SURREY COUNTY COUNCIL

CABINET

DATE: 25 JUNE 2013

REPORT OF: MR JOHN FUREY, CABINET MEMBER FOR TRANSPORT,

HIGHWAYS AND ENVIRONMENT

LEAD TREVOR PUGH, STRATEGIC DIRECTOR – ENVIRONMENT &

OFFICER: INFRASTRUCTURE

SUBJECT: AMENDMENT TO WASTE CONTRACT BETWEEN SCC AND

SITA SURREY

SUMMARY OF ISSUE:

To receive updated information regarding technologies and to consider value for money and affordability factors; to approve technology; to ask officers to continue to progress work to amend the Waste Contract with SITA Surrey and prepare a detailed report to present at the 23 July 2013 Cabinet meeting, which will include legal, financial, procurement and risk assessments.

RECOMMENDATIONS:

It is recommended that:

- 1. Having received an update on technology and been notified of the proposed contractors, Cabinet approves the technology changes.
- 2. Officers continue to progress work to vary the Waste Contract between SCC and SITA Surrey to reflect the changes necessary to deliver the proposed waste solutions and prepare a further detailed report for final approval (including value for money and affordability considerations) to present at the 23 July 2013 Cabinet meeting.
- 3. Cabinet approves the release of a Voluntary Transparency Notice announcing the Council's intention to enter into a contract variation.

REASON FOR RECOMMENDATIONS:

The recommendations are necessary to provide proper authority to:

- Deliver the Eco Park which represents a corporate priority for the Council
- 2. Provide assurance to contractual and funding partners to the Council
- 3. Demonstrate commitment to use of best available most appropriate technologies in terms of efficiency and environmental impact

DETAILS:

Reason for Report to Cabinet

- 1. On 14 March 2011 the Cabinet delegated authority to amend the Waste Contract to deliver an updated Joint Municipal Waste Management Strategy ('the Waste Strategy'). Since then the technical solution has been developed; necessary permissions have been granted; and the financial and legal negotiations and assessments are now near completion. There have also been significant developments in the approach to waste, aimed at delivering savings through increasing the value of waste materials, and benefits of scale and efficiency. On 26 March 2013, an update report on the current status of the Eco Park and grant support from DEFRA to the waste contract was presented to Cabinet.
- 2. This report builds on the previous reports considered by Cabinet and provides Cabinet with technical information to support a proposal to enter into a contract variation to develop the Eco Park.
- 3. Given the corporate significance of the Waste Strategy and the fact that new issues have arisen, in particular changes to the proposed solution, the Cabinet Member for Transport, Highways and Environment felt it was prudent for the Cabinet to reconfirm its commitment, based on the most up to date information, prior to receiving a report detailing the costs and terms of a proposed contract variation.
- 4. Cabinet approval will therefore be sought in two stages, supported by a current and comprehensive business case, based on environmental criteria and financial terms.

The Drivers for Change

- 5. Historically waste in the UK has been disposed of by landfill. Landfill is a waste of scarce resources and biodegradable waste in landfill is a significant producer of harmful greenhouse gases. The Waste Strategy is aimed at reducing levels of municipal waste and increasing the value of materials within the waste stream by reusing and recycling, producing renewable energy.
- 6. The cost of landfill has risen steeply and will continue to rise in the future. Landfill tax will reach £80 per tonne in 2014/15. If new solutions are not found this would cost the council approximately £13m a year by 2014/15.
- 7. Delivery of solutions based on the Waste Strategy, in partnership with District and Borough Councils and the South East, and including the Eco Park, are important to ensure that Surrey County Council is effective in delivering financial and environmental benefits to the Surrey taxpayer.
- 8. Full details of the need to deliver new solutions are provided in the 2 February 2010 and 14 March 2011 Cabinet reports. This report and the July 2013 report concentrate on the proposed technical solution and contractual method of delivering new solutions in the best interests of the taxpayer.

Waste Management Progress

- In June 2006, the County Council, along with all Surrey waste authorities, adopted a Joint Municipal Waste Management Strategy. This strategy set out a plan for managing household waste in Surrey until 2026. An updated version was produced called "A Plan for Waste Management" and was subsequently endorsed by SCC's Cabinet on 29 September 2010.
- 10. A Plan for Waste Management sets out a series of ambitious targets for Surrey's local authorities, relating to reducing household waste, increasing recycling and diverting household waste from landfill.
- 11. Surrey authorities have made significant performance improvements over the past five years, which have significant environmental and financial benefits for the Surrey taxpayer.
 - The amount of waste produced per head of population in Surrey reduced by 17% between 2007/08 and 2012/13.
 - The Surrey recycling rate has increased from 35.3% in 2007/8 to 52.4% in 2012/13.
 - The proportion of waste Surrey sends to landfill has so far reduced from over 60% to under 20%.
 - Recycling performance has been improved through changes in kerbside collection systems, including collection of a wider range of materials for recycling. Surrey is the first county in England where all districts and boroughs collect food separately.
- 12. A number of joint contracting and purchasing arrangements have been introduced including green waste processing and the purchase of fuel.
- 13. The Surrey Waste Partnership continues to develop. Work over the next few years is set to deliver further performance and efficiency improvements.
- 14. Surrey County Council is now looking to deliver further improvement by engaging with the 55 waste authorities in the SE7 area (covering Kent, Hampshire, Surrey, East and West Sussex, Brighton & Hove and Medway). A strategic blueprint is being developed to steer the SE7 authorities towards becoming a waste business that supplies commodities and fuel to the market and delivers substantial financial benefits for the SE7 taxpayer.

Eco Park Progress

15. Planning - Following extensive consultation, planning permissions have been granted for the Eco Park at Charlton Lane, Shepperton. In March 2011 a permanent permission for a waste site was granted, followed in March 2012 by a permission to develop the Eco Park on the same site. Both permissions are subject to a number of conditions that require the applicant (the Council's contractor SITA Surrey) to submit detailed technical schemes and plans. This will take into account changes to sub-contractors and technology providers where appropriate. The planning process is well

- advanced although further submissions and detailed applications will be required.
- 16. Environmental Permit On 8 October 2012 an environmental permit was issued by the Environment Agency. This permit is required before any waste facility can operate. It would require a variation to reflect the change of technology provider referred to later in the report.
- 17. Footpath diversion One planning condition is a requirement to divert a footpath to enable the Eco Park to be built. Following objections by a number of local residents, the Planning Inspectorate held a public inquiry which took place between 3 and 5 April 2013. A proposed decision to confirm the diversion order with a few modifications is being advertised. Should no objections be made during the advertisement period the decision to confirm the diversion order can be expected by August 2013.
- 18. Delivery timetable (based on satisfactory outcomes of regulatory requirements without significant delay):

• Late 2013 Commence Eco Park construction

September 2014 Recycling and bulking facility operational

• End 2015 Eco Park fully operational.

Explanation of current contractual position

- 19. The County Council is the statutory Waste Disposal Authority for Surrey. The District and Borough Councils are the statutory Waste Collection Authorities.
- 20. In 1999 the Council entered into a long term (25 year) integrated waste management contract with Surrey Waste Management Ltd, now SITA Surrey (a wholly owned subsidiary of SITA UK). DEFRA supports this contract by providing Waste Infrastructure Grant. The Waste Contract provides for the treatment of residual waste delivered by Waste Collection Authorities and the operation of 15 Community Recycling Centres where the public can take waste to be recycled or for disposal.
- 21. The Council's Waste Contract was one of the first waste contracts of this kind. At that time the anticipated volume of residual waste requiring disposal was over 330,000 tonnes a year and the original intention was to dispose of this largely through two energy from waste plants, to be provided as part of the Waste Contract.
- 22. The first 10 years of the contract saw a rapidly changing landscape for waste. There were significant changes in the law and policy in relation to waste management at national, regional and local level, alongside a shift in public behaviour. Alternative technologies have also emerged.
- 23. In order to move forward, the Surrey Councils jointly developed a revised Waste Strategy in 2010, and the Cabinet now has to consider varying the Waste Contract within the mechanisms it provides.

Proposed Amendments to the Waste Contract and their effect on the Council

- 24. The existing Waste Contract with SITA predates the Waste Strategy. It requires the contractor to fulfil statutory waste management obligations on behalf of the Waste Disposal Authority, in relation to disposal of all Surrey's residual municipal waste and operating community recycling centres.
- 25. In order to align the Waste Contract with the waste strategy, it would require updating to:
 - the service specification and service delivery plan;
 - the financial model based on the delivery of new waste solutions, and adjustment to the contractual payments accordingly;
 - performance targets and timescales.
- 26. In addition it would be necessary to confirm the:
 - contractual position relating to cost and risk resulting from the replacement of energy from waste incineration technology with new technologies (anaerobic digestion and gasification);
 - funding arrangements by which the contractor will provide finance for the infrastructure required, including the Eco Park.
- 27. This report concentrates on an explanation of the new technologies proposed for the Eco Park and the presents an initial assessment of value for money to the UK taxpayer. It is important to demonstrate clearly that:
 - the technologies are safe and reliable and are developed and operated by competent and sound contractors;
 - a solution delivered through the Waste Contract provides value for money compared with the other options available to the Council.

Assessment Process

28. A decision to make the changes needed to deliver the Eco Park requires careful consideration by Cabinet as it is a complex assessment involving many facets. Officers have taken advice from:

Mott MacDonald technical advisers

Simmons and Simmons legal advisers

Deloitte financial advisers

Enviros planning advisers

- 29. The assessments of relevant Heads of Service are also provided on key areas:
 - Head of Waste Service technical and service
 - Head of Legal and Democratic Services legal (contractual, procurement and local government)
 - Chief Finance Officer affordability and value for money
 - Acting Head of Procurement and Commissioning negotiation and contract strategy
- 30. This report summarises the key considerations, conclusions and recommendations of officers relating to technology, and presents an initial opinion of value for money. Further assessments will be provided in July 2013. As much information as possible will be made publicly available. However, the assessments may include matters of commercial sensitivity and legal privilege. Such information and advice is contained within confidential annexes and referenced where necessary.
- 31. Also, due to the volume and detail of information supporting the assessment, where appropriate, reference has been made to supporting documents which have not been reproduced but are available on request to members.
- 32. The assessment in this report provides:
 - A technological and technical consideration of the waste treatment technologies available
 - A description of the proposed sub-contractors (including technology providers) appointed by SITA to build the Eco Park
 - The options available to the Council and the consequences of each option
 - An initial opinion of value for money based on assessment undertaken to date

Technological and technical changes

- 33. Whenever amendment to the Waste Contract is considered, a technology assessment is undertaken by technical advisors, Mott McDonald, to ensure that Surrey benefits from the most modern and appropriate technologies. In March 2011 the technologies proposed for the Eco Park comprised anaerobic digestion for food waste and Batch Oxidation System (BOS) gasification technology for residual waste.
- 34. Since March 2011 the licence holder of the previously proposed BOS gasification technology has gone into administration, removing this option to SITA. Mott McDonald have therefore carried out an update of the gasification technology assessment. The updated assessment concluded

- that there were now a number of potential suppliers within the gasification market.
- 35. In order to address this issue and demonstrate value for money SITA has conducted an additional procurement exercise. This has been to secure the most advantageous anaerobic digestion and gasification technologies within a sub-contract led by an engineering, procurement and construction (EPC) contractor who will be responsible for the overall delivery of the Eco Park, including design, appointment of the technology providers, procurement of materials and construction.
- 36. SITA commenced the tendering process to select the EPC contractor in June 2012. The procurement competitive bid exercise has now concluded and appointed contractors are described below. The tendering process was monitored by SCC waste and procurement officers and was considered appropriately robust and comprehensive.
- 37. Following the competitive tendering process, SITA have selected M+W Group as the EPC contractor for the Eco Park. M+W Group have selected Monsal as their partner for the anaerobic digestion plant and Outotec as the provider of the gasification technology. Profiles of the three subcontractors and proposed technologies are provided below.

Proposed sub-contractors to build the Eco Park

M+W Group: Engineering, procurement and construction (EPC) contractor

- 38. M+W Group is a leading global engineering, construction and project management company in the fields of Advanced Technology Facilities, Life Science & Chemicals, Energy & Environment Technologies and High Tech Infrastructure. From concept development to turnkey services the company manages projects of all sizes.
- 39. Its expertise lies in linking process and automation technologies and complex facilities to integrated solutions whilst ensuring rapid realisation, high quality standards and cost-effective completion. M+W Group primarily focuses on leading companies in the fields of electronics, photovoltaics, life science, chemicals, energy, automotive, security, IT & Telecoms, as well as research institutes and universities.
- 40. M+W Group GmbH is a holding company with headquarters in Stuttgart, Germany. It has experience of constructing facilities in a wide variety of locations and cultures, and at times under very challenging circumstances. It has representation in over 30 countries and has existed for just over 100 years. In 2012 the company generated an order intake of 3.58 billion euros and revenues of 2.38 billion euros with 7,700 employees.
- 41. The M+W Group has earned numerous awards and recognitions all around the world for excellent project management, for outstanding engineering expertise or best environment, health and safety performance.

Outotec: Gasification technology provider

- 42. Outotec is a large global company based in Finland working in the minerals and metals processing industry, water treatment and renewable energy. Over 80% of Outotec's business comes from the minerals and metals industry and the rest increasingly from the energy industry, chemical industry and industrial water treatment.
- 43. On 1 January 2012, Outotec acquired Energy Products of Idaho (EPI) an experienced US based provider of combustion and gasification technology. EPI has pioneered in the area of biomass and waste materials combustion and delivered over 100 energy solutions.
- 44. EPI technologies complement Outotec's fluidised bed technology platform. EPI's proprietary fuel thermal oxidation and gasification technologies recover energy from various biomass and wastes such as fresh and used wood, agricultural waste, demolition waste, manure, waste paper, paper sludge, oil sludge, municipal waste and many other materials.
- 45. EPI had nearly four decades of operating experience and more than 100 fluidised bed energy system installations.
- 46. Through EPI Outotec has pioneered, developed and commercialised fluidised bed combustion technology for biomass and waste materials for decades, leading the way for the disposal of waste materials and provision of efficient, economical and environmentally favourable biomass and waste to energy solutions.
- 47. Outotec operates globally with sales and service centers in 25 countries and deliveries to over 80 countries. At the end of 2012, Outotec had 4,805 employees. Outotec generated sales of approximately £2bn in 2012.
- 48. Outotec is 12th in the global top 100 sustainable companies index announced at the 2012 Dayos economic conference.

Monsal: Anaerobic Digestion Technology Provider

- 49. Monsal is a well established process and technology company operating in the environmental sector. Its core business is the treatment and conversion of waste biosolids¹ and biowaste² into renewable energy and a nutrient rich product. With experience of over 220 anaerobic digestion systems in the last 14 years Monsal is the UK's expert in anaerobic digestion and the UK's leading advanced digestion and integrated biogas to energy business.
- 50. The company delivers innovative turnkey solutions, process treatment technology and products. Monsal's background is in the water industry where anaerobic digestion has been used to process sewage sludge for many years. More recently however, Monsal have designed and built plants to deal specifically with food waste. This process knowledge is combined

¹Biosolids are nutrient rich organic materials derived from wastewater solids (sewage sludge) ²Biowaste (or biodegradable waste) is waste material capable of decomposing under anaerobic or aerobic conditions (e.g. manure, sawdust or food scraps)

- with the team's expertise in mechanical and electrical engineering to produce effective engineering solutions for sludge and biowaste.
- 51. Monsal operates from their East Midlands base where they deliver projects all across the UK. They have the largest specialist technical team in the UK for advanced digestion, biowaste technology and biogas to energy projects.
- 52. Monsal is associated with the following professional bodies:
 - Founding Member of ADBA (Anaerobic Digestion and Biogas Association)
 - Member of REA (Renewable Energy Association)
 - Chartered Institution of Water and Environmental Management (CIWEM)
 - Water Environment Federation (WEF)
 - Chartered Institution of Wastes Management (CIWM)
- 53. Monsal is a subsidiary of Monsal Holdings Ltd owned by private investors, Mobeus Equity and Four Winds Capital Management. Four Winds Capital Management is a specialist in global commodities and natural resources. Mobeus Equity Partners is a leading equity investor in the UK lower midmarket.
- 54. Quality, health and safety and consideration for the environment are integral to the company's daily and long term activities. Monsal is accredited to ISO 9001:2000 (Quality Assurance); ISO 14001:2004 (Environmental); and BS OHSAS 18001: 2007 (Health & Safety).

Description of the Technological Changes

- Description of the Gasification Process
- 55. The proposed gasification process is designed to treat the waste that remains for residual waste (black bag) collections, after source segregation of recyclables has been undertaken.
- 56. The proposed gasification process is known as fluidised bed gasification:
 - Prior to gasification, waste will be mechanically sorted to remove recyclable materials, which have not previously been separated out, such as metals and items unsuitable for the process. The remaining waste will be shredded into pieces of a similar size to create a refuse derived fuel (RDF). This is known as pre-treatment and will remove additional materials, which will be sent for recycling or disposal.
 - This fuel is fed into a chamber with reduced oxygen levels where it is suspended in a bed of hot sand and heated to temperatures above 700 degrees but not set on fire, to produce a gas.

- This gas (known as synthesis gas or syngas) rises towards the upper part of the chamber.
- Here air is added and the gas is burnt at high temperatures to provide energy in a similar way to natural gas.
- The heat from the process is used to drive a steam turbine and electrical generator.
- The gases from the combustion of the syngas go through a multi stage clean-up process before being released into the atmosphere by a chimney.

- Gasification Process - Due diligence

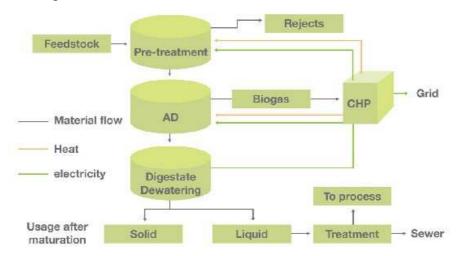
- 57. Waste gasification is a relatively new technology in the UK and therefore both SITA and the County Council have conducted a robust due diligence assessment to ensure that the gasification process technology proposed by Outotec is appropriate for use within the Eco Park.
- 58. SITA's Parent Company Suez Environnement is proposing to make a significant capital investment in the Eco Park and therefore, like any bank making an investment, it is necessary for them to be completely satisfied that the proposed technology will operate effectively and safely in accordance with its design. SUEZ Environnement have extensive experience in waste to energy technologies and their experts have undertaken a significant amount of due diligence on the technologies, including visits to reference plants in the USA and Italy as well as discussions with Outotec's technical experts. Following this due diligence, Suez Environnement has confirmed their investment in the Eco Park and specifically the gasification technology that will be supplied by Outotec.
- 59. The County Council's technical advisors, Mott MacDonald have also undertaken an independent review of the Outotec gasification technology. This involved visits to a pre-treatment facility in Leeds and a fluidised bed combustion plant in Italy as well as discussions with both M&W and Outotec personnel.
- 60. Although the plant in Italy operates as a combustion plant, Mott MacDonald reported that the site visit was positive and provided comfort that the Outotec technology was able to process refuse derived from municipal waste. The plant has been in successful commercial operation for 8 years.
- 61. Mott MacDonald has advised that Outotec has experience of fluidised bed combustion with a variety of fuels including refuse derived fuel and it also has increasing experience of gasification plants using variable feedstock.
- 62. They note that the Outotec gasification and combustion plants are similar in that they both operate with a fluidised bed system. The difference between the plants is the size of the fluidised bed, in relation to the feedstock, and amount of primary and secondary air utilised.
- 63. They note that Outotec have cited over 100 reference plants using fluidised bed technology on a variety of feedstock, however only a small number of these plants operate in gasification configuration with majority being

- combustion plant. They also note that there are currently no gasification plants operating on refuse derived fuel.
- 64. Mott McDonald consider that Outotec has extensive experience of fluidised bed combustion using a variety of fuels. The company also has a good level of understanding of the complexity of waste gasification and the requirements of the UK regulatory system and the ability to design a plant to operate using the waste feedstock in Surrey.

- Description of the Anaerobic Digestion Process

- 65. Anaerobic Digestion (AD) is an organic technology, which breaks down food waste in the absence of air to produce two by-products:
 - a compost material, which can be used on agricultural land;
 - and a biogas, which can be used to generate electricity, or to power vehicles.
- 66. The AD technology that will be provided by Monsal is a wet, one stage process.
 - Food waste will be unloaded in the delivery building, which will be equipped with fast acting roller shutter doors and under negative pressure to ensure that any odours stay within the building.
 - Food waste is then loaded into the waste shredder. The function of the
 waste shredder is to split open any bags and reduce the incoming waste
 to an acceptable size for the digestion process.
 - Shredded material is transferred by closed conveyor to the waste turbodissolver to pulp the waste and separate out any contaminants such as plastics grit or metals. The contaminants are subsequently removed from the dissolver and the pulp is pumped into the buffer tank.
 - It is within the digestion tank that micro-organisms break down the pulp into methane rich biogas. This biogas is captured and is used to power a gas engine and generator to produce heat and electricity.
 - The solid material that remains after digestion (known as a digestate) is removed from the digester tank and dewatered using a screw press.

• The liquid digestate is cleaned up and discharged to sewer, whilst the solid digestate is removed from the site for use as a substitute fertiliser.



- Anaerobic Digestion process Due diligence

67. Monsal were the original AD contractor for the Eco Park and their process remains unchanged. AD is considered by Mott McDonald to be a proven technology. Therefore no further due diligence is considered to be required as a result of the change to the EPC contractor.

Sustainability assessment

- 68. The County Council's Waste and Sustainability teams have carried out a sustainability assessment of the proposal to create an Eco Park and the assessment process fed into the scheme development.
- 69. The following aspects have been considered, in addition to the proposal's inherent contribution to the sustainable use of resources and waste management as outlined earlier in this report:
 - <u>Energy</u> The site will provide an installed gross capacity of 5.58MW of decentralised energy generation capacity comprising a 1.78MW Anaerobic Digestion plant, a 3.65MW Gasifier plant and a 0.16MW solar PV array. The Government supports such clean technologies through the award of Renewable Obligations Certificates (ROCs) for every unit of power generated from renewable sources and this funding stream will be claimed for the site.
 - The energy demands of the site will be fully met through the on-site energy generation including the pre-treatment equipment within the gasification building. Electricity generated by 3.82 MW of the plant will be exported to the national grid.
 - The building design includes intelligent lighting systems and heated areas are highly insulated to reduce energy demand.

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- Water Clean roof water will be harvested through a 50m³ storage tank, with the harvested rainwater being used as process water in the AD process, reducing the reliance on the local potable water supply from Thames Water. An engineered surface water drainage system has been developed to the latest Environment Agency guidance to meet green field run off rates. This means that water is discharged no faster than if the site were a green field to ensure there is no additional possibility of off-site flooding. The surface water drainage system will drain to an infiltration lagoon, which is located in an area of undug sand deposits in the field next to the Eco Park. This infiltration lagoon is sized to ensure it can cope with intense and severe storm rainfall events.
- Transport The impact assessment has itemised that there will be a significant reduction in annual numbers of heavy goods vehicle movements and miles travelled by vehicles associated with the Eco Park, compared to the current situation. This would reduce the level of transport-related CO2 emissions. The change in the gasification system and the introduction of a pre-treatment process will result in slightly more weekday movements of vehicles and slightly fewer vehicle movements at weekends, compared to the consented levels. However, heavy goods vehicles (HGV) movement will still be reduced compared with current usage, with weekday HGV movements predicted to decrease by approximately 37% from current use patterns.

Biodiversity and character - The development will result in significant environmental improvements to the land to the north and east of the site to provide enhanced amenity and ecological value. The Landscape and Ecology Management Plan sets out the full detail of how the local biodiversity and landscape will be enhanced. Examples include the maintenance of existing mature vegetation to provide screening whilst improving its structural diversity, the protection of veteran willow trees during construction and the planting of 2.3ha of new woodland. A diversity of grassland habitats will also be developed, including a wet meadow in an area of the site anticipated to experience regular short periods of inundation with surface water during periods of high intensity rainfall. Purpose built pathways will be constructed to enable greater public access to this area, this will also include the proposed diversion to the Public Footpath.

- Local services and education The Eco Park will continue to provide community recycling centre facilities for local residents and provide a reuse centre. Early improvements will be undertaken to the entrance to the centre. A survey carried out in 2008 found that 92.8% of the users surveyed rated the CRC facility as excellent and good. The Eco Park site will also incorporate a visitor centre where school parties and other groups can learn about sustainable living in practice and build on the County Council's school engagement work.
- <u>Local economy</u> The Proposals will deliver local benefit through the
 creation of local employment opportunities during construction and
 operation. During construction, an anticipated maximum of 50 workers will
 be on site at anytime. It is anticipated that 60 staff will be based at the Eco
 Park site, an increase of 40 staff on current numbers on the Charlton Lane
 site.

70. Overall, the scheme represents a positive contribution to the County Council's commitment to sustainability; with the core aim of managing Surrey's waste sustainably and a wider set of positive environmental, economic and social outcomes.

Financial implications

- 71. The report to Cabinet in July 2013 will include a detailed explanation of the financial impacts of proceeding with this proposal. There are two key elements to the financial business case for the waste contract variation:
 - value for money this has to take into account the overall effect on the
 public purse, i.e. it cannot take into account any reduced costs to the
 County Council through support from Government in the form of Waste
 Infrastructure Grant, which is a transfer of benefit from one arm of
 Government to another and does not affect the overall cost to the UK
 taxpayer.
 - affordability which is concerned with the impact on the County Council's finances, and as such does take Waste Infrastructure Grant into account.
 - The outcome of the value for money and affordability assessments will be addressed in detail in the July 2013 report to Cabinet.
- 72. In order to assess value for money and affordability four options for future waste management in Surrey have been considered. The options assessments consider the entire contract as they impact on other services and infrastructure as well as the Eco Park.
- 73. The first two options deliver waste infrastructure. These are:
 - Option 1: Amend the existing waste contract to deliver Waste Solutions
 - Option 2: Terminate existing waste contract and re-procure to build and operate Waste Solutions
- 74. A further two options which do not rely on developing infrastructure have also been considered:
 - Option 3: Terminate waste contract and achieve recycling and landfill diversion improvements without new infrastructure (i.e. secure alternative technology contracts)
 - Option 4: Terminate waste contract and achieve recycling and landfill diversion improvements without new infrastructure (i.e. continue to landfill)
- 75. Each option is being considered in detail, and costs are being modelled by the Council's financial advisors, Deloitte. Costs are considered over 25 years, in line with the expected economic life of waste infrastructure. Affordability is also considered over the medium term, i.e. impact on the Medium Term Financial Plan (2013-18). A number of assumptions will be made in order to model expected costs, e.g. around future inflation, landfill tax and waste volumes. Risk and uncertainty will also be addressed, and

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- where possible quantified using an adjustment for optimism bias in line with HM Treasury guidance. Deloitte have confirmed their agreement with the financial assessment methodology, and that it follows HM Treasury guidance.
- 76. When considering affordability it is appropriate to take into account support provided by the Government in the form of Waste Infrastructure Grant. The Council expects to receive grant of £205m over the 25 year term of the waste PFI contract. Of this, £118m has been received leaving a balance of £87m remaining (approx. £8m per year until 2023/24). Earlier this year DEFRA reaffirmed its commitment to providing support to the waste PFI, including grant support, subject to re-profiling the grant to better align with the delivery of infrastructure. It is therefore assumed that in option 1 the full Waste Infrastructure Grant, £205m, will be received by the end of the agreed term (2023/24) after which the grant will cease. Two possibilities will be considered for the remaining options retention of grant already paid (£118m) but loss of future payments (£87m), and loss of all grant payments (£205m). For the purposes of this assessment it will be assumed that any claw back of grant can be capitalised over 25 years.
- 77. At this point cost estimates have not been finalised and remain subject to further checks by both SITA and Deloitte, negotiations with SITA are also ongoing to secure the best possible commercial arrangement. The results of the financial assessment will therefore be reported in detail to Cabinet on 23 July 2013.
- 78. In terms of affordability, within the existing Medium Term Financial Plan (2013-18) some prudent financial planning assumptions have been made in terms of a possible reduction to the Waste Infrastructure Grant and the creation of a sinking fund to meet future waste costs. Only when the modelling of future costs has been completed can the impact of any proposed contract variation on the Council's Medium Term Financial Plan and longer term financial position will be understood and this will be reported to Cabinet on 23 July 2013.
- 79. Only when contractual negotiations and financial modelling are completed and appropriate due diligence has taken place, can an opinion on value for money be given. This will be included in the report to Cabinet in July 2013.

Summary comparison of advantages and disadvantages of available options

Option 1: Amend the Waste Contract to deliver Waste Solutions Description: Negotiated solution with SITA	
 Ability to proceed without delay Business continuity of services Comparative clarity of contractual cost and terms 	 Negotiation with single party Restrictions of existing contract Treatment of residual 95,000 tonnes to be determined through contract

Option 2: Terminate Waste Contract: re-procure to build and operate Waste Solutions		
Description : Terminate waste contract, new construction and service contracts to deliver Eco Park		
Advantages	Disadvantages	
 Opportunity to test market for improved costs and terms No contractual restrictions 	DelayUncertainty of outcomeIncreased cost escalation risk	

Option 3: Terminate Waste Contract: achieve recycling and landfill diversion improvements without new infrastructure (i.e. secure alternative technology contracts)		
Description : Terminate waste contract, let new supply contracts based on energy from waste technologies		
Advantages	Disadvantages	
 No requirement to develop new facilities in Surrey Opportunity to test market No contractual restrictions 	 Uncertain long term market capacity Risk to business lose benefit of planning permission and permit continuity Uncertainty of outcome Increased cost escalation risk 	

Option 4: Terminate Waste Contract: achieve recycling improvements without new infrastructure (i.e. continue to landfill)		
Description: Terminate waste contract, let new supply contracts based on landfill		
Advantages	Disadvantages	
 No requirement to develop new facilities in Surrey Opportunity to test market No contractual restrictions Lower market capacity risk than option 3 (risk still exists) 	 Uncertain long term market capacity Risk to business lose benefit of planning permission and permit continuity Uncertainty of outcome Risk of EU/legal restrictions banning this option Highest cost escalation risk 	

Commentary on options by Acting Head of Procurement and Commissioning

- 80. From a commercial perspective, the key consideration has been whether the Council could either (i) build the waste management facilities (option 2) or (ii) procure these services from the open market (options 3&4), both outside of the current Waste Contract at a lower overall cost.
- 81. In terms of option 1, SITA have undertaken a competitive process with two shortlisted tenderers and we have worked alongside them to clarify and challenge the bids. The tender process has been through a structured evaluation and provides assurance that value for money is comparable to that which would be achieved if the Council decided to procure the facility directly. Indeed there may be some additional benefits within option 1 as it will continue to allow SCC to benefit from SITA's access to landfill capacity that is likely to become scarcer in the future, as well as contracts for recycling and disposal.
- 82. There is a high level of uncertainty in options 3 and 4. Both centre around the procurement of waste disposal services from the commercial market and are heavily influenced by landfill tax. Potential large future increases will have a sizeable direct impact on the value for money of option 4 as the tax is a major component of the overall price. In addition, the use of Energy from Waste (EFW) providers as an alternative (option 3) also exposes SCC to the risk of prices increases as they seek to peg their prices to the landfill increases (at least in the medium term).
- 83. Forecast cost figures against each option will be reviewed and a final assessment made when the financial modelling, which takes into account these risks, is complete.

Commentary on options by Head of Waste Service

- 84. From a service perspective amendment to the Waste Contract to deliver the Eco Park is the preferred option for two main reasons:
 - It complies with the Council's waste strategy.
 - It represents the lowest risk to business continuity, as the cost and terms are being negotiated with the current contractor SITA, who would continue to provide services during the construction phase.

Outstanding approvals and conditions

85. Contractual terms have been negotiated with SITA Surrey, the Council's contractor, and full contractual documentation is being produced to minimise uncertainty. The outstanding conditions and contractual approvals required by the Council and other parties are:

Conditions

- 86. Government planning and regulatory approvals:
 - Vary the planning permission to reflect replacement of Gasification technology provider at Eco Park

- Fulfil planning conditions
- Confirm or amend Environmental Permit to reflect replacement of Gasification technology provider at Eco Park
- Approval to divert a footpath to the north of the proposed Eco Park

Subcontract signature

87. All sub-contractors have been appointed by SITA Surrey through competitive or cost scrutiny processes and therefore costs have been provided, subject only to delay or change in requirements, e.g. from unexpected planning or permit conditions.

Approvals

- 88. Legal commitment to the proposed contractual variation by the Council's Contractor SITA Surrey.
- 89. DEFRA scrutiny team and legal department. This includes an assessment of the Council's business case (including legal advice), the decision making process, and confirmation that all parties (including SITA parent and technology providers) have committed to final terms.
- 90. The contract variation has to be in law consistent with European Public Procurement Regulations. It is considered prudent to issue a 'Voluntary Transparency Notice' which announces the Council's and SITA's intention to enter into a contract variation.

CONSULTATION:

A Plan for Waste Management

- 91. The Joint Municipal Waste Management Strategy for Surrey was developed in 2006. The strategy was the subject of a three-month consultation process and was subsequently adopted by all 12 authorities in Surrey. The Joint Municipal Waste Management Strategy was revised in 2010, three years earlier than originally planned, to reflect:
 - Significant reduction in waste volumes
 - Significant improvements in recycling rates
 - New national targets and policies
- 92. A formal three month public consultation was again carried out before waste authorities adopted the revised strategy in 2010. The consultation process identified very strong stakeholder support for the revised strategy as evidenced by the direct quote below:

"It is clear that there is strong support for the proposed revision to the Plan for Waste Management. ... The higher recycling rate is welcomed, with public members willing to recycle more if they have the capacity to do so."

93. In September 2010 the Surrey Waste Partnership approved the revised strategy. By January 2011 all Surrey authorities adopted 'A Plan for Waste Management' as their strategy for dealing with waste.

Development of Eco Park

- 94. An extensive consultation and engagement process was carried out throughout 2010 to engage stakeholders about the Eco Park. A range of techniques was used to ensure that information was readily available across the Spelthorne borough and the county. The communications strategy was signed off by the heads of communications in SCC and SITA Surrey and managed by a joint communications group. This comprehensive approach meant that interested parties had every opportunity to contribute their viewpoints.
- 95. The stakeholder groups identified for the Eco Park are:
 - Local residents including associations
 - Political representatives including local MP
 - Statutory consultees
- 96. Throughout the extensive consultation process, described below, over 30% of comments received from local residents have been positive.
 - 1) Monthly Community Liaison Group meetings (in line with best practice planning guidance)
 - A group of local residents who put themselves forward to receive regular updates regarding aspects of the proposal and provide a voice back to the local community
 - First meeting held in June 2010 20 meetings to date
 - 2010 June, August, September, October, November
 - 2011 January, April, June, July, September, November
 - 2012 January, March, May, June, September, October
 - 2013 January, April, June
 - 2) Exhibitions in local area, 6 days in total
 - First exhibition in April 2010 to introduce the Eco Park concept (200 attendees)
 - Second exhibition in September 2010 to provide detailed messages and full update on the application (152 attendees)
 - Third exhibition in November 2010 to provide details of the planning application (74 attendees)
 - 3) Offer of presentations by Waste Disposal Authority and SITA Surrey to all Residents Associations. Attended three separate Residents Association meetings between March and October 2010.

- 4) Comprehensive presentations at Spelthorne Local Committee at July and September 2010 meetings (39 attendees from the public)
- 5) Regular engagement with and updates provided to the local MP (Kwasi Kwarteng)
- 6) Seven newsletters sent to 10,000 households in March 2010, August 2010, October 2010, December 2010, June 2011, July 2011 and to 11,000 households in May 2013.
- 7) Update Letter from Portfolio Holder and Head of Waste and Sustainability to all Councillors and Residents Associations in August and November 2010
- 8) Website updated to contain additional information as it became available in the summer e.g. traffic assessment results
- 9) Ongoing updates to Spelthorne Borough Council officers
- 10) Two drop-in sessions held in Shepperton (7 and 8 June 2013) that gave the local community an opportunity to get an update on progress and technology changes and ask questions on these
- 11) Technical meeting with members of the Committee Liaison Group on 12 June 2013
- 12) Public meeting for the local community on 13 June 2013 with presentations on latest updates from Surrey County Council and chaired by the chairman of the Shepperton's Resident Association

RISK MANAGEMENT AND IMPLICATIONS:

97. The risk management implications of this report are significant. Any technology risks have been mitigated by selection criteria and strong due diligence and will be regulated by the Environment Agency though the issue of an environment permit. The commercial risks and a financial assessment will be addressed fundamentally in the July 2013 report to Cabinet.

Financial and Value for Money Implications

- 98. Formal value for money advice and affordability considerations will be provided by the Chief Finance Officer, supported by the work of the Council's financial advisers, Deloitte, prior to contractual commitment in the July 2013 Cabinet report.
- 99. The Value for Money assessment has to take into account the overall effect on the public purse, i.e. it cannot take into account the reduced costs to the council through support from government in the form of Waste Infrastructure Grant.
- 100. The affordability assessment will consider the implications of the support from Government in the form of Waste Infrastructure Grant on the council's Medium Term Financial Plan (2013-18).

Section 151 Officer Commentary

101. All material financial and business issues and risks will be properly taken into account in the report to Cabinet in July 2013. That report will explain the Council's approach to modeling waste costs, key assumptions and risks, and will present the outcome of the value for money and affordability assessments including the financial implications to the Council over the Medium Term Financial Plan (2013-18) and in subsequent years.

Legal Implications – Monitoring Officer

- 102. The action proposed by this report is the publication of a voluntary transparency notice. Whilst this signals the Council's intention to make permitted variations to its Waste Contract it does not bind the Council in any way.
- 103. Further legal advice will be provided by the Head of Legal and Democratic Service in the July 2013 report, prior to any contractual commitment on the part of the Council. .

Equalities and Diversity

- 104. An Equality Impact Assessment (EIA) stage 1: initial screening) was completed for the purposes of the contract variation and was reviewed and approved by the Environment & Infrastructure Directorate Equalities and Diversity Group. The summary of key impacts and actions is copied below and the EIA is attached as an annex to this report.
- 105. The main potential impact arises from residents use of the community recycling centre and in particular residents with reduced mobility. The decision to proceed with the Eco Park will not materially change how the community recycling centre is operated. The operation of the community recycling centre was subject to a previous EIA in March 2009. This EIA has been reviewed and remains valid. Continued monitoring of customer feedback has not identified any particular issue relating to service users with protected characteristics.
- 106. The screening stage concluded that it was not necessary to carry out a full EIA given the minor potential impacts and actions already in place as stated in the paragraph above.

Climate change/carbon emissions implications

- 107. The County Council is committed to becoming a low carbon authority, through changes to operations within its direct control and wider sphere of influence as a community leader.
- 108. The Eco Park will contribute to the reduction in greenhouse gases, in a number of ways. Firstly, compared to the business as usual case, methane emissions will be reduced by less landfill. Furthermore there will be a reduction in carbon dioxide and nitrous oxide emissions. This arises from two areas of reduction in fossil fuel consumption; the export of energy generated on-site energy by AD, gasification and solar PV technologies, generates energy from sources with lower carbon emissions than the average for the national grid and furthermore the net reduction in transport

- movements associated with the site will reduce consumption of petroleum fuels.
- 109. An in-depth carbon balance study was commissioned for the Eco Park before the proposed contract variation. This considered direct, indirect and avoided emissions from landfill, the plant, site facilities, transport impacts and water consumption. The study concluded that the scheme would result in a 79% net reduction of greenhouse gas emissions, compared to the business as usual case. The impact of the proposed variation to the gasification process is currently subject to a revised carbon balance study. The revised detailed figures will be made incorporated in the July 2013 Cabinet report although initial modelling results show that the change in gasification technology may result in up to a further 20% carbon saving compared to the previous technology. It is anticipated that the Eco Park will continue to make a positive and significant contribution towards making Surrey a low carbon authority.

Other Implications:

110. The potential implications for the following council priorities and policy areas have been considered. Where the impact is potentially significant a summary of the issues is set out in detail below.

Area assessed:	Direct Implications:
Corporate Parenting/Looked After	No significant implications arising
Children	from this report
Safeguarding responsibilities for	No significant implications arising
vulnerable children and adults	from this report
Public Health	Public health implications are not
	considered significant for this report.
	These matters will be considered as
	part of the regulatory permissions
	related to the Eco Park.

WHAT HAPPENS NEXT:

- 111. The Council will issue a Voluntary Transparency Notice.
- 112. A subsequent report will be presented in July 2013 for Cabinet to make the decision to enter into contract based on the terms agreed with SITA and subcontractors. The report will include the value for money and affordability assessments and also provide Cabinet with evidence of DEFRA's approval.
- 113. Following approval, officers will ensure that other parties have approved the terms and conditions described in this report and, conditional on the following outstanding approvals, will complete the required variation to the Waste Contract. This is expected to take place within the current financial year.
- 114. Outstanding items:
 - Satisfaction of remaining planning conditions
 - Amendment of Environmental permit

- Footpath diversion completed
- Confirmation of parent company guarantor, contractor and subcontractor acceptance of final terms
- Confirmed affordability and value for money
- Detailed legal, financial and risk assessments
- Approval of stage 2 report (includes detailed design, detailed plans, final costs)
- Direct agreement signed

115. The Eco Park is planned to commence operations by December 2015.

Contact Officer:

Ian Boast, Assistant Director for Environment. Tel: 020 8541 9479

Consulted:

Waste Disposal Authority consultation on Eco Park proposals prior to planning permission:

(Note: this does not relate to the County Planning Authority consultation as part of the planning application as this was a separate process.)

- Local MP
- All local Residents Associations (Charlton Lane RA; Shepperton RA)
- Spelthorne Local Committee, which includes local councillors and county councillors
- Spelthorne Borough Council relevant officers (e.g. Chief Executive, Deputy Chief Executive, Director for Environment)
- 10,000 local residents
- Elmbridge Borough Council
- Adjacent neighbours
- SCC Cabinet

Consulted on report to Cabinet:

- Leader
- Cabinet Member for Transport, Highways and Environment
- Chairman Environment and Economy Select Committee
- Chief Executive
- Strategic Directors
 - o Environment and Infrastructure
 - o Business Services
 - Chief Finance Officer
 - Monitoring Officer

Informed:

All relevant stakeholders informed.

Sources/background papers:

- Cabinet Reports: 2 February 2010 14 March 2011 26 March 2013
- A Plan for Waste Management: www.surreywastepartnership.org.uk/theplan
- Consultation details and analysis: www.surreywastepartnership.org.uk/consultation
- Mott MacDonald technical advisors report Technology Review August 2012
- Mott MacDonald Technical Due Diligence M&W proposal June 2013

Annexes:

 Equalities Impact Assessment for decision by Cabinet to proceed with a variation to the Waste Disposal Project Agreement to develop the Eco Park