4 February 2015	ITEM: 6						
Standard and Audit Committee							
Bridge Maintenance Inspections							
Wards and communities affected:	Key Decision: Non Key						
Report of: Councillor Oliver Gerrish, Portfolio Holder Highways and Transportation							
Accountable Head of Service: Ann Osola, Head of Transportation and Highways							
Accountable Director: David Bull, Director of Planning and Transportation							
This report is Public.							
This report is To provide an overview of the Audit Report (Oct 2014) carried out on Bridges Maintenance Inspections.							

Executive Summary

This report sets out the findings from an Audit of the Bridge Maintenance Inspections undertaken as part of the approved internal audit periodic plan. The report identifies deficiencies in the inspection and maintenance regime in place to ensure the safety, integrity and adequacy of structures within the highway for use by the public.

The Council has complied with its duties to undertake the two year General Inspections, however, the (six to twelve year) Principal Inspections/Assessments have not been undertaken due to insufficient funding for bridges.

The two year General Inspections enable a regular review of the state of the bridge condition and which provides a safety review and the Principal Inspections are a more detailed inspection where more inaccessible areas are inspected and smaller or less visible defects (which could cause future problems) can be found and plans prepared to repair them before they develop.

The report includes an action plan which details the recommended control measures and improved risk management to be put in place for the Council to meet its statutory duties.

A recovery programme is recommended to meet the objectives outlined in the report. This programme will require increased investment in the bridge maintenance inspection regime.

- 1. Recommendation(s)
- 1.1 To note the contents of the report.

2. Introduction and Background

- 2.1 Thurrock Council as the highway authority has statutory duties to maintain the public highway and associated structures in a state that is safe and fit for use. These duties are mainly contained in the Highways Act 1980. For bridges the national code of practice is the Management of Highway Structures and the Department for Transport's BD 63/ 07 supplemented by Interim Advice Note (IAN) 171/12 which sets out risk based inspection intervals.
- 2.2 There are 115 bridges and other structures in Thurrock. Each should have a General Inspection every two years and a detailed Principal Inspection every six years (subject to a risk assessment) to identify any major defects and to provide data for preparation of major bridge maintenance programmes. In addition bridge assessments are undertaken every twelve years (or in conjunction with Principal Inspections) to determine the live load capacity of structures which informs the need to strengthen or place weight restrictions on bridges.
- 2.3 An audit of bridge maintenance was carried out as part of the approved internal audit periodic plan for 2013/14. The Final Report was issued in October 2014.
- 2.4 The audit was designed to assess the controls in place to manage the following objective and risks.
 - Objective There is adequate inspection and maintenance regime in place which ensures the safety, integrity and adequacy of structures within the highway for use by the public
 - Risk Highway bridges may not be subject to periodic inspection to determine their condition and to record defects.
 - Risk There may not be an approved programme of works in place and preventative maintenance works may not be carried out in a timely manner which could result in an increased whole-life cost of the structure.
 - Risk Performance Indicators may not have been developed or monitored.
- 2.5 The audit produced the conclusion that:

Taking account of the issues identified, the Council cannot take assurance that the controls upon which the organisation relies to manage this risk are suitably designed, consistently applied or effective. Action needs to be taken to ensure this risk is managed.

2.6 The audit produced an action plan to improve the bridge inspection management.

Improvements in Bridge Maintenance - Implementation of recommendations.

- 2.7 The bridge service is a part of the Highways Service. The Department for Transport (DfT) funded Highways Maintenance Efficiency Programme (HMEP) carried out a Strategic Review of Thurrock Highways using a team from the Local Government Association.
- 2.8 The scope of their work covered all aspects including strategic vision, management processes, communication and delivery of the service.
- 2.9 The review and recommendations of the Strategic Review were presented to the December 17 2014 Cabinet meeting. These recommendations will improve bridge management as they include improved processes across highways including asset management.
- 2.10 The Audit produced an action plan (below) to implement their recommendations. This includes management comments which have been updated with red text.
- 2.11 An additional £150,000 has been found from existing budgets for Principal Inspections. Inspection funding in future years will depend on available budgets allocated on a risk and network priority basis.
- 2.12 A main purpose of the Principal Inspection is to identify defects before they become a problem or more expensive to repair. To gain best value from the inspections, funds will need to be made available to carry out the identified repairs.

Ref	Recommendation	Categorisation	Accepted (Y/N)	Management Comment	Implementation Date	Manager Responsible
1.1	As recommended by the Consultants (Pell Frischmann), a recovery programme for principal inspections should be established as soon as possible. This should include a risk assessment to determine the length of time required between inspections. Thereafter, a programme of regular principal inspections should be carried out in line with the risk assessment. This will reduce the likelihood of major defects going undetected and ensure the Council meets its statutory responsibilities.	High	Y	Agreed – a recovery programme is being established and is reflected in current budgets and work programmes. A prioritised list based on the DfT IAN 171/12 has been produced	October 2014	Les Burns
1.2	Once Principal Inspections are carried out, a more accurate BCI should be obtained by utilising the data from both principal and general inspections. This will ensure the Council has accurate information on the condition of its bridge stock.	Medium	Y	BCIs will be refined as more detailed structural information comes forward through principle inspections Currently the BCIs are based on General Inspections. As Principal Inspections are completed then the results will be used.	Ongoing	John Devono
1.3	In line with the Management of Highways Structures Code of Practice (MHSCOP), the Council should review how it stores its data and determine whether Asset Management software should be purchased. This will assist in targeting resources to those structures that are highest priority.	Medium	Y	Thurrock is progressing a phased upgrade to its Highways Asset Management System, based on Symology software. This is ongoing and a part of the HMEP programme.	Ongoing	Les Burns
1.4	The programme of strength assessments to determine whether highway bridges achieve the required	High	Y	This is being programmed into the Recovery Programme Prioritisation. As 1.1 & 1.2 this is	October Ongoing	John Devono

Ref	Recommendation	Categorisation	Accepted (Y/N)	Management Comment	Implementation Date	Manager Responsible
	live load capacity should be undertaken as soon as possible. This work could be programmed to coincide with principal inspections and should help to improve the stock and reduce the likelihood of legal or reputational damage.			based on using the Principal Inspection information as it becomes available.		
1.5	Senior management should develop some key performance indicators to show how the service is performing and help identify any areas for improvement. This will help them to target resources more effectively and efficiently.	Medium	Y	This will be undertaken in relation to HAMP best practice and corporate risk management.	October Part of the overall HMEP service improvements	Ann Osola

3. Issues, Options and Analysis of Options

- 3.1 Since the audit the action points are being addressed now as a part of the overall Highways Service HMEP strategic review actions.
- 3.2 The service agrees and accepts the recommendations of the Audit report and the actions will be implemented.
- 3.3 The service is putting in place funding of £150,000 in 2013/14 to implement some Principal Inspections/Assessments as part of a recovery programme
- 3.4 The costs of the Action plan will be found from prioritisation of existing budgets or from the resources provided for the implementation of the HMEP programme which is subject to separate consideration.
- 3.5 The Council has a statutory duty under section 41 of the Highways Act 1980 to maintain adopted highways to ensure that they are in a safe condition in accordance with agreed standards. Any failure to discharge this duty leaves the Council liable to third party claims for compensation, although there is a defence under section 58 if the Council has a reasonable system of inspection and maintenance. The actions from this Audit will improve the system of inspection and bridge management.
- 3.6 The proposals in this report if implemented will lead to a safer, more reliable and responsive and service for the benefit of all users.

4. Reasons for Recommendation

- 4.1 This report is for information only there are no recommendations attached.
- 5. Consultation (including Overview and Scrutiny, if applicable)
- 5.1 Not applicable.
- 6. Impact on corporate policies, priorities, performance and community impact
- 6.1 This report is consistent with corporate priorities especially "protecting and promoting our clean and green environment".

7. Implications

7.1 Financial

Implications verified by: Mark Terry

Principal Finance Officer

The financial implications are included in the text body of this report.

7.2 Legal

Implications verified by: Alison Stuart

Principal Solicitor

The Legal Implications are included in the text body of this report.

7.3 **Diversity and Equality**

Implications verified by: Lynn Gittins

Senior Administration Officer Community Development & Equalities

The diversity implications are included in the text body of the report.

7.4 **Other implications** (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder)

None

- 8. Background papers used in preparing the report (including their location on the Council's website or identification whether any are exempt or protected by copyright):
 - Thurrock Cabinet December 2014 Item 18 Highways Efficiency Maintenance Programme, Strategic Review and Recommendations for Improvement
 - Management of Highway Structures Roads Liaison Group
 - BD 63/07 & IAN 171/12 Department for Transport.

9. Appendices to the report

Appendix 1Bridge maintenance Inspections, Internal Audit Report

Report Author:

Les Burns Chief Highways Engineer

Planning & Transportation