves as a quotation for council to assess.

2.2 Project vision

CPC would like to install PV panels on the Morgan Centre to:

- Reduce the council's own emissions.
- Reduce electricity bills to prevent hirers' costs from increasing.
- Support the government's move to green energy and the commitment to reach NetZero by 2050.

Another tender is currently available for a new roof for the Morgan Centre. CPC would like to remove the existing failing felt and flashings, install insulation, prepare roof structure to hold PV panels for years to come and then install a new roofing layer.

These tenders are linked with the expectation that contractors will liaise with each other with regards to timings so the scaffolding can be used for both projects and that the load calculations are complete. Companies are welcome to bid for both tenders if able to deliver new roof, and solar PV system.

2.3 Timeline

Contract published on Contracts Finder government portal	Tuesday 8 th October
Deadline for submissions (see Format of submissions 6.2)	noon, Monday 9 th December
Tender evaluation initiated	Tuesday 10 th December
Contract awarded conditional of satisfactory RAMS	Tuesday 14 th January 2025

It is anticipated that the roofing contractors will start work at the end of January, in order to complete by 21st March 2025. They will liaise with the successful bidder for the solar PV contract in order to coordinate a start time for solar installation.

2.4 Planning permission

CPC will send a pre-application to Bracknell Forest Council. The successful bidder will be required to work with the projects officer if needed.

2.5 Pricing and payment schedule

All pricing should be listed exclusive of VAT and valid for 6 months from the date of submission.

Payment will be made upon completion and the RPII report, less 5% snagging. Once the snagging is complete and CPC is satisfied that there are no ongoing issues, the last 5% will be settled.

For the full CPC Financial Regulations, see Appendix 1.

2.6 Inspection

The system must be MCS certificated with appropriate NICEIC certification arranged at the expense of the contractor.

3.0 Specification

The work specification is not exhaustive, but stipulates the preferred requirements. Bidders are expected to visit the buildings in order to understand its use and take their own measurements.

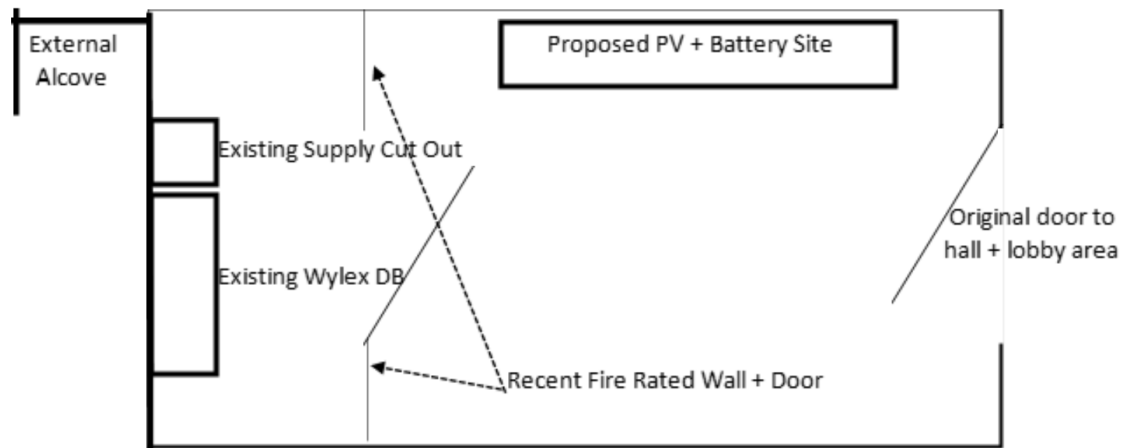
CPC are not obliged to accept the lowest tender but are bound to assess 'best value'. Bidders are welcome to bid for one, or both parts of the project.

Specification	Notes
Electrical Distribution	
<p>There is currently a main distribution board in the electrical intake cupboard located in the ground floor entrance lobby area. This distribution board is a Wylex Three Phase 12 TP way board with a 125amp 3 pole incoming switch.</p> <p>The current electrical supply is single phase, the Wylex board has been fitted with a single phase (SP+N) conversion to reflect the incoming supply.</p> <p>Whilst the existing incoming supply is 100amp single phase, there is a three phase (TP+N) incoming supply with only one cut out fuse being utilised and a single phase consumption meter fitted.</p>	
Proposed electrical supply	
<p>It is proposed that the client contact the energy supplier to negotiate a TP+N supply to the building. We don't not believe this will be complicated as the existing cabling and supply connection point appears to be a TP+N unit.</p> <p>Once the TP+N supply is agreed, there will need to be a co-ordinated removal of the SP+N conversion to the main distribution board at the same time as the supply authority attend to facilitate the change to a TP+N. All circuits need to be checked in advance for suitability and safety with regard to changing the building supply to TP+N.</p> <p>The electrical installation needs to have a current electrical safety certificate and any alterations will need to be fully tested and issued with electrical certification meeting 18th Edition BS 7671.</p>	
Solar PV and Storage System Installation	
<p>There is sufficient capacity within the existing Wylex distribution board to provide a 32amp TP+N supply to the proposed PV + Battery System. It is proposed to utilise the area within the electrical cupboard to install the Solar inverter and battery units. See Figure I, below table.</p> <p>This area is currently used for storage, which will not be permitted if new usage proposals are adopted. The area has also been separated from the actual electrical intake by a recently constructed fire rated door and wall, we believe the purpose was to fire rate the electrical area as well as provide additional storage. This item needs to be re-addressed as the whole cupboard area will probably revert back to its original "electrical only" use and, as such, additional fire barrier work may be required to the original separating door and wall.</p> <p>It is envisaged that a 10mm, 4 core PVC SWA cable is installed from the Wylex distribution board to a new 4 way, TP+N distribution board located on the wall backing onto the main hall. This new board shall house the appropriate circuit</p>	

<p>protection to the proposed equipment and shall include a suitable surge protective device.</p> <p>Appropriate metal containment can be utilised to connect the new TP+N board to the various elements of PV and Storage System.</p> <p>There will be associated electrical works related to the installation of equipment in the electrical cupboard. There are currently a number of electrical items installed on the wall identified as "Proposed PV + Battery Site", these electrical items will need to be moved to allow the proposed works. We would recommend a provisional sum of £600 is allowed to investigate and relocate these items, they can stay within cupboard providing as their positioning allows new equipment installation.</p>	
DC Distribution	
<p>There is currently an external cable tray, carrying AC cabling, which exits the electrical cupboard out into an alcove by the front door. It is envisaged that metallic containment, probably cable tray, can be installed directly opposite the existing cable tray to carry the DC cables exiting the electrical cupboard, running straight up the wall and over the roof parapet.</p> <p>It is proposed to install a 100mm cable tray on the roof to connect the various areas of solar panels. This tray can't be fixed to the roof but should be mounted onto Unistrut placed onto proprietary lead-free flashing to offer some protection to the roof membrane.</p> <p>We recommend a suitable externally rated flexible conduit is used to contain DC cables passing between the PV modules.</p>	
Solar PV Array	
<p>All items specified are relevant at the time of design and assumed to be available, all items specified must be checked for availability prior to the commencement of work.</p> <p>The array size will be +17kWp which will consist of approximately forty photovoltaic modules placed on all parts of the flat roof while avoiding shade wherever possible. The modules will be placed onto Renusol Consol+ units and orientated due south.</p> <p>Client will determine suitability of these units in relation to the roof membrane, if required a suitable material may be placed underneath the consol+ units to offer additional protection to the roof membrane.</p>	
Solar Inverter	
<p>The 20kW inverter will be a hybrid unit capable of DC input from the solar array and DC charging +13kWh of battery capacity mounted, in the electrical cupboard as previously described.</p>	
Battery Storage	
<p>Battery storage will be DC coupled to the proposed Solar PV Inverter as listed above. Batteries with +13kWh battery storage system capable of charging and discharge at a rate of 5kw.</p>	
User display unit	

CPC will be proud of the solar system in place. It will be publicised throughout the village and feature in Great Big Green Week 2025 as we promote the use of solar energy. Ideally, we would like a tamper-proof display unit illustrating harvested energy and use on display in the hall or hallway so visitors can see.	
Electrical Equipment and Cabling	
All electrical equipment used must meet with appropriate British Standards and be installed in accordance with manufacturers recommendations. Cabling should be installed in accordance with BS7671 and must also meet the appropriate British Standards.	
System Documentation and Registration	
This system falls under the ENA Engineering Recommendations G99 and G100 and should be designed in accordance with the appropriate sections of this document. DNO authorisation will be required before the commencement of this project and the DNO will require notification with appropriate documentation once the project is complete. The system must be MCS certificated with appropriate NICEIC certification issued for the electrical fixed wiring associated with this installation.	
Site Access and Safety	
<p>There is appropriate parking approximately 15m south of the building.</p> <p>Where necessary, access to the internal work area will be marked with appropriate barriers and signage to protect staff and members of the public.</p> <p>All works must be preceded by an appropriate Method Statement and Risk Assessment which will be prepared with due diligence and must include a site visit.</p> <p>Liaise with CPC to ensure all access and use of the site is safe and secure.</p>	
Timings	
The Morgan Centre is booked, often in hourly slots, throughout the week. The successful bidder will liaise with CPC staff to receive a copy of the hall bookings which will indicate when the hall and front door will be busy. Ideally, noisy work such as drilling can be worked around events such as a weekly baby or yoga group.	
Liaison with other contractors	
<p>The successful bidder will liaise directly with the contractor managing the roof renovations to:</p> <ul style="list-style-type: none"> • Ensure scaffolding is erected to suits their needs. • Assess roof and load calculations while the roof is dismantled/roof structure visible. • Agree on timings for solar project start date. • Understand qualities of the roof membrane to house the mounting units to determine if an additional layer/matting is required beneath them to offer additional protection to the roof membrane. • Inform on completion date so scaffolding can be removed. 	

Figure I – Schematic diagram of Morgan Centre cupboard – not to scale



3.1 Equipment maintenance

Submissions must include a schedule for expected annual maintenance costs for 25 years, laid out as follows:

	Maintenance costs					
Item	Years 1-5	Years 6-10	Years 11-15	Years 16-20	Years 21-25	25 year total

3.2 Equipment warranty

It is anticipated that solar panels will have a power warranty of 25 years and a product warranty of 15 years. Please confirm warranty period for solar panels and other equipment such as inverter and battery. Note that CPC require an insurance backed guarantee for labour.

4.0 Work considerations

4.1 Site works

Confirmation of working hours, storage materials, access, location of skips, final programme of works and Risk Assessment and Method Statements (RAMS) will be agreed with CPC before work starts.

Materials and machinery should not be stored beneath tree canopies, again to minimise root compaction.

During installation, the contractor should secure the work area for the build, ensuring that the public cannot gain entry to the construction site.

The contractor will be held responsible and liable for any damage caused by, or to, machinery and materials left on site, and any vandalism caused by, or to, machinery and materials left on site.

The contractor will be held responsible for, and must make good any damage caused to existing buildings, roads, paths, grassed areas, car parks, drives, fences, drains, sewers, service mains, landscaping etc.

Before the project's completion any area that has been damaged during the installation must be made good and returned to new, or as a minimum to the original condition, at the contractor's expense.

The contractor must protect the whole CPC estate against unauthorised persons, vehicles and encampments by ensuring the access points are locked when not in use. The contractor shall bear the costs incurred in the removal of unauthorised encampments due to the contractor's negligence.

4.2 Removal of existing items and waste

Any works undertaken by the contractor, resulting in waste will need removing from site, and the costs to form part of this tender.

All waste should be stored safely while on site and then removed from site by the contractor. Please supply a copy of Waste Carrier Licence.

4.3 Use of public buildings

The successful company will need to work with CPC to ensure that the hirers of the buildings are aware of any disruption throughout installation.

4.4 Liaison with other contractors

As listed in the works specification table in section 3.0.

5.0 Making the most of your bid

5.1 Scoring and evaluation

Tender submissions will be assessed on whether they meet the following criteria – MET or NOT MET. Submissions which fail to meet these criteria will be rejected.

Criteria	
Satisfactory references wrt installation	MET/NOT MET
Evidence of insurance cover (Public, Employer's, Professional)	MET/NOT MET
Insurance backed guarantee for works	MET/NOT MET
Assurances to deliver by 2 nd May 2025	MET/NOT MET

The following criteria will be scored on a scale of 0-5, and each weighted as shown.

Criteria	Weighting	Potential score
Value for money <ul style="list-style-type: none"> Total project costs Projected maintenance costs (see 3.1) Warranties and guarantees (see 3.2) 	1	5
Ability to work on site around hall hirers and H and S guidelines <ul style="list-style-type: none"> Member of Renewable Energy Consumer Code (RECC) 	1	5
Adherence to work specification (see 3.0)	1	5
Social value <ul style="list-style-type: none"> Environmental statement Equality statement Any other social value factors Assurances to use local subcontractors 	1	5
Maximum possible score		20

Where 0 score = No response, 1 = Significantly below expectations, 2 = Below expectations, 3 = Meets expectations, 4 = Above expectations and 5 = Significantly above expectations

5.2 Format of submission

The tenders must be submitted in line with provisions outlined in section 11 of the CPC Financial Regulations, see Appendix 1.

In short, the sealed tenders must be addressed to the CPC clerk, Melanie Saville, until the prescribed date for opening tenders (10am, Friday).

Please make sure your delivered submission includes:	/ or x
A developed scheme with diagrams, along with costs for individual components, scaffolding and installation, including proposed installation dates.	
State total cost and include payback time information using energy usage in Section 1.2	
Evidence to address the criteria listed in 6.1 Scoring and Evaluation Two satisfactory references wrt installation from the last 3 years Two satisfactory references wrt maintenance from the last 3 years	
A table specifying equipment maintenance costs.	
Individual equipment warranty details.	
5 year insurance backed guarantee for works	
Recent set of the bidding company's audited accounts.	
Details of any enforcement action under the Health and Safety legislation.	
Waste carrier licence	
Membership details of Renewable Energy Consumer Code (RECC) or similar	
Health and safety policy statement	
Equality policy statement	
Environmental policy statement	
Evidence of Public liability insurance (minimum £10 million)	
Evidence of Employers' liability insurance (minimum £5 million)	
Evidence of Professional indemnity insurance (minimum £5 million)	

Bidders must ensure they fully understand this document and the work requirement and specification. If you have any queries, please ask - projects@crowthorne-pc.org.uk or 01344 771 251.

Submissions should be marked 'Solar Panel installation tender – CONFIDENTIAL' and posted to The Clerk, Crowthorne Parish Council, Morgan Centre, Wellington Roads, Crowthorne, RG 45 7LD to arrive by noon, Monday 9th December.

Appendix 1 – Relevant provisions from Crowthorne Parish Council’s Financial Regulations – adopted June 2024

5. Procurement

- 5.1 Members and officers are responsible for obtaining value for money at all times. Any officer procuring goods, services or works should ensure, as far as practicable, that the best available terms are obtained, usually by obtaining prices from several suppliers.
- 5.2 The RFO should verify the lawful nature of any proposed purchase before it is made.
- 5.3 Every contract shall comply with the council’s Standing Orders and these Financial Regulations and no exceptions shall be made, except in an emergency.
- 5.4 For a contract for the supply of goods, services or works where the estimated value will exceed the thresholds set by Parliament, the full requirements of The Public Contracts Regulations 2015 or any superseding legislation (“the Legislation”), must be followed in respect of the tendering, award and notification of that contract.
- 5.5 Where the estimated value is below the Government threshold, the council shall (with the exception of items listed in paragraph 6.12) obtain prices as follows:
- 5.6 For contracts estimated to exceed £30,000 including VAT, the Clerk shall either seek formal tenders from at least three suppliers or advertise an open invitation for tenders in compliance with any relevant provisions of the Legislation. Tenders shall be invited in accordance with Appendix 1.
- 5.7 For contracts estimated to be over £30,000 including VAT, the council must comply with any requirements of the Legislation¹ regarding the advertising of contract opportunities and the publication of notices about the award of contracts.
- 5.8 For contracts greater than £5,000 excluding VAT the Clerk or Finance Officer shall seek at least 3 fixed-price quotes;
- 5.9 Where the value is between £500 and £5,000 excluding VAT, the Clerk or Finance Officer shall try to obtain 3 estimates which might include evidence of online prices, or recent prices from regular suppliers, or use a regular supplier/contractor who has previously been engaged by Council.
- 5.10 For smaller purchases, the Clerk or Finance Officer shall try to achieve value for money.
- 5.11 Contracts must not be split into smaller lots to avoid compliance with these rules.
- 5.12 Every contract shall comply with these financial regulations, and no exceptions shall be made otherwise than in an emergency provided that this regulation need not apply to contracts which relate to items (i) to (vi) below, in which case the requirement to obtain competitive prices in these regulations need not apply, and the Clerk or Finance Officer are duly authorised to determine and approve the work/contract and report to Council at the next meeting:

¹ The Regulations require councils to use the Contracts Finder website if they advertise contract opportunities and also to publicise the award of contracts over £30,000 including VAT, regardless of whether they were advertised.

- i. specialist services, such as legal or other suitably qualified professionals;
 - ii. repairs to, or parts for, existing machinery or equipment;
 - iii. works, goods or services that constitute an extension of an existing contract;
 - iv. goods or services that are only available from one supplier or are sold at a fixed price.
 - v. for the supply of gas, electricity, water, sewerage, broadband and telephone services and the like;
 - vi. for additional audit work of the external/internal auditor up to an estimated value of £500 (in excess of this sum the Clerk and RFO shall act after consultation with the Chairman and Vice Chairman of the council and report to council at its next meeting)
- 5.13 When applications are made to waive this financial regulation to enable a price to be negotiated without competition, the reason should be set out in a recommendation to the council. Avoidance of competition is not a valid reason.
- 5.14 The council shall not be obliged to accept the lowest or any tender, quote or estimate.
- 5.15 Individual purchases within an agreed budget for that type of expenditure may be authorised by:
- The Clerk under delegated authority, on revenue items up to the amount included for that class of expenditure in the approved budget.
 - the Clerk, under delegated authority, for any items below £2500 excluding VAT.
 - the Clerk, in consultation with the Chair of the Council or Vice Chair of Council in the Chair's absence, for any items between £2500 and £5000 excluding VAT.
 - In respect of grants the Administration Working Group or a dedicated sub group shall review applications, recommend expenditure/awards within any limits set by council and ensure compliance with the Council's Grant Awarding Policy and statutory powers. The Administration Working Group's recommendations must be taken to council for approval/resolution and must not exceed the budget sum approved for grant payments. Subject to these provisions the Clerk is authorised to pay any grants duly approved. Occasionally unspent grant funding may remain and ad hoc approval for small community grants up to £250 may be authorised by the Clerk in consort with either the Chair or Vice Chair, any such approval shall be reported to Council at its next meeting.
 - the council for all items over £5,000;
- 5.16 Such authorisation must be supported by a purchase order, minute (in the case of council or committee decisions), or other auditable evidence trail, which in the case delegated powers purchases, emergency or urgent matters could be a signed telephone note or an email.
- 5.17 No individual member, or informal group of members may issue an official order or make any contract on behalf of the council.
- 5.17.1 No expenditure may be authorised that will exceed the budget for that type of expenditure other than by resolution of the council, or where the budget and earmarked reserve, or budget and vired budget cover the expenditure, except in an emergency.

5.18 In cases of serious risk to the delivery of council services or to public safety/health and safety on council premises, the Clerk, or Finance Officer in the Clerk's absence, may authorise expenditure of up to £10,000 excluding VAT on repair, replacement or other work that in their judgement is necessary, whether or not there is any budget for such expenditure. The Clerk or Finance Officer shall report such action to the Chair, or Vice Chair in the Chair's absence, as soon as possible, and to the council as soon as practicable thereafter.

5.19 No expenditure shall be authorised, no contract entered into or tender accepted in relation to any major project, unless the officer, committee or council with authority to authorise the expenditure is satisfied that the necessary funds are available and that where a loan is required, Government borrowing approval has been obtained first.

5.20 A purchase order, letter or email shall be issued for all work, goods and services unless a formal contract is to be prepared or an official order would be inappropriate due to de minimis principles or petty cash type purchases. Copies of orders shall be retained, along with evidence of receipt of goods.

5.21 Any ordering system can be misused and access to them shall be controlled by the RFO and Finance Officer.

Appendix 1 of Crowthorne Parish Council's Financial Regulations adopted June 2024 - Tender process

- 1) Any invitation to tender shall state the general nature of the intended contract and the Clerk shall obtain the necessary technical assistance to prepare a specification in appropriate cases.
- 2) The invitation shall in addition state that tenders must be addressed to the Clerk in the ordinary course of post, unless an electronic tendering process has been agreed by the council. Council should be aware that for large, technical projects, it may be best to require tender by post in order that the person or organisation tendering provides hard copies of all tender document, plans and associated papers.
- 3) Where a postal process is used, each tendering firm shall seal and clearly mark their envelope 'Tender for []'. The tender is to remain sealed until the prescribed date for opening tenders for that contract. All sealed tenders shall be opened at the same time on the prescribed date by the Clerk in the presence of at least one member of council.
- 4) Where an electronic tendering process is used, the council shall use the Clerk's email address and emails containing a tender must be headed 'Tender for []' to ensure that nobody inadvertently opens and accesses any tender before the expiry of the deadline for submission.
- 5) Any invitation to tender issued under this regulation shall be subject to the relevant standing order of Council and shall refer to the terms of the Bribery Act 2010.
- 6) Where the council, or duly delegated committee, does not accept any tender, quote or estimate, the work is not allocated and the council requires further pricing, no person shall

be permitted to submit a later tender, estimate or quote who was present when the original decision-making process was being undertaken.

- 7) Where the tender opportunity has been advertised on the Government's Contract Finder Portal a notice confirming the decision to award or not to award a contract as the case may be shall be uploaded to the portal within the timeframes required for public inspection.