

LED Streetlighting - proposed implementation - estimated financial impact

APPENDIX A

Year	0	1	2	3	4	5	6	7	8	10	11	12	13	14	15	16	Totals
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	
Total Cost	288,889	1,011,111															1,300,000
Less TfL funding		(50,000)															(50,000)
Less loan	(171,111)	(598,889)															(770,000)
Initial Cost to Council	117,778	362,222															480,000
Loan repayment		192,500	192,500	192,500	192,500												770,000
Capital Cost to Council	117,778	554,722	192,500	192,500	192,500												1,250,000
Revenue Savings																	
Energy	(25,667)	(117,553)	(166,566)	(173,229)	(180,158)	(187,365)	(187,365)	(187,365)	(187,365)	(187,365)	(187,365)	(187,365)	(187,365)	(187,365)	(187,365)	(187,365)	(2,724,188)
Component replacement		(44,235)	(58,980)	(58,980)	(58,980)	(58,980)	(58,980)	(58,980)	(58,980)	(58,980)	(58,980)	(58,980)	(58,980)	(58,980)	(58,980)	(58,980)	(457,095)
Total revenue savings	(25,667)	(161,788)	(225,546)	(232,209)	(239,138)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(3,594,143)
Net flow in year	92,111	392,934	(33,046)	(39,709)	(46,638)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(2,344,143)
Net flow cumulative	92,111	485,045	451,999	412,290	365,651	119,307	(127,038)	(373,383)	(619,728)	(866,073)	(1,112,418)	(1,358,763)	(1,605,108)	(1,851,453)	(2,097,798)	(2,344,143)	
Payback year 6																	
NPV at 4%	1	0.962	0.925	0.889	0.855	0.822	0.790	0.760	0.731	0.703	0.676	0.650	0.625	0.601	0.577	0.555	
NPV of net flow in year	92,111	378,002	(30,568)	(35,301)	(39,876)	(202,495)	(194,613)	(187,222)	(180,078)	(173,181)	(166,529)	(160,124)	(153,966)	(148,053)	(142,141)	(136,721)	
Net NPV flow cumulative	92,111	470,114	439,546	404,244	364,369	161,873	(32,739)	(219,961)	(400,040)	(573,220)	(739,749)	(899,874)	(1,053,839)	(1,201,893)	(1,344,034)	(1,480,755)	
Payback yr 6																	

SUMMARY OF INITIAL FUNDING

Salix Loan	770,000	Final decision on loan to be confirmed
LBH capital - general	380,000	
LBH capital - streetcare	55,000	
LBH capital - community safety	45,000	
TfL	50,000	
	1,300,000	

SIGNIFICANT CONCLUSIONS

Investment pays back in year 6 - a good rate of return
 From 2018/19 onwards, ongoing base savings of £247k - **no need for further capital investment**
 Strong financial case for proceeding

ASSUMPTIONS

- 1 Assume 1.02.14 start to 31.10.14
- 2 Unit cost of capital investment - £1.3m by 6,000 units gives £217 per unit
- 3 Energy - savings pa of £154k at current prices. Per Ofgem, assumed energy 4% rise year on year from 14/15 to 18/19 - thereafter assumed to stabilise
- 4 Very prudent assumption made around component replacement; assumed above every 10 years, in line with warranty; however, industry standard is 15-20 years (Annual current cost £17.83 pa; anticipated cost of £8 pa - difference £9.83, times 6,000 units gives saving of £58,980)