

**Kent Highway Services, Capital Works for 2008/09  
Assessment, Strengthening and Structural Maintenance of Structures**

A report by the Director, Kent Highway Services, to the Highways Advisory Board on 8 July 2008

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**Introduction**

1. This report advises Members of the schemes from which the programme of capital works on highway structures will be delivered in 2008/09
2. The capital allocation made for the “Assessment, Strengthening and Structural Maintenance” of highway structures in 2008/09 is £1.666 million. This is below the bid in the Local Transport Plan of £4.17million intended to work towards a regime of ‘Good Asset Management’ as recommended in the ‘Code of Practice for the Management of Highway Structures’ by 2011 and to meet the targets in the LTP for the Strengthening Index and Bridge Stock Condition Indicators.
3. It is also less than the figure of £3.3 million identified in a report to the Director of KHS in August last year, prepared in response to concern about the potential for closure of weak bridges due to delays in the remedial programme. This sum was aimed at completing the strengthening programme by 2012 whilst hopefully maintaining the status quo on overall condition of the asset.
4. A programme of works is being prepared to enable output to be managed both within this original allocation but also in anticipation of any improved funding should additional resources become available.

**The Strategy**

5. A case has been made and bid submitted for a share of any additional funding which might become available later in the financial year with the aim of delivering as much as possible of the programme outlined in the report to the Director referenced above.
6. To manage delivery within budget at whatever amount, the planned works have been scheduled at three levels as detailed below and are being prepared for staged implementation through the year.
7. ‘Unavoidable Works’ These comprise of schemes which are:
  - Already in progress;

- essential safety works;
  - committed through the completion of advanced ecological works and/or approvals; and
  - where land agreements have agreed access times and terms which it would be detrimental to rearrange.
8. “Must do” works are those where there is real potential for risk now in failing to deal adequately and timely with the existing situation.
9. “Should do” works are those remaining schemes which are made up of the programme identified in the report in (3) and (5) above.
10. The total budget needed to deliver the schemes is variously:
- “Unavoidable” Works - £1,435.
  - “Must do” Works + (a) - £2,835
  - “Should do” Works + (b) - £3,355
11. Decisions on the implementation of schemes will be made at the time when/if additional monies become available but in any event in July, September and December.
12. Schemes will none the less be fully prepared to take advantage of any situation or ultimately, for an April 09 start.
13. All the schemes are listed in the accompanying Appendix A.

#### **Other potential influences**

14. Three review initiatives are underway which may produce further contingency opportunities in relation to works of maintenance and upgrade on structures:
- (a) Finalising the Capital Programme of Work for ensuring the requirements of the EU Tunnel Safety Directive (2004) and the Road Tunnel Safety Regulations 2007 are met in respect of Ramsgate Tunnel.
  - (b) A review to locate bridges of significant strategic importance to the highway network and identify what action is necessary to mitigate their

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potential non-availability. This was the subject of a report to the Alliance Board in April.

- (c) Implementing the Code of Practice for the Management of Highway Structures which will focus more attention on improving maintenance regimes. This too was reported to the Alliance Board in April.

**CONCLUSION**

15. The scheme preparation programme for 08/09 is being progressed to facilitate the ability to respond to any additional budget provision which might become available during the financial year.
16. Taking advantage of such opportunities is essential to ensure delivery of a Structure Asset which is both fit for purpose and moves towards the recommendations for Good Asset Management detailed in the 'Code of Practice for the Management of Highway Structures' as they relate to the KHS defined levels of service.
17. Members are asked to note this report.

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**Background Documents:**

- Local Transport Plan 2006 to 2011
- Report to Director KHS; Bridges Vulnerable to Closure – Status Report August 2007
- Identification of Strategically Important Structures. A report to the Alliance Board 24/4/08
- Implementation of The Code of Practice for the Management of Highway Structures – Current Status within KHS.

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Structures Management					Appendix A
2008/09 – Planned Capital Programme of Bridge Assessment, Strengthening and Structural Maintenance					
Road and Area	Bridge Name	Bridge Number	Funding Required in 08/09 - £'000s  Incl.design fee		Comments
<b>Structures on PRN</b>					
A25	Botany Bay	332	50	A	Essential brick arch repairs. Awaiting track possessions to do work. Extent of work may vary as a result.
<b>Structures on 'A' Road Network</b>					
Eastbound  A21 Road Slip. WK	Vauxhall Br.  Tonbridge	74	150	A	Reconstruction of failing head and tail walls. Deferred from 07/08 due to ecological restrictions.

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<b>Structures on Remainder of Adequate Network</b>					
U/C EK	Harnet Street Culvert, Sandwich	1946	30	A	Strengthening/relining of rapidly deteriorating culvert in critical junction location. Difficult access limits options for ongoing maintenance. Carry over from 07/08. Complete.
B???? EK	Barham (Valley Road)	254	350	A	Replacing weak bridge and increasing capacity. £100k from drainage flood relief budget. Advance works started in March in prep. for Utility work and main scheme. In progress.
B2162 MK	Twyford Bridge, Yalding	73	100	A	Realignment of west end wing wall to eliminate restrictive dog-leg to facilitate unrestricted use and protect the public on and below the bridge. Deferred in 07/08 awaiting EH sanction which has now been received.
B2188	Longbridge	129	15	A	Anti scour works and brickwork repairs
B????	Royal Parade Viaduct	3245	150	A	Replacement of spalling balusters. Phase 1 essential safety work over public thoroughfare. Could be extended. In progress.

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<b>Structures on Other Routes</b>				
<b>Road and Area</b>	<b>Bridge Name</b>	<b>Bridge Number</b>	<b>Funding Required in 08/09 - £'000s  Incl.design fee</b>	<b>Comments</b>
C186 MK	Bilsington Bridge over Royal Military Canal Bilsington	385	10	<b>A</b> Reconstruction of bridge, which had failed it structural assessment, in accordance with strategy for bridges over Royal Military Canal. Carry over from 07/08. Bridge strengthening programme. Complete.
C185	Stone Reaches	671	200	<b>A</b> Replacement of weak and weight restricted bridge. Bridge strengthening programme. Carry over from 07/08. In progress.
C696 EK	Radnor Bridge Folkestone	2351	170	<b>B</b> Phase 4 and completion of restoration work to eliminate risks from falling render and protect fabric of structure. Overpainting. Track possessions agreed for summer.
U11340 MK	Stile Farm Br. Chilham	1637	610	<b>B</b> Reconstruction of bridge over R. Great Stour, weight restricted to 3T due to failed assessment. Bridge strengthening programme.

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U11475 EK	Paternoster Ford Br. St Mary in the Marsh	706	200	C	Reconstruction of bridge which has failed its structural assessment currently weight restricted at 3T. Bridge strengthening programme
U/C	Salters	732	100	C	Strengthening weak bridge. Bridge strengthening programme
D1455	Lansell Cottage	2766	100	C	Replacement of weak and weight restricted bridge. Bridge strengthening programme
D1589	Barkley	80	140	B	Reconstruction of weak and weight restricted cast iron beam bridge. Bridge strengthening programme
C55	Shipland	148	130	B	Reconstruction of weak bridge. Bridge strengthening programme
	<i>Tannery Footbridge</i>	3466	(50)	R	<i>Replace deteriorated laminated timber footbridge Need being reviewed with local stakeholders. Reserve scheme.</i>
U/C EK	Seaview Terrace, Ret. Wall, Margate	6708	45	C	Possible joint scheme with Thanet District Council to strengthen retaining wall by infilling toilet block and provide vehicle barrier. Deferred to allow further discussion with Thanet DC.
U23785 EK	<i>Barham "The Street" Bridge, Barham</i>	231	(225)	R	<i>Reconstruction of bridge to secure increase in flow capacity recommended on this section of the Nailbourne following flooding a few years ago. Scheme will also resolve structural weakness identified in parts of the structure. Reserve scheme.</i>



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<b>Other Works</b>				
	Various Sites		150	<b>B</b> Replacement of ageing Aluminium parapet in accordance with national guidelines. Slipped from 07/08.
	Various Sites		20	<b>A</b> PTSI and Half Joint investigations. Carry over from 07/08. In progress.
	Various Sites		75	<b>C</b> Structural maintenance works. Dealing with backlog of structural defects
	Interim Measures		10	<b>A</b> Ongoing protection of bridges awaiting strengthening.

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	Assessments and Principal Bridge Inspections		200	<b>A</b> Ongoing programme to meet cycle of principal inspections which are the first stage of bridge assessment reviews and undertaking any necessary structural assessments.
	Various design and site supervision		200	<b>A / B</b> Completing scheme preparation, supervising site works, on site design and prep.of as built records
	Forward design for 09/10 schemes		100	<b>B</b> Will be allocated as the year progresses for 09/10 schemes.
	Implementation of new Code of Practice for Management of Highway Structures.		50	<b>B</b> Gap Analysis, Data Collection and Development of Database. Required to meet Government requirements for Good Asset Management and Resource Account and budgeting. Agreed by Alliance Board
	<b>Total</b>		<b><u>£3,405,000</u></b>	Original allocation is £1.666million. Income of £100k sought from drainage flood relief fund. Outturn will be managed within final budget