

# CABINET

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# GATEWAY 1 OPTIONS APPRAISAL: MERCURY ABATEMENT AND IMPROVEMENTS TO MEDWAY CREMATORIUM

Portfolio Holder: Councillor Janice Bamber, Customer First and Corporate Services

Report from: Neil Davies, Chief Executive

Author: Paul Edwards, Bereavement and Registration Services Manager

# Summary

To seek approval for the commencement of the procurement process which will make the improvements that are required by legislation and works that are intended to improve the facilities for service users at the Medway Crematorium.

# 1. BUDGET AND POLICY FRAMEWORK

1.1 The proposals in this report are within policy and budgetary frameworks previously agreed by Members, albeit with some modifications to budget requirements. This procurement process has been classified as high risk, therefore, this is a matter for Cabinet.

# 2. RELATED DECISIONS

2.1 Overview and Scrutiny and Cabinet have already considered the matter of mercury abatement and chapel improvements (meetings dates 30 July 2007 and 25 September 2007, respectively refer). Members agreed then that a range of improvements should be undertaken and that Medway adopt the principle of abating mercury emissions to the target level of 50%.

# 3. BACKGROUND/INTRODUCTION

3.1 Statutory Guidance, issued under the Environmental Protection Act 1990, requires that the crematorium must abate mercury emissions or participate in an emissions burden sharing scheme if it is to operate beyond 31 December 2012. The Department of Environment, Food and Rural Affairs (DEFRA) have made it clear that failure by cremation authorities to comply with the guidance will result in statutory provision for abatement being introduced compelling all authorities to comply with the 50% figure or higher.

- 3.2 It should be noted that mercury abatement has been the central theme of DEFRA's project, but the provision of abatement equipment will also have a beneficial effect upon dioxins and other pollutants so does have a wider environmental benefit, both locally and nationally.
- 3.3 Medway Council operates 4 cremators at Medway Crematorium and these carry out approximately 2,700 cremations per annum. The 4 cremators were installed in the early 1990's and by current standards may be considered to be coming to the end of their economic life. The pollution monitoring equipment that is currently available is not fulfilling its proper purpose and requires replacement complete replacement is extremely expensive and it is almost more economic to replace a cremator than upgrade the equipment.
- 3.4 Although it may be feasible to provide abatement equipment that will attach to the existing cremators, there is the potential for non-compatibility issues. There is also a limited market (possibly just one supplier), which could place restrictions on competitive tendering. The current proposal is to replace the 4 cremators with 3 new cremators.
- 3.5 Chapel and car parking space is small by more modern standards and there are now often occasions where the chapels and car parks are full to overflowing. It is essential that these facilities be improved for service users.
- 3.6 The proposal is that new cremators with abatement equipment capable of dealing with up to 100% of Medway's cremations; enlarged parking and one chapel be extended and to be provided by no later than the summer of 2012, and ideally by the summer of 2011. As Medway has two similar chapels, the second chapel would be enlarged once there were sufficient funds available.
- 3.7 The local planning authority has advised informally that the chapel enlargements would be contingent upon enhanced parking provision.
- 3.8 The project is to be delivered through a two stage Design and Build tender process, with an external project manager who will oversee the design, tender and construction processes on behalf of the council. The Option Appraisal report and the draft Tender for Appointment document gives details on the procurement timetables and the form of contract.
- 3.9 It is envisaged that the project will be managed by one principal contractor who will take full responsibility for delivery, thus mitigating risks of failure by having one or more specialist or sub-contractors.
- 3.10 The project will also be subject to a BREEAM (BRE Environmental Assessment Method) Assessment, which will benchmark and measure the sustainable design and construction of the building work.

# 4. BUSINESS CASE

#### 4.1 Business Case Summary

- 4.1.1 In relation to the cremators and abatement equipment there are the following options:
  - (i) Burden share this is in effect a form of 'carbon trading': Medway Council would 'pay' others to abate their share of the national 50% reduction.
  - (ii) Provide abatement equipment to 2 or more of the existing cremators.
  - (iii) Provide new cremators with abatement equipment that would be able to abate at emissions from no less than 50% of all cremations.
- 4.1.2 There is not an option to 'do nothing' as this could result in the council's authorisation to operate as a crematorium being withdrawn and could be detrimental to the local community.
- 4.1.3 There is no legal requirement to extend the chapels but there is a need to provide the best possible facilities for service users. Funeral directors have remarked that their most significant problem with Medway Crematorium currently is chapel size. The service operates, to some extent, in a competitive environment and the relatively new (and much larger) crematorium at Bobbing and the larger cremators and refurbished chapels at Maidstone and Eltham could have an impact upon activity levels long term.
- 4.1.4 The chapels have had little improvement work carried out for at least twenty years and these improvements would help marketability.

# 4.2 Strategic Context

- 4.2.1 The income from the crematorium plays a vital role in supporting the crematorium, the cemeteries and Medway Registration.
- 4.2.2 The provision of excellent and sympathetic services is a key target and enhancing the facilities at the crematorium will play a significant part in achieving that goal. The enlargement of chapels and better car parking will demonstrate that services are customer focused.

# 4.3 Whole Life Costing/Budgets

- 4.3.1 The project is being funded from a combination of prudential borrowing and from the crematorium reserves, funded from fees and charges, that have been built up over a number of years specifically for dealing with environmental protection works. The costs of prudential borrowing will also be met from fees and charges levied by Bereavement Services.
- 4.3.2 Apart from a sum equal to7.5% of the estimated costs of the works that has been included for contingencies/risk there in no inclusion in the current costings for unforeseen works. Architects and the project management team will be expected to investigate the potential for unforeseen works as part of design and build brief.

- 4.3.3 The Federation of Cremation and Burial Authorities have been recommending for a number of years that its members include a financial levy in its cremation fee and Medway has been following that recommendation.
- 4.3.4 There are some unknowns around the project at this stage and these centre around the costs of any building work that may be associated with the installation of mercury abatement equipment and new cremators. This is partly due to the relatively small space at the crematorium into which the newer, larger equipment must be fitted. The small number of equipment manufacturers in the UK are generally not able to undertake this type of civil building works.
- 4.3.5 Future operational costs are currently unknown, but comparisons are to be made with other crematoria, and expected revenue costs will be a factor taken into account as part of the tender evaluations.
- 4.3.6 There is an opportunity to implement heat recovery systems that would help reduce long term heating costs.

#### 4.4 Risk Management

4.4.1 A risk matrix is given in the table below.

Risk	Probability (P). Score 1 - 4	Impact (I). Score 1 - 4	Overall Score. P x I	Action to avoid or mitigate risk				
Commissioning and implementation stage								
Planning consents refused or subject to conditions (chapel and car parking)	1	4	4	Meetings and consultations with planning authority				
Loss of income through closure (including payments to third parties should equipment failures occur)	4	3	12	Make arrangements with other crematoria and consult with local funeral directors; make arrangements for carry over. Factor in the potential for loss of income into business plan and/or increase fees to compensate (recognise that income for 2009 - 2010 was enhanced due to other crematoria closure. Worst case situation could be the failure of equipment during periods of operation and costs paid for the transport of bodies etc.				
Unforeseen works including inadequate power supplies, electrical installations etc.	3	4	12	Good quality survey and inspection: pre commencement surveys. Design and build contract Arrangements with other providers. Contingency/risk allowance in feasibility study is 7.5%. Full measured survey.				
Contractors fail to deliver	1	4	4	Damages; choice of contractor and references. The procurement documentation can reduce the risk of an adverse impact; by ensuring the contractor is bound contractually. The contract management structured to ensure re compliance.				

Equipment size requires significant civil building works.	2	4	8	Fall back position would include lower target for mercury abatement and modify outputs including remove chapel extension; and / or additional borrowing or extension of borrowing period. Full measured survey.
Contaminated land,	1	3	6	Subject to costs and extent fall back position would include lower target for mercury abatement and modify outputs including remove chapel extension; and / or additional borrowing or extension of borrowing period.
Increase in maintenance costs (including disposal of hazardous waste etc)	2	2	4	Operating revenue costs to be taken into account when assessing contract tenders. Investigate benefits of entering into long-term maintenance contract which would smooth maintenance costs over 5 – 10 year period. Reflect costs in fees and charges where possible.
Post Commissionir	ng			
Reduction in cremations due to competition from other crematoria (thus affecting income)	2	4	8	Review fees and charges and staffing levels. Reduction in cremations would also reduce revenue expenditure.
Increase in cremations (having reduced the number of cremators from 4 down to 3)	1	4	4	Review staffing levels and work practices.

# 4.5 Market Testing (Lessons Learnt/Bench Marking)

- 4.5.1 There are a limited number of providers who have the technical and professional ability to provide specialist equipment of this nature and not all are based in the UK. There are at least two procurement frameworks currently available for abatement equipment. Tenders will be sought from the widest selection of suppliers as possible.
- 4.5.2 Maidstone Council who undertook similar work in 2009 have been consulted and their experiences have been taken into consideration. The experiences of other crematoria will also be considered.

# 4.6 Stakeholders Consultation

- 4.6.1 Medway Crematorium is located in the district of Tonbridge and Malling (Bluebell Hill village). Their Environmental Health department has been kept advised of this council's progress in meeting the DEFRA targets and are aware of this council's current proposals. Their planning officers have also been approached informally and they have not raised any significant barriers to the project.
- 4.6.2 A small survey of local funeral directors demonstrates that 86% think that the chapel size was average to very poor.
- 4.6.3 Members have been advised of this project at meetings of Overview and Scrutiny and Cabinet as set out previously in the report.

# 4.7 Other Issues

- 4.7.1 The new plant will have a greater reliance upon ICT. The hardware and software will be provided and maintained by the successful cremator manufacturer. Any software will be bespoke to the manufacturer's cremators, which does mean that there is potential for the council being 'locked' into long-term service and maintenance. This is an issue that will be taken into account during the tender evaluation phase.
- 4.7.2 The works will have to be spread over 2 financial years to mitigate against possible VAT implications for the council.

# 5. PROCUREMENT IMPACT ASSESSMENT (PRIMAS)

- 5.1 A significant element of the project is intended to reduce the environmental impact crematoria have on local and national air quality and the proposed improvements will achieve this target. The project will include for equipment to continuously monitor emissions and any licence that is issued will require annual independent monitoring and assessment by external auditors.
- 5.2 The works will be of a specialist nature and there are no known local providers of such equipment.
- 5.3 There will be some impact locally from the building works including traffic, but this will be restricted to the period of construction. As the crematorium is a sensitive site and it is intended that the grounds, at the very least, will remain open during the entire project, mitigation works will be an important element of the project.
- 5.4 The service has undergone a Diversity Impact Assessment and there is nothing in this project that would affect that assessment.

# 6. PERMISSIONS / CONSENTS

- 6.1 Planning permission will be required for chapel and car parking extensions and this will be obtained prior to commencement. Informal discussions have already taken place and nothing has been raised that would materially jeopardise completion of the project.
- 6.2 The mercury abatement work will require approval from the local Environmental Health Department, as they issue the legal authorisation to operate as a crematorium. They have been kept informed of progress being made for a number of years as required by DEFRA (AQ24 [05] refers).

# 7. OPTIONS APPRAISAL

# 7.1 Success Criteria/Key Drivers/Indicators

7.1.1 The minimum (government) target is the completion of works that would abate 50% of all cremations by 31 December 2012.

- 7.1.2 For Medway the proposed target is to have the equipment operational by November 2011 and achieve an abatement target of better than 92% of all cremations being abated. This target takes into account a minimal level of breakdowns and annual servicing and maintenance. Apart from the risk of a lack of available equipment suppliers in 2012, there should be no risks from the project slipping until November 2012.
- 7.1.3 For service users, it will be important to maintain services for as long as possible during the project and therefore any disruption will be closely monitored.

# 7.2 **Options**

- 7.2.1 There are a number of options available to ensure compliance with DEFRA's requirements:
  - (i) Provide equipment capable of abating to a level of at least 50% of all cremations carried out annually. This is the minimum level.
  - (ii) Provide equipment capable of abating up to 100% of all cremations undertaken annually. This option will secure new cremators and maximum abatement of pollutants, plus assist in future proofing against any further requirements to abate. Providing new cremators would also reduce risk and improve business continuity. It is cheaper to provide a complete package of abatement equipment, cremators and software than it is to provide piecemeal solutions. This is the preferred option.
  - (iii) Provide abatement equipment only. There are very few companies offering this service; this could limit the potential for achieving value for money and there is uncertainty as to the new equipment achieving the desired outputs.
  - (iv) Provide no abatement equipment. This would only be feasible if the council were to burden share (a system similar to carbon sharing schemes) operated through a scheme called CAMEO - the Crematoria Abatement of Emissions Organisation. There is some uncertainty as to exactly how much this might cost (in the long term) and any payment into the scheme might be better used in paying for work at Medway. Crematorium. In addition, because of the relatively large number of cremations at Medway Crematorium, it is possible that Medway could be required to provide equipment to offset the emissions from smaller crematorium elsewhere. However our response to this would need to be decided by members.
- 7.2.2 However there are uncertainties about the CAMEO scheme, including:
  - The legality of the scheme for local authorities;
  - The potential for the scheme to decline or fail;
  - The potential for DEFRA to insist on abatement at a later stage.
- 7.2.3 And, if buying abatement credit from others the perception might be that there is:
  - Expenditure with no environmental benefit or gain;
  - Toxic material being emitted from a council facility.

- 7.2.4 The project is comprised of 3 elements; abatement, chapel improvements and car parking. The appraisal has split these into 5 possible options, which are:
  - 1. Provide Mercury Abatement to a level of 50% of all cremations.
  - 2. Provide Mercury Abatement to a level of 50% of all cremation, plus chapel extension and car park
  - 3. Provide Mercury Abatement capable of dealing will 100% of cremations.
  - 4. Provide Mercury Abatement capable of dealing will 100% of cremations plus chapel extension and car park
  - 5. Do nothing.

# 7.3 **Preferred Option**

- 7.3.1 The preferred option is to replace all existing cremators with new, modern units. This ensures maximum compatibility; provides cremators that have a useful lifespan; ensures that the requirements of the Environmental Protection Act are fully met; reduces operational risk; and reduces costs, at least in the short term.
- 7.3.2 This option is shown in the exempt appendix as Option 4.
- 7.3.3 Enlarging the chapels and car park would provide better facilities for service users and help retain the marketability of Medway Crematorium. The chapels cannot be improved without providing better car parking facilities but car parking could be carried out without the chapel extension. Both items are affordable within the current budget and are considered essential for the business needs of the service.
- 7.3.4 The planning application will take into account the expansion of both chapels, but this procurement project will only consider extending one chapel. The other chapel may be extended at some point in the future, subject to available funding.

# 8. PREPARATION OF THE NEXT STAGE OF PROCUREMENT

# 8.1 EU Implications

- 8.1.1 The legal date for completion is December 2012 and it is proposed that the works be completed one year in advance of that date and so some slippage, if necessary would not adversely affect the procurement timetable. But currently, it is intended to have the works undertaken during the summer of 2011 and this is accommodated within the current timetable. A draft timetable is attached at appendix 1 to the report.
- 8.1.2 The works are subject to EU procurement law. Frameworks are however available from which to select contractors if necessary.

# 8.2 **Resources and Project Management**

8.2.1 This project requires a variety of professions and skills sets and this will be reflected in the appointment of architectural services and a project managers. A sub project to tender for architectural and project management services is currently underway.

# 8.3 Contract Documents

- 8.3.1 The project will be delivered via a design and build tender (D&B), with the design architect providing drawings and specifications to the requirements of the council and a lead consultant will be appraising the tender returns based upon cost and quality criteria which will be set out prior to tendering. The design architect will also advise the D&B contractor on quality assurance of the design. A project manager will also be engaged for the term of the contract who will oversee the design, tender and construction processes on behalf of the council.
- 8.3.2 An in-house board comprised of officers from Design and Surveying, Finance, Planning, Bereavement Services and Procurement will also be engaged during the entire project.
- 8.3.3 The contract will be through the joint contracts tribunal standard building contract (JCT SBC D&B 2005) and architectural services will be to RIBA Stage C.
- 8.3.4 Details on how the tender will be evaluated are set out in the 'Appointment of architectural services tender and contractors will be expected to demonstrate their commitment to good practice; project organisation; personnel; project execution and employ Medway.
- 8.3.5 As the performance of the abatement equipment within statutory limits is the most important outcome for this project and therefore compliance against PG5 (04) will be measured and monitored by completely independent air quality monitoring specialists.
- 8.3.6 Some of the mitigation strategies will be outside the direct scope of the contract and these will be dealt with by Bereavement Services prior to the commencement of any works.

#### 8.4 Contract Management

8.4.1 Contract management and outcomes have been discussed elsewhere in this paper.

#### 9. COMMENTS OF THE PORTFOLIO HOLDER FOR PORTFOLIO HOLDER FOR CUSTOMER FIRST AND CORPORATE SERVICES

- 9.1 This report sets out improvements that are required by legislation and works that are intended to improve the facilities for service users.
- 9.2 It is essential that for the service to implement improvements to its pollution abatement systems, not just to comply with any legal requirements but also to improve air quality for local residents. It is also important to ensure that service users continue to receive the best possible facilities when they visit the crematorium.
- 9.3 The proposals set out in the paper achieve these aspirations.

# 10. PROCUREMENT BOARD – 12 MAY 2010

10.1 The Procurement Board considered this report on 12 May 2010 and supported the recommendations set out in paragraph 12.1 of this report subject to some further information being incorporated within this report regarding the costs of the scheme and contingencies.

# 11. FINANCIAL, PROCUREMENT AND LEGAL COMMENTS

11.1 There is an existing scheme within the capital programme, which was agreed in 2007, and the budget for this is £1,174,000. The current improvement proposals also include new cremators, which were not originally included and the estimated costs at this stage are £1,757,000. The prudential borrowing costs arising from Option 4, shown in the exempt appendix , can be met from existing budgets. There is an element of risk, should there be significant unforeseen works, but there should be some scope within budgets to manage this.

Council approval will be required for an increase of £583,000 to the capital programme and this will be sought via the Capital Budget Monitoring process.

- 11.2 Strategic Procurement will provide Quality Assurance throughout the procurement process including a robust appraisal and review of all procurement documentation at Gateway 2. Strategic Procurement has been engaged from the onset of this project and will continue to be part of the project group throughout the procurement tendering and contract management phases.
- 11.3 As the estimated contract value is below the EU procurement threshold of approximately £3.9m for works, the procurement of the project will primarily be subject to the Council's Contract Rules. Generally speaking these Rules require a competitive tendering process to be undertaken. EC case law now suggests that some form of advertising of requirements should take place in all instances regardless of contract value or any need to place a Notice in the OJEU. Although the estimated value is below the EU procurement threshold, the Council will have the option to either let the contract through the use a framework or to follow a formal competitive tendering process. If a framework is used it will be necessary to comply with any requirements governing its use. It is the responsibility of the Council to decide whether an intended contract award might potentially be of interest to contractors located in other Member States, this decision being based on an evaluation of the individual circumstances of the case, such as the subject-matter of the contract; its estimated value; the specifics of the sector concerned (size and structure of the market, commercial practices, etc) and the geographic location of the place of performance. In any event, the procurement procedures undertaken by the Council will need to be subject to the general requirement to treat all economic operators equally and to act in a non- discriminatory and transparent manner. Such a competitive tender process should also secure a contract providing value for money to the Council.

# 12. **RECOMMENDATION**

12.1 The Cabinet is asked to agree to the commencement of the procurement process for the proposal to provide new cremators, mercury abatement up to the level of

100% and to provide additional car parking space together with larger chapel accommodation (option 4).

#### 13. SUGGESTED REASONS FOR DECISION(S)

- The provision of abatement equipment is required through legislation •
- The current cremators are coming to the end of their economic life. •
- The chapel accommodation is too small for service users.
- There is insufficient car parking space for current demand and additional car parking would be required as a condition of enlarging the chapels.

Report Originating Officer: Chief Finance Officer or deputy: Monitoring Officer or deputy: Head of Procurement or deputy:

Gurpreet Anand 🖀 01634 332450

 Paul Edwards

 <sup>1</sup> 01634 337744

 Peter Bown

 <sup>1</sup> 01634 332311

 Julien Browne

 <sup>1</sup> 01634 332154

#### **Background papers**

The following documents have been relied upon in the preparation of this report:

Description of document	Location	Date
Option Appraisal Report for Medway Crematoriums' mercury and Expansion for Medway Council (Author STACE LLP). Reference 2010/0416.	Medway Crematorium, also available in electronic format.	January 2010
Draft Tender document for the appointment of Architectural Services.	Medway Crematorium, also available in electronic format.	March 2010
The Environmental Permitting (England and Wales) Regulations 2007 & The Environmental Protection (England) (Crematoria Mercury Emissions Burden Sharing Certification) Direction 2010	Electronic	
RAT	Electronic	Dec 2009
Secretary of State's Guidance for Crematoria PG5 (04)	Electronic	2004
Control of Mercury AQ1 (05)	Electronic	2005
Control of Mercury AQ13 (05)	Electronic	2005
Control of Mercury AQ24 (05)	Electronic	2005

Design and Build	Electronic	2005
Bereavement Services in Medway: Cabinet Report	Electronic/Medway Council webpages.	September 2007