

# Chichester District Council

**CABINET**

**7 July 2015**

## **Combined Heat and Power (CHP) plant replacement at Westgate Leisure Centre, Via Ravenna, Chichester**

### **1. Contacts**

#### **Report Author:**

John Bacon, Buildings and Facilities Services Manager

Tel: 01243 534648

E-mail: [jbacon@chichester.gov.uk](mailto:jbacon@chichester.gov.uk)

#### **Cabinet Member:**

Cllr Bruce Finch, Cabinet Member for Support Services

Tel: 01243 351903

E-mail: [bfinch@chichester.gov.uk](mailto:bfinch@chichester.gov.uk)

#### **Recommendation**

- 1.1. That Cabinet considers the tender report (Exempt Appendix) prepared by Pope Consulting Limited and resolves to replace the existing three Combined Heat and Power units with a single unit under a capital purchase (CAPEX) scheme.**
- 1.2. That Cabinet approves Tenderer 2 as the preferred bidder, subject to the application of sensitivity analysis to the bid.**
- 1.3. That Cabinet**
  - (a) releases the balance of the existing budget (amounting to circa £115,000) for the replacement of the three existing gas engines and,**
  - (b) releases an additional £80,000 from capital reserves, to fund the new CHP and associated costs and fees.**

### **2. Background**

- 2.1.** A report was made to Cabinet on 3 September 2013, which followed notification received from the original CHP suppliers that they would be terminating their maintenance contract with the Council from 1 April 2013. The report included proposals to mitigate potential losses due to the failure of the heat generating plant and detailed arrangements to reinstate the CHP plant to full operational status. Cabinet approved the proposals following advice provided by the Council's externally appointed legal and technical experts.
- 2.2.** Council approved the release of £175,000 from capital reserves for the replacement of the three gas engines and, to mitigate against potential

further losses, the funding included the provision of two additional gas boilers to restore power. In addition officers were authorised to seek recovery of the Council's losses from the suppliers.

- 2.3. The works to install the gas boilers were completed in December 2014 and the Centre now has sufficient boiler capacity to operate normally and maintain business continuity.
- 2.4. However, the situation regarding reinstating the CHPs to operational status has taken longer to resolve. Initially tenders inviting specialist contractors to replace the gas engines only (leaving the engine sets in situ) were unsuccessful with no tender returns received. Tenderers were unwilling to place their engines into an existing engine set.
- 2.5. A second invitation to tender, based on a full replacement CHP or CHPs option i.e. not just the engine, or energy purchase options, have been more successful.
- 2.6. The tender report (included in the Exempt Appendix) includes tender submissions from all the contractors. The submissions include options for either a capital purchase (CAPEX) option or energy purchase<sup>1</sup> options, referred to as discounted energy purchase (DEP) schemes. The Exempt Appendix details the analysis of the various tenders.

### **3. Outcomes to be achieved**

- 3.1. The Council is seeking to achieve the successful reinstatement of the CHP plant at Westgate which is fully supported by a two-year maintenance and warranty agreement. The installation will be designed to be "open protocol" which enables other maintenance organisations to undertake the maintenance of the CHPs in the future, if required.
- 3.2. These proposals are also aimed at reinstating energy savings to a level considered best practice for a modern leisure centre (these figures are quantified in the Exempt Appendix).

### **4. Proposal**

- 4.1. The Cabinet is requested to consider the benefits of either the CAPEX or DEP option, both of which provide a major cost benefit over the continued use of gas boiler power only. Cabinet is recommended, in accordance with the advice from our consulting engineers, supported by the officer working group and external legal advice, to opt for the CAPEX option based on a smaller engine set that provides the greater overall financial benefits at the lowest technical and commercial risk. The higher scoring DEP options may potentially fail to deliver the expected energy savings, due to the likelihood of the larger engine sets operating for fewer hours than predicted.

---

<sup>1</sup> This option requires no capital outlay by the Council but it pays a price to the installer for any energy produced as a result of the installation

- 4.2. The lead-in and installation programme from award of contract is a minimum of four months and the works include full removal and disposal of the existing plant plus installation of the new CHP, mechanical and electrical modifications, commissioning and testing by the regional electricity company.

## **5. Alternatives that have been considered**

- 5.1. Members are advised that either a CAPEX or a DEP option will provide energy savings over and above any efficiency saving attributable to the use of gas boilers only at the centre.
- 5.2. The Exempt Appendix provides a comprehensive list of different technical solutions of varying sizes and capability which have all been analysed and the results contained therein.

## **6. Resource and legal implications**

- 6.1. Contract preparation will be undertaken by the Building and Facilities Manager with support from the Legal Practice Manager. Contract administration will be undertaken by the Consulting Engineer who will review and approve the commissioning of this scheme which includes integration with the existing plant. The cost of this appointment is included in the funding request.
- 6.2. In order to complete this work an additional £80,000 is requested from capital reserves. The reason for this additional budget request is detailed in paragraphs 2.4 and 2.5 above.

## **7. Consultation**

- 7.1. External consultation has been undertaken initially with an expert technical Engineer qualified to act as expert witness to the Council and throughout the project an external legal adviser has provided legal advice relating to procedure and the consequences of mitigation of losses.

## **8. Community impact and corporate risks**

- 8.1. There is a specific risk relating to plant failure and failure to deliver energy savings. These risks are deemed minimal given the detailed assessment of the tenders that has been undertaken.
- 8.2. There are also risks associated with either of the options since the cost benefit assessment is impacted by assumptions relating to energy generated, used and dumped. Therefore, a sensitivity analysis of the projected monetary saving from CHP will be conducted as part of the final analysis and before appointment.

- 8.3. Any mechanical installation includes elements of risk. However the evaluation of the tenders has been thorough and interviews have subsequently been held with the principal bidders to ensure that this is a fixed price tender bid and there is absolute clarity as to the Council's requirements.
- 8.4. The project group have been mindful of possible future action regarding recovery of losses and these recommendations are in full accordance with advice given.

## 9. Other Implications

<b>Crime &amp; Disorder:</b>	No
<b>Climate Change:</b> The scheme is expected to reduce carbon dioxide emissions at the Westgate Centre by 2,400 tonnes over twelve years.	Yes
<b>Human Rights and Equality Impact:</b>	No
<b>Safeguarding:</b>	No

## 10. Appendix

- 11.1 Exempt Consultant Engineer's Tender Report.