

# Stockton-on-Tees Borough Council

## Street Lighting PFI Briefing Paper

9 November 2009



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# 1 Introduction and Background

The Department for Transport ("DfT") issued a notice to Authorities on 27 July 2009 stating that Authorities have until 7 December 2009 to submit an Expression of Interest ("EOI") to submit a bid for the 3rd street lighting bidding round. The bidding round is for £440 million of street lighting PFI credits and is anticipated to be allocated between a maximum of eight PFI projects.

The Council requested that Grant Thornton prepare a briefing paper to set out the following three key areas that the Council wanted further information on to help in its decision as to whether to submit an EOI to DfT:

- What the Council wants to achieve in undertaking a street lighting project;
- Provide an indicative cost to the Council over the expected 25 year project term; and
- Provide an explanation of the benefits/disadvantages between PFI and Prudential Borrowing.

This briefing paper addresses the above points utilising Grant Thornton's significant street lighting experience developed through advising one of the major street lighting PFI players in the market.

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This briefing paper is split in to seven sections and should be read in its entirety since individual subsections considered in isolation could be misleading.

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## 2 Expression of Interest

Like other bidding rounds, this one is anticipated to be oversubscribed and therefore an EOI submission that differentiates itself from other Councils is likely to secure the best possible chance of success.

The DfT issued new EOI guidance which gives the Council a clear idea as to what the DfT are expecting to see and the core elements itemised as follows:

- Strategic Case;
- Economic Case;
- Commercial Case;
- Financial Case; and
- Project Management Case.

The details behind these core elements is not included in this briefing paper but we would highlight the following which, based on our conversations with DfT and as discussed with the Council at the meeting on 12 October, are likely to make a more attractive EOI submission:

- Robust Project Management proposals - this carries the highest overall weighting and DfT want a track record of project delivery either from the Council team that will be put forward in the submission or from its advisory team;
- Commitment to deliver - the Council needs to demonstrate that it will commit current and possibly additional financial resources to the project; and
- Develop proposals which will significantly reduce energy/carbon emissions - DfT have put a greater emphasis on this aspect, significantly more so than in previous bidding rounds.

### 3 What the Council wants to achieve

There are significant benefits that are proven to arise following on from a significant upgrading of a Council's lighting stock. Some of the key benefits that can be delivered are as follows:

- Reduced fear of crime;
- Reduced accidents and severity of accidents;
- Reduced greenhouse gas emissions;
- Operating cost savings through modern lighting;
- Energy savings through modern lighting; and
- Energy savings through the "active" control of lighting i.e. switching and dimming.

Typically the PFI project will deliver immediate results with replacement of lighting stock occurring from day one of service commencement. Furthermore, within a period of five years, known as the Core Investment Period, the Council will have had all identified lighting stock replaced. Those columns not replaced are assumed to be "Deemed to Comply", that is in simplistic terms anticipated to last until the end of the project term.

## 4 Indicative Cost of the Street Lighting PFI Project

### **Council assumptions**

In order to forecast the indicative cost of the street lighting PFI project we have made the following core assumptions as advised by the Council via email on 4 November:

- Replacement of 18,142 columns in the first five years;
- The Council's current budget for their street lighting function of £0.825 million per annum for revenue and £0.2 million per annum for capital, i.e. £1.025 million which covers all aspects of street lighting which will be transferred to the Service Provider. Two different affordability estimates have been produced (for each PFI credit award ratio as discussed below) based upon the £0.2 million capital funding being included or excluded. This is due to the requirement that the funding be in place for the whole of the 25 year period. The funding relates to Local Transport Plan funding which is not necessarily guaranteed for the duration of the period;
- The Council's estimated potential energy savings following column replacement of £0.15m per annum. The anticipated energy savings are likely to be one of the primary drivers for the Council in undertaking the Project;
- The Council will have to retain an element of their current budget for monitoring the Service Provider ('client side costs') and this has been assumed to be £0.2 million per annum.

### **Grant Thornton assumptions**

Grant Thornton have also assumed the following:

- Contract term of twenty five years;
- An annual Unitary Charge based on our experience of street lighting PFI projects - although please note that it does not take into account any Council specific issues such as a preferred technical solution etc. Please also note that it does not include the cost of energy provision which remains a cost to the authority. However, the affordability estimates do include the £0.15m estimated energy cost saving as provided by the Council above. The Unitary Charge is the amount that the Council would be expected to pay to the Service Provider for undertaking the street lighting service. The Unitary Charge used was based on a recent private sector bid that we advised on, although this was for a larger scheme involving the replacement of 30,000 columns during the Core Investment Period (CIP). Therefore we have pro-rated the figures to give an indicative estimate of the Unitary Charge that would be payable for a scheme with 18,142 columns. Please note that the actual Unitary Charge payable may differ from this as many costs are fixed as opposed to variable and therefore a more detailed calculation would be required to give a more accurate figure. For example, some costs such as SPV Management, or ongoing bank monitoring fees do not necessarily decrease on a simple pro rata basis, and in some cases may not differ from a large PFI project to a small PFI project. 60% of the Unitary Charge has been assumed to be indexed, inflating at 2.5% per annum;
- An indicative PFI credit award calculated based on an average of the ratio of PFI credits awarded to the number of columns replaced for each Project. Three different affordability estimates have been produced, based on the average ratio for the first bidding round, the

second bidding round, and the average ratio for both rounds combined. This has resulted in indicative ratios of 1.3:1, 1.5:1 and 1.7:1 and indicative PFI credit awards of £23.6 million, £27.2 million, £30.8 million respectively (detailed analysis is included at Appendix 1). Please note that the ratio achieved will vary from one authority to another and will depend on the capital costs for the preferred option (i.e. accelerated replacement procured through the PFI) for the first 5 years and the capital costs for the Do Minimum Option. A discount rate of 5.4% was used for the calculation of the PFI Credit Annuity;

- That the Council's estimated potential energy savings following column replacement will not be realised in full until the end of the 5 year Core Investment Period. Therefore Grant Thornton have modelled 10% of the saving in year 1, 30% of the saving in year 2, 50% of the saving in year 3, 70% of the saving in year 4 and 90% of the saving in year 5. 100% of the saving applies in year 6. The savings have been assumed to inflate at 2.5% per annum;
- Client side costs are assumed to inflate at 2.5% per annum;
- That the Council's existing funding and the ongoing revenue contribution required/saving achieved is assumed to inflate at 2.5% per annum;
- An interest rate of 3% is assumed on the cash balances of the SPV.

Based on the above assumptions six different estimates have been produced of how much additional contribution the Council would need to fund. Please note that these contributions will be subject to indexation.

<b>Additional Annual Council Revenue Contribution required / (Saving achieved) (2009/10 prices)</b>		
<b>Assumed PFI credit to number of columns ratio</b>	<b>With LTP funding (£0.2m) included</b>	<b>With LTP funding (£0.2m) excluded</b>
1.3:1 (average based on the first bidding round)	£0.16m	£0.36m
1.5:1 (average based on the first and second bidding round combined)	(£0.043m)	£0.16m
1.7:1 (average based on the second bidding round)	(£0.25m)	(£0.047m)

Note: the credit ratio is PFI credits (£'000): Number of Columns, eg on a 1.3:1 ratio we are assuming £13m credits for 10,000 columns.

Attached are separate spreadsheets which provide the annual contributions required by the Council based on the each of the different assumptions outlined above.

It is clear from the above that the PFI credit multiplier is instrumental to the overall affordability of the project. The difference to the Council's affordability position between a multiplier of 1.3:1 to 1.7:1 is around £400,000 per annum.

We also note that at the lowest ratio the Council would receive £23.6m of credits and at the highest ratio would receive £30.8m of credits. Indications from DfT are that the minimum credit allocation is likely to be in the £25m to £30m bracket and it would be worth the Council discussing any minimum thresholds with the DfT before proceeding further.



## 5 PFI -v- Prudential Borrowing

The benefits / disadvantages between PFI and prudential borrowing can be outlined under the following headings:

### **PFI Credits**

The principal advantage with a PFI type project is that PFI credit support is available whereas with prudential borrowing no additional funding is provided. The PFI credits are based on the capital expenditure of the project over the first five years less the cost of providing a do minimum replacement on the lighting stock. The PFI credit amount is a proxy for the interest and capital payments associated with the capital expenditure. The Council does not have to find any additional budget for the capital works.

### **Overall Financing Cost**

In a PFI project the overall financing cost will be more expensive. A traditional PFI structure, made up from 90% debt and 10% subordinated debt / equity would incur a current financing rate of approximately 7%-7.5% for senior debt and 12%-14% for subordinated debt / equity. Whereas a prudential borrowing rate would be approximately 4.75%.

### **Risk Transfer - Incentivisation**

Under a PFI structure the risk of column replacement would transfer to the Service Provider. There is an established market position whereby the Service Provider would be paid for the capital installation work over the life of the contract based on a number of performance measures including the availability of the lights which provide an adequate incentivisation on the Service Provider to perform over the whole project life.

Under prudential borrowing there is likely to be a disconnect with the contractor replacing the columns and providing the maintenance over the project life. The contractor would also secure the majority of their profit upfront by being paid for the installation work as incurred. Furthermore our experience shows that the incentivisation regime is significantly less penal under a typical maintenance contract as compared with a PFI contract.

### **Ring fenced funding**

The Unitary Charge under a PFI structure would always require to be paid. Therefore the payments required to meet the Unitary Charge for twenty five years would be ring fenced. There are mechanisms to increase or reduce the scope of a PFI street lighting contract through the standard Accruals and Deaccruals mechanism which is subject to a cap. Effectively the Council would have limited flexibility to reallocate funding.

In contrast the prudential borrowing route would provide an element of flexibility but this may lead to piecemeal replacement of lighting stock under competing budgetary pressures from other services requiring money. In this respect the step change in lighting and the associated benefits would not be capable of being delivered.

### **Energy consumption and carbon reduction**

Electricity consumption and carbon reduction is becoming more important for Authorities in the UK and a PFI project would allow the Council to secure a significant reduction in energy from new lantern technologies and remote monitoring systems which provide real time control

of the lighting. This may not be possible to realise to such an extent through the use of prudential borrowing.

## 6 Conclusion

This briefing paper has highlighted some of the key benefits, both financial and non financial to the Council in undertaking a street lighting PFI project and indicative costs in the form of additional annual contributions to that already contributed to the street lighting service. The indicative estimates suggest that a PFI project may lead to either additional annual contributions being required or savings being achieved. This depends on whether LTP funding is included or excluded and on the ratio of PFI credits to columns assumed.

Moreover, the amount of PFI credits the Council seeks from DfT is going to be a key issue and may drive the number of columns that need to be replaced in the Core Investment Period.

The paper has highlighted that there are significant advantages of delivering the service through a PFI contract, notably because of the significant PFI credit support that is available should the Council be successful in its application for PFI credits, the step change in service provision (and economies of scale) that this would allow, and the certainty of funding available given that it will be ring fenced from Council budgets.

## 7 Appendix 1 - Analysis of PFI credits allocated in previous bidding rounds

This appendix provides the basis for the PFI credit to column ratios referred to in section 4 of this report.

The table below shows the ratio of PFI credits to columns for projects in bidding rounds 1 and 2. Please note that the ratios for the 10 pilot projects were not included in this analysis due the ratios achieved being inconsistent with those in rounds 1 and 2, and therefore unrepresentative of the ratio that the Council can expect to achieve.

Bidding Round	Project	Credit Value (£m)	Duration (yrs)	No. of CIP Columns	Ratio of Credits to Columns
1	Barnet	27.770	25	19,000	1.46:1
1	Derby	35.711	25	20,100	1.78:1
1	Dorset	31.600	25	28,000	1.13:1
1	Ealing	25.275	25	18,700	1.35:1
1	Enfield	23.700	25	19,900	1.19:1
1	Leeds	94.600	25	82,000	1.15:1
1	Norfolk	38.100	25	25,000	1.52:1
1	Redcar & Cleveland	21.100	25	19,200	1.10:1
1	South Tyneside	31.500	25	24,300	1.30:1
1	Surrey	73.900	25	73,180	1.01:1
2	Blackpool	33.900	25	15,000	2.26:1
2	Nottingham	44.600	25	26,900	1.66:1
2	Oldham & Rochdale	72.800	25	46,600	1.56:1
2	Coventry	64.300	25	32,400	1.98:1
2	Croydon & Lewisham	79.500	25	44,800	1.77:1
2	(South Coast) Hampshire, Southampton & West Sussex	225.025	25	169,700	1.33:1
2	(Eastern Shires) Cambridgeshire & Northamptonshire	145.800	25	111,900	1.30:1
2	Harrow	32.000	25	14,400	2.22:1
2	Knowsley	30.157	25	16,500	1.83:1

The table below shows the average PFI Credit to column ratio, calculated using the data in the table above.

Average ratio of PFI credits to columns	
Round 1	1.30:1
Round 2	1.77:1
Round 1 and 2 combined	1.52:1



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