

Fleet Air Arm Museum (Environmental sustainability and environmental resilience of Cobham Hall) - Design & Build (Lots 1 & 2)

Clarifications & Responses Issue 3

Q1- Our product offers a lightweight, high performance solar panel that can directly be attached to metal roofs. Therefore, we can offer to cover the whole roof and address the full energy load requirements, rather than restricted to 30% of the roof. Is this something that could be considered in the ITT or do we need to adhere to the specifications?

The main reason for looking at approx. 30% coverage was due to the load bearing restrictions referred in Annex H1/H2. If your solution would satisfy these concerns, we can look at a different arrangement upon selection. However, we also need to consider the results of the G99 application (not due until 18th Sept 2023) and battery systems aside, consider what capacity could be retained or fed back into the grid – this will also impact any final decision and how we proceed.

For now, we would suggest that you propose a solution for LOT One that satisfies the brief and delivers us approx. 30% coverage and approx. 500 panels. You can undertake your own survey to better understand and refine this rationale. However, like for like submissions will allow the Museum to assess suitability and best value for the LOT and wider roofing works.

Q2- We've noted in your tender you specified ground mount solar array. We can offer solar carports for a similar investment to ground mount arrays. Could this be considered as an alternative proposal?

There is some confusion surrounding LOT Two – we have no car parking area awaiting refurbishment although did previous tender some surfacing works a few years back. Again, we need to stick to the brief and I can explain more about these specifics as part of a site visit. Please let me know if this is something you want to arrange.

Q3 - The building has a consistent appearance to the surroundings and we are keen to ensure any coating is equally consistent from a design perspective, can you confirm the RAL number of the existing roof / skin coating so we can source and match as appropriate?

We are not yet able to provide a RAL number but will attempt to obtain this. In the short term, we can provide an option to take a sample if conducting a site visit.

Q4 - Reference Annex A 4.3, you have specified the roof to be applied with Delcote architectural coating system or similar, why in particular was this added to the specification? Would you consider an alternative?

FAAM has worked with Gleeds to undertake a number of surveys and proposed remedial works across our sites. The proposed Delcote / Seamsil solution is what their survey recommended and is not only a starting point but an appropriate remedy for these works. However, this is indicative and we would consider a proposed solution if it can equally protect the roof in the same way as Delcote, or better. The solution requires an effective long-life remedy to address the problem of corrosion at cut edges and overlap joints on our profiled roof areas. Any alternative coating must also consider the Brody Forbes load bearing calculations (Annex H1/H2).

Q5 - Can you tell me the details of the system you requested, on your G99 application, or a copy of the application?

The G99 application has been made by a support agent and we are unable to provide this information at the current time.

Q6 - Are all the gutters and down pipes you want relining or replacing, fixed to the outside of the building, none of it running internally?

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The gutters and downpipes are all fixed to the outside of the building, there is no internal provision as part of this specification.

Q7 - Is there any full roofing survey or drone footage available for the roof?

Yes, we refer annex A, section 4.2. The Museum has since undertaken its own drone survey to further assess the roof's condition. This can be seen via a digital one drive link. For access – please email Marc Farrance, General Manager – marc.farrance@nmrn.org.uk. You will in turn be emailed a one-drive link.

Q8 - Does the structure have any sort of lightning protection installed?

Cobham Hall has Lightning Protection. The lightning protection system has an overall resistance value to earth of 2.08 ohms. The system is made up of 16 rod style electrodes affixed to the roof via clamp.

Q9 - Does FAAM have any designer drawings, DWG files or similar for parts of the building, including the lighting design in the aero hall?

FAAM has limited drawings in any digital form, with equally limited plans available to us currently. We have found a lighting design plan from the initial install. We hope to make this available as soon as we can scan it. **22nd Aug 2023 Update – the Museum has managed to scan an electrical plan for Cobham Hall which will be emailed around to all tenderers.**

Q10 - As the site is/next to an operational airfield has a glint and glare study to been carried out or considered for the PV installation?

We have made an application for a certificate of lawful development via the local authority and may be asked to complete a glint and glare study as part of this process. As yet, this has not been arranged but has been considered. We would recommend this is costed into your plan in case of any requirement made by the authority as part of issuing the certificate of lawful development.

Q11 - Is the March 2024 deadline a reflection of the funding for this project or is there some flexibility due to the potential for bad weather delaying the roof works? Is this being funded by PSDS?

The project is not related to PSDS funding, although the project needs to be completed prior to March 2024, reference Annex A 9.1 - We aim to complete all works in advance of the 31st March 2024, works should be complete and invoiced prior to this date. Any works plan or Gantt chart should be developed to reflect the deadline and mitigate risk as much as possible in terms of weather.

Q12 - Would you have a height measurement for the internal of the building to eaves and highest point?

An approx. response is as below: -

- Eaves to bottom of the curved edge meeting the vertical – approx. 7.65 metres
- Ridge height – 14.75 metres.

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Q13 - Could you please clarify what you mean by “end panels” in Appendix A – Scope of Requirements, Section 2.1 para b?

End Panels refer the entire north and south fascia's, the powder coated tin work that is flaking and requires remedial work and re-coating.

Q14- Would there be any issue using sub-contractors for parts of the works in Lot 1?

There is no issue working with sub-contractors to complete sections of the project. The key element we need in the tender is to understand who is the overall project lead in terms of planning, delivery and overall CDM responsibility (principal designer and principal contractor – Annex A, 8.1). If your proposal has this detail and rationale over the method statement and approach, we can certainly consider it.

Deadline for Clarification Questions for Response is Friday 1st September 2023,

these are to be sent to tenders@nmrn.org.uk