Wiltshire Council

Cabinet

7 November 2017

Subject:	**Highway Infrastructure Asset Management System Contract Award**
Cabinet Member:	**Cllr Bridget Wayman, Cabinet Member for Highways, Transport and Waste**
Key Decision:	**No**

Executive Summary

The highway network and associated infrastructure in Wiltshire has a replacement value of over £5 billion, and represents a significant asset and liability for Wiltshire Council. Tenders have been invited to improve the management of this asset through the procurement of Highway Infrastructure Asset Management System (HIAMS). This will provide the Authority with an improved, modern IT system to replace a number of existing systems currently being used.

The HIAMS will enable the Authority to manage operational activities better including safety inspections, street works management, street lighting and major highway maintenance schemes. The HIAMS will offer full mobile working capability for highways operatives which the Authority cannot achieve with the current systems. The HIAMS will also provide a full complement of asset analysis tools to enable the Authority to improve its understanding of the condition of its highways and associated assets and make better investment decisions.

A full open tender procedure was followed as a joint exercise with Oxfordshire County Council. The tender submissions were assessed in terms of quality and cost, using Quality/Price considerations of 70/30 described in the tender documentation. The quality assessment was evaluated jointly by representatives from Wiltshire Council and Oxfordshire County Council with the Wiltshire Council Procurement Team acting as moderators.

The outcome of the procurement is the award of individual contracts for Wiltshire Council and Oxfordshire County Council. The detailed scoring and financial information is contained in a confidential report to be considered in Part 2 of this meeting.

Proposal

The proposal is to be considered as a Part 2 Item at this meeting.

Reason for Proposal(s)

Wiltshire Council is responsible for 4,500 kilometres of roads, 1,500 bridges and over 40,000 street lights with an estimated replacement value of £5 billion. The local highway network is vital for providing connectivity for businesses and communities. Effective maintenance to ensure its availability is essential to the economic development of the county.
Procurement of a modern Highways Infrastructure Asset Management System will provide Wiltshire Council with the digital tools to improve the efficiency of key and statutory services such as major maintenance, highway safety inspections, street lighting repairs, traffic management and road space co-ordination. It will enable the Council to achieve long-term improvements in asset condition through improved investment decisions and to deliver an efficient and modern highways service.

Following a full open procurement exercise with Oxfordshire County Council the submitted tenders have been assessed in terms of quality and price.

The most advantageous tender for the Councils, taking into account quality and price, should be accepted in accordance with the procurement procedures. The detailed scoring and financial information is contained in a confidential report to be considered in Part 2 of this meeting.

Alistair Cunningham, Corporate Director

Wiltshire Council

Cabinet

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Subject: **Highway Infrastructure Asset Management System Contract Award**

Cabinet Member: **Cllr Bridget Wayman, Cabinet Member for Highways, Transport and Waste**

Key Decision: **No**

Purpose of Report

1. To seek approval to award a contract for a Highway Infrastructure Asset Management System.

Relevance to the Council's Business Plan

2. The Wiltshire Council Business Plan 2017 – 2027 sets out the vision to create strong communities, with priorities for growing the economy, strong communities and protecting the vulnerable. As part of growing the economy it is acknowledged that it is necessary to bring the county's roads up to an acceptable state. The goal is that road infrastructure is improved and to:

    - Improve asset management and the use of investment to improve the condition of Wiltshire roads (implementing our Highways Asset Management Strategy).

    - Promote and further development the MyWiltshire platform to improve and increase the reporting of issues.

Background

3. The Council is responsible for the maintenance of the roads in Wiltshire, with the exception of motorways, trunk roads and those in private ownership. The highway network represents the Council's biggest asset, and is possibly its most significant potential liability. Maintaining a fit for purpose highway network is crucial to support economic development and to ease the movement of goods and people.

4. The highway network in Wiltshire comprises 4,500 kilometres of road, 3.9 million square metres of footway, 1,500 bridges and over 40,000 street lights with a replacement value of over £5 billion. It would cost over £330 million to resurface all of the roads, with additional costs to repair structural damage.

5. The condition of the county's roads is important to the public. This is demonstrated by the results of the Council's People's Voice and the National Highways and Transportation (NHT) surveys, which indicate low levels of

public satisfaction with road conditions. In the Council's consultations on budget setting, expenditure on roads is the service area where the public consistently wish to see more spent.

6. The Council applies the principles of asset management to the maintenance of the highway network. This involves developing lifecycle plans to demonstrate how funding and performance requirements are achieved through appropriate intervention and investment strategies, with the objective of minimising expenditure while providing the required performance.

7. Asset Management has been widely accepted by Central and Local Government as a means to deliver a more efficient and effective approach to the management of highway infrastructure assets through longer term planning, ensuring that standards are defined and achievable for available budgets.

8. Wiltshire Council recognises the importance of adopting such an approach for its most valuable asset, and has developed and published a Highway Asset Management Policy and Strategy. This demonstrates Wiltshire Council's commitment to ensuring the public can safely use the highway and contributes to the achievement of its corporate goals.

9. A vital part of implementing and maintaining an asset management approach is through the use of Asset Management Systems to provide information on the location, type and performance of highway infrastructure assets. They can support decision making and the operational and strategic parts of the service. Knowledge of the asset, its condition and its performance is vital for making the right investment decisions, as well as for demonstrating to senior decision makers and stakeholders the overall investment requirements.

10. The use of Wiltshire's Asset Management Systems and the analysis of Wiltshire's asset data were used to make the case for the 'Local Highways Investment Fund 2014 – 2020' to address the backlog of maintenance required on the network. This initiative has increased the annual road maintenance funding in Wiltshire to £21,000,000 in recent years.

11. In 2014 the Council received £3,010,025 funding from the Department for Transport (DfT) as part of the weather repair fund after the severe weather and flooding in early 2014. Wiltshire Council also secured £3,063,000 through a bidding process where local highway authorities had to demonstrate a number of practices, including the use of asset management principles and innovation. The use of asset management data was vital in achieving this additional funding.

12. The DfT has set aside £578 million nationally between 2015/16 – 2020/21 as an incentive fund scheme to reward local councils who demonstrate they are delivering value for money in carrying out cost-effective improvements. Local councils in England submit an annual self assessment questionnaire in order to be awarded a share of the incentive fund. The questionnaire consists of 22 questions covering topics relating to asset management and maintenance operations, and authorities must score themselves out of 3 levels. In order to achieve highest Band 3 the Local Authority needs to have robust asset management procedures.

13. The Wiltshire Council latest assessment indicates that Band 3 has been achieved, which ensures that Wiltshire receives its full allocation from the incentive fund. By 2020/21 the difference between achieving Band 1 and Band 3 for Wiltshire Council would be £2,782,000 annually, so it is important that Wiltshire maintains its Band 3 status.

14. Asset management and the use of Asset Management Systems have become increasingly important for highways departments across the UK, especially in view of the DfT Incentive Fund and the need to ensure value for money. Highway Asset Management involves using long-term planning and an understanding of roads, bridges and drainage assets and their condition to help deliver a more efficient and cost-effective maintenance service. It is important to have appropriate systems in place to enable effective asset management. Approving the award of this contract will enable the implementation of a Highways Infrastructure Asset Management System that strongly focuses on mobile working, analysis tools and operational efficiency.

Main Considerations for the Council

Invitation to Tender

15. The full open procurement of the Highway Infrastructure Asset Management System has been carried out jointly with Oxfordshire County Council in order to reduce costs and provide an attractive package for bidders.

16. In compliance with the open tender process all tender documents were made available to potential bidders on 17 July 2017 for return by 22 August 2017. At the request of Oxfordshire County Council this deadline was extended to 22 September 2017. The tender documents included a Quality Questionnaire and a Price List for the bidders to complete.

17. The Quality Questionnaire comprised 3 parts:

Part 1 - Mandatory Requirements - Bidders must meet these mandatory requirements

Part 2 - Quality Evaluation Questions - This comprises of four sections:

- Solution, Delivery, Support and Maintenance
- Data Analysis and Information Management
- Technical and Functional
- Ease of Use and Integration

Part 3 - Live System Demonstration – This comprises of four sections the details of which were sent to bidders seven days before their demonstration:

- Scenario A: Planned Works
- Scenario B: Inspections and Defect Repair
- Scenario C: Street Works
- Scenario D: Street Lighting

18. The tenderers had to complete the Price List of items which reflected the solution and services to be procured through the contract.

19. The assessment has been based on 70% quality and 30% price as set out in the tender documents.

Quality Assessment

20. The Quality Questionnaires were assessed and scored by representatives from Wiltshire Council and Oxfordshire County Council's Highways and ICT teams. The weightings given to each aspect of the Quality Questionnaire and the tender assessment procedure are described in **Appendices 1 and 2 and include worked examples.**

21. The Quality Scores were calculated for each tenderer by dividing their initial quality scores awarded by the panel by the highest initial quality score. Thus the tenderer with the highest initial quality score from the Quality Evaluation was awarded a score of 100.00% and all the others are awarded Quality Scores pro rata to their initial quality scores (rounded to two decimal places).

22. The outcome of the tender quality assessment is reported in the Part 2 item to be considered at this meeting.

Price Assessments

23. Tenderers completed and submitted a Price List which contained a schedule of rates for the solution proposed and items of work required under the contracts. This included rates for software, licensing and support. The tender assessment procedure for the prices submitted is described in **Appendix 3 and includes a worked example.**

24. The lowest value calculated from the price assessment was awarded 100%. The cost scores for all the other tenderers were calculated by dividing the lowest value by each tender value in turn.

25. The outcome of the price assessment is reported in the Part 2 item to be considered at this meeting.

Comparison of Bids

26. The tender assessment process has recognised the vital importance of delivering a high quality solution with strong mobile working and analysis tools, and has also recognised the importance of a cost-effective solution. Consequently, bids have been evaluated on a 70/30 Quality/Price basis in order to reflect the relative importance of these two aspects for this contract.

27. The quality and price scores of the tenderers were combined to determine the preferred contractor. The full details of the assessment are described in the Part 2 Item to be considered at this meeting.

Next Stages

28. Following a decision to award the contract there will be a ten day standstill period during which other tenderers may make a legal challenge to the award of the contract.

29. Subject to the outcome of the decision by Cabinet, and assuming no legal challenge is received; the intention is to begin the implementation period. There will be a significant amount of preparatory work for the successful bidder and Council staff in arranging the necessary resources, configuration, data transfer and training for the contract start date of 1 April 2018.

Overview and Scrutiny Engagement

30. The Environment Select Committee Chairman and Vice Chairman were briefed about the procurement exercise on 11 October 2017 by Parvis Khansari and Paul Bromley. The meeting discussed the budget and functionality of the current systems, as well as the benefit of procuring a new single system.

31. The ESC Chairman and Vice-Chairman were very interested in the new system and felt that the Committee should have the opportunity to be updated by Officers. It was agreed that a presentation will be received by the Committee at 21 November meeting on the procurement process, how the new system will inform the capital programme and the IT support required to help progress the project.

Safeguarding Implications

32. There are no safeguarding implications.

Public Health Implications

33. Improved understanding of asset condition and targeting investment in road maintenance through the implementation of the Highway Infrastructure Asset Management System will have benefits for public health. The improved road surfaces, better skid resistance and associated safety improvements would help reduce the numbers killed and injured on the road network. These improvements would complement the other measures to improve road safety, such as traffic calming and speed limits, being introduced through the Local Transport Plan funding and the Community Area Traffic Groups.

34. The improved road surfaces, particularly on the minor urban roads, would be of benefit to cyclists and pedestrians, and with suitable publicity campaigns could be used to encourage these healthier means of transport. At present the condition of some of the urban roads may discourage cycling as cyclists are adversely affected by poor road conditions and uneven or damaged surfaces.

35. Roads in poor condition in urban areas can result in disturbance and noise for residents, especially on busier routes carrying heavy goods vehicles at night. Better road surfaces could result in reduced background noise in residential areas, with potential mental and physical health benefits. The new Highway

Infrastructure Asset Management system will help improve the maintenance of the highway network.

Procurement Implications

36. The procurement has followed the open procedure, with the relevant OJEU notices and procedures being complied with.

37. Wiltshire Council's Procurement Team has led on this joint procurement with Oxfordshire County Council, and has monitored the procurement and tender assessment processes to ensure they are carried out properly, to reduce the risks, and providing a procurement process that is easily understood, clear and fair.

38. The quality assessment was scored jointly between Wiltshire Council and Oxfordshire County Council staff with relevant experience, and the price assessments were undertaken separately. The procurement will result in each Authority awarding a separate contract.

39. The detailed scoring and financial information on the tender assessment is contained in the report to be considered in Part 2 of this meeting.

Equalities Impact of the Proposal (detailing conclusions identified from Equality Analysis, sections 4 and 5)

40. The improvements in road condition and safety anticipated with the improvement in maintenance decisions achieved through the implementation of the Highway Infrastructure Asset Management System would be expected to benefit all road users, but especially the more vulnerable, including pedestrians, cyclists and other non-vehicle users.

41. The highway network is important to road users, local businesses and public transport operators. Improving maintenance decisions and the Authority's ability to manage traffic with a modern software solution will help to ensure that transport disruption and its impact on users is kept to minimum.

Environmental and Climate Change Considerations

Question 1

42. **Will the proposal result in energy consumption associated with the service area increasing, decreasing or remaining roughly at current levels? Please consider emissions from both static[1] and transport[2] sources. For the purposes of this question contractor emissions are to be included as part of the energy consumption of the service area that manages the contract.**

43. The proposal should result in energy consumption associated with the service area decreasing. The highways service is making large strides in improving efficiency embracing digital and mobile technology, and the development of the My Wiltshire platform has been leading the way. By allowing staff to carry out inspections and contractors to record repairs in the field we will be

reducing the use of paper and the double handling of information, which will have a positive environmental impact. The procurement of a Highway Infrastructure Asset Management System will enable a more mobile workforce by moving street works inspections, street lighting and major maintenance onto mobile platforms, enabling more efficient workload and travel planning and further reducing the use of paper and the need for staff to return from the field to the office. It will ensure all data is held in one system and is easily accessible to staff.

Question 2

44. **What measures have been introduced, or are planned to be introduced, to reduce the carbon emissions associated with the proposal.**

45. A modern, highly mobile Asset Management System providing the tools to develop a well-informed preventative maintenance programme will enable traffic disruption to be kept to a minimum. With unplanned maintenance the delays to traffic and associated fuel consumption can be considerable. In the longer term a more robust highway network, with roads in better condition, would require less reactive maintenance and reduced travelling to respond to potholes and localised defects.

Question 3

46. **From the perspective of day to day environmental management, what risks associated with the proposal have been identified and how are they going to be mitigated?**

47. There are no major day to day risks associated with this proposal. The award of a Highway Infrastructure Asset Management System Contract will provide the Authority with the software to improve the management and efficiency of the Highways Service.

Question 4

48. **If the service or contract is planned to last longer than 20 years, how have issues related to the unavoidable consequences of climate change been integrated and mitigated? For example, increases in the mean summer temperature and increased vulnerability to adverse weather events like heavy snow or rain leading to flooding.**

49. The Highways Infrastructure Asset Management System Contract will have a maximum contract period of ten years. The road network is particularly vulnerable to the effects of climate change. In recent years we have seen the effects of severe winters which have resulted in damage to the roads and an increase in the number of potholes. In long periods of hot weather the surfaces can be damaged by melting, resulting in roads becoming slippery or deforming under traffic loads. By building up a greater understanding of network condition and improving the efficiency of our operations through the use of a modern Highway Infrastructure Asset Management System it is possible to make more informed maintenance decisions to arrest deterioration and minimise the effects of climate change.

Risks that may arise if the proposed decision and related work is not taken

50. By not proceeding with the award for the implementation and delivery of the Highway Infrastructure Asset Management System contract, it is likely that the planned work on the network will not deliver maximum benefits. Road conditions could deteriorate, accidents increase, and public satisfaction would decline further.

51. By not taking the opportunities to use the latest software technology in the highways industry, Wiltshire Council could be at risk of failing to improve the efficiency and effectiveness of its operations, which includes major and reactive maintenance, improving road safety, improving road condition and improving traffic congestion. Embracing the latest technology would enable Wiltshire Council to better manage and understand its highway assets which would help reduce the risks of damage, injury or death to Wiltshire's road users.

Risks that may arise if the proposed decision is taken and actions that will be taken to manage these risks

52. There is a risk that, despite the stringent procurement procedure and assessment processes, the selected solution does not meet expectations and performance is not as good as anticipated. The potential issues, especially with regards to performance, are well understood and a contract management process is being put in place to manage those risks.

53. All highways staff will need to be trained in the use of a new software solution. In order to reduce risks there will be a four month mobilisation period where all staff will receive the training they need to use the new system to its full potential. Teams will be required to have staff trained to 'super user' level with the confidence to liaise with the supplier over queries and problems. 'Super users' will support the development of their teams and maximise their use of the system.

54. There is a small risk that data could be lost during migration to the new system. This has been mitigated by a detailed implementation plan, and where possible data will be backed up before transferring it to the new system. No sensitive data is used in this exercise.

55. There is a risk that there could be a legal challenge to the contract award. There is a ten day standstill period following award during which this could happen. The processes followed in procuring the contract have followed the required procedure in order to reduce the risk.

Financial Implications

56. The financial implications of the award of the contracts are discussed in the Part 2 report which will be considered at this meeting.

Legal Implications

57. The Council has a duty under the Highways Act 1980 to maintain the county's roads. The highway inspection procedures, policies and improvement plans ensure that this duty is fulfilled. An improved Highway Infrastructure Asset Management System will help the Council improve the way it manages its assets and statutory obligations under this Act.

58. The Council has a duty under the Traffic Management Act 2004 to manage its road network to make sure that traffic can move freely on its roads and on the roads of other traffic authorities. It also designates powers to local authorities to direct when works are carried out or where new apparatus is placed. Greater efficiency and improved decision making can be achieved through the introduction of a modern Highway Infrastructure Asset Management System with mobile capabilities.

59. The procurement process was carried out in accordance with the Council's policies and procedures contained within its Constitution and any European legislation as applicable.

Options Considered

60. Not proceeding with the contract award will deny the Council the opportunity to embrace the latest software technology in the highways industry. Wiltshire Council could be at risk of failing to improve the efficiency and effectiveness of its operations, which includes major and reactive maintenance, improving road safety, improving road condition and improving traffic congestion.

61. The tenders submitted for the contracts have been assessed in terms of quality and price in accordance with the agreed procedure, and the most suitable tenderer has been identified.

Conclusions

62. The result of the assessment to identify the preferred bidder is described in the Part 2 item to be considered at this meeting. The most advantageous tender for the Council, taking into account quality and price, has been identified in accordance with the procurement procedures.

Parvis Khansari (Director - Highways and Transport)

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Date of report 26 October 2017

Appendices

Appendix 1 - Tender Evaluation Procedure with Worked Example
Appendix 2 - Quality Evaluation Procedure with Worked Example
Appendix 3 - Pricing Evaluation Procedure with Worked Example

Background Papers: None