

BARNSELY METROPOLITAN BOROUGH COUNCIL

This matter is a Key Decision within the Council's definition and has been included in the relevant Forward Plan

Report of the Executive
Director Place

Acquisition of New Cremators

1. Purpose of report

- 1.1 This report is to seek approval to replace the four cremators at Barnsley crematorium.

2. Recommendations

- 2.1 That officers be authorised to procure 4 x new cremators to be installed at Ardsley Crematorium at a total estimated cost of £853,000, phased over a two year period (Two in 2019/20 FY, two in 2020/21), to be funded from specifically earmarked reserves, set aside for the Council's 2020 capital priorities through the Council's Reserves Strategy;
- 2.2 That the scheme be included in the Capital Programme and funding released in accordance with Financial Regulations.

3. Introduction

- 3.1 This project is to replace 4 x cremators at Barnsley Crematorium which are now almost 25 years old and are approaching the end of their economic life. The current cremators require significant investment to keep them operational. The project was approved at Capital Oversight Board on the 23rd October 2018 on the basis of savings to be achieved through replacement rather repair.
- 3.2 The incumbent provider Facultatieve Technologies have assessed the potential remaining lifespan of the existing cremators which should now be balanced out against the cost of maintaining the cremators as they get older.
- 3.3 New cremator refractory has a useful life of around 10 years and therefore it is reasonable to look at expected costs over the next ten year period for the existing cremators. General servicing costs are the same for both the old and new cremators and are not included here. **However the following costs would be incurred over ten years should the existing cremators be retained;**

Future Expected Costs	£M
PLC Replacement	0.140
Gas Control Valves	0.020
Refractory Replacement	0.450
Gas Costs	0.200
Total	0.810

The composition of the above costs are detailed at item 4 below.

- 3.4 The cremators are already operating at the upper limit of their life expectancy and therefore it is anticipated that they will be well beyond any operating design model for a cremator within that 10 year period. After 10 years, replacement cremators would still be required in addition to the £810,000 of upgrades detailed above. Obviously prices of new cremators will have increased in that time and it is estimated that new cremators may be in excess of £1,000,000 at that point.
- 3.5 The installation of new cremators is expected to be around £853,000 in total.
- 3.6 New cremators would future proof our operational capacity for the next 25 years and mitigate the risk of repeated requirements for downtime of the cremators to undertake repair works, which could create delays in cremations, requirements for extended operational hours and staffing at additional cost and reputational damage to the Council.
- 3.7 Crucially, the newer machines have a larger capacity so are able to accommodate larger coffins, which will mitigate the current issue of having to refuse certain requests due to the size of the person being cremated, which currently means certain families are having to travel outside to neighbouring areas.
- 3.8 Current discussions with risk management have highlighted the age and condition of the cremators as a RED risk in the councils risk register. It is also a requirement of the Cremation Act 1902 to keep the crematorium in good working order.

4. Proposal and Justification

- 4.1 The proposal is to procure 4 replacement cremators, in two phases of two for installation in the summer of 2019 and the summer of 2020. It is proposed to procure directly from Facultatieve Technologies. The Executive Director, Core Services, has approved a waiver to allow an exception to the competition requirements of Contract Procedure Rules in this case, in view of the specialist nature of the procurement (Contract Procedure Rule 6.6(b)) and the need to progress the works as a matter of urgency.
- 4.2 The Evans Universal 300/2 Cremator was, in its day a very robustly built cremator with only a very few examples still in daily operation.
- 4.3 Assessing our current cremators, Facultatieve Technologies have considered their potential remaining lifespan which should now be balanced out against the cost of maintaining the cremators as they get older. The cremators could potentially last another 3 to 5 years, but as each year passes, there is more risk that yet more equipment fitted to the cremator is no longer supported by the original equipment manufacturers, meaning there will come a time in the future where a component fails and there is no replacement available and a work round need to be found.
- 4.4 This method of operation has its risks and will become ever more costly if in fact replacement parts can be found. Servicing / equipment upkeep costs attributed to “emergency call outs” and failure of parts can only increase as the reliability of the cremator continues to deteriorate, parts that require replacing are starting to become obsolete, or simply (in the modern world) the replacement parts are

being altered, and now instead of buying the light bulb in the switch gear, you now have to buy all the switch gear – at greater cost.

- 4.5 There are a number of cremator components that are now approaching in excess of twenty years old, this brings into question the availability of new replacement components, and if some of the existing components are still supported by their manufacturer. These are:

Cremator Control System

The cremator control system is PLC based, and utilises a Mitsubishi A1S controller which is now in excess of twenty two years old, this controller is no longer manufactured, or for that matter supported by the manufacturer. Failure of this controller WILL render the cremators inoperable, and should be noted. In the short term consideration should be given to replacing all four off existing cremator control panels with new wall mounted control panels, this would cost in the order of £90,000 for the four control panels.

Cremator Control Field Wiring

The above cost for new control panels does not include for replacement of field wiring from the four cremators to the above control panels, which again is 22 years old and has been affected by heat in its lifecycle. To re wire all the interconnecting field wiring associated with all four cremators may cost in the order of £50,000.

Cremator Burners and Gas Control Valves

The natural gas burners and their gas valve trains as fitted to the cremators are also no longer in manufacture – the burner head itself should not present a problem, but should the safety gas train control valves fail, then they would need to be replaced. Unfortunately due to the existing gas valves no longer being manufactured, a simple repair will not be possible.

Typical cost of this replacement work would be £20,000 in total for all four cremators.

- 4.6 All the above costs should be taken into consideration for the next five years as potential expenditure, which are likely to be required to “keep” the equipment going. Over and above these high repair costs will be significant outage time to effect repairs as the majority of such work will not simply be swapping or replacing like for like parts but modifying the equipment to enable the new replacement spare to fit.
- 4.7 The above costs are quoted over and above the costs of the normal day to day servicing costs and should be considered as extraordinary costs in addition to the usual expenditure.
- 4.8 Relines of refractory (internal brick work) cost an average of £40,000 to £45,000 per year (for 4 cremators) along with other associated smaller age related breakdowns. This will mean that over the next 10 years we will be spending between £400,000 and £450,000. Modern cremator brickwork lasts much longer due to the new kind of block work. Not only is it more thermally efficient, it requires less replacement or repair.

- 4.9 It should also be noted that the new FTIII cremators in burning less fossil fuel will also emit less CO₂, this figure too will be reduced by some 40%, which would be equivalent to reducing the Council's CO₂ (greenhouse gas) annual emission in excess of 100 tonnes (100,000kg) whilst still performing the same number of cremations. This obviously may be very significant to the Authority in reducing its future energy expenditure (£200,000 over 10 years) and reducing its overall greenhouse gas generation, all assisting the Authority to meet environmental requirements identified within the Energy Strategy and linking to corporate indicator CO₂₉ – reduction in the Council's carbon emissions.
- 4.10 The average life of a cremator is 20 to 25 years so we are approaching the top range of the existing cremators working lives.
- 4.11 Crucially, the newer machines are able to deal with larger coffins due to their size which means that residents can be cremated within the borough and not have to travel outside to neighbouring areas.
- 4.12 It is proposed to replace the cremators on a two phased approach to minimise disruption to the public and significant loss of income. However, a lead in time of 6 months is expected due to the timing of the installation to minimise disruption to the public in the busiest periods of cremation and to accommodate the planning and capacity of the manufacturer to order and install.
- 4.13 It is worth noting that Barnsley's population is ageing and the number of residents aged 65+ is projected to reach 58,100 by 2028, a change of 27% from 2016. It is essential that the crematorium is kept up to date to deal with this rising demand.

5. Consideration of alternative approaches

- 5.1 The alternative would be to not replace the cremators which would result in additional maintenance costs over the next 10 years totalling a minimum of £810,000 in addition to any further replacement costs.
- 5.2 The additional risks of this approach would be reputational damage to the Council through delays or refusal of cremations, loss of income through residents being forced to use facilities outside the borough, and potential additional costs of extended operational hours required to compensate for the downtime of one or more cremator.

6. Implications for local people / service users

- 6.1 There will be no disruption to the service offered to the public as the works will be phased so the facility can remain open.

7. Financial implications

- 7.1 Consultations have taken place with representatives of the Service Director – Finance (S151 Officer).
- 7.2 The estimated cost of the replacement cremators totals £0.853M to be split over the 2019/20 and 2020/21 financial years being £0.386M and £0.467M respectively reflecting the phasing of the installation.

- 7.3 Given the expected significant financial implications of continuing with the existing cremators, as outlined within this proposal at paragraphs 3.3 and section 4 respectively, together with the potential loss of income due to downtime, there is no other viable option but to replace the existing cremators.
- 7.4 The new cremators are expected to generate savings in respect of premises, energy and operational costs as a result of them being more efficient as well as maintaining a vital income stream to the Council.
- 7.5 It is proposed to fund this scheme using specifically earmarked reserves for the Council's 2020 capital priorities, as outlined and identified through the Council's Reserves Strategy.
- 7.6 The financial implications to this report are shown in the attached Appendix A.

8. Employee implications

- 8.1 None

9. Legal Implications

- 9.1 None

11. Customer & Digital implications

- 11.1 Works will be phased so the facility will remain open during the installation which will minimise disruption to the public.

12. Communications implications

- 12.1 Communication on the council website and through local funeral directors will take place in advance of the works. As the work is not in public areas it will not affect the visual amenity at the crematorium.

13. Equality and Inclusion Implications

- 13.1 None

14. Consultations

- 14.1 Finance
Risk Management
Procurement

15. Risk management issues

- 15.1 Current discussions with risk management have highlighted the age and condition of the cremators as a RED risk in the councils risk register. It is also a requirement of the Cremation Act 1902 to keep the crematorium in good working order.

16. Glossary

16.1 None

17. List of Appendices

Appendix A – Financial Implications

18. Background papers

If you would like to inspect background papers for this report, please email governance@barnsley.gov.uk so that appropriate arrangements can be made

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