

# Mowthorpe Bridge, Everley near Scarborough

**Core Sampling** 

**For Ringway** 

May 2014



RAM Services Limited
Structural Survey, Investigation and Repair
www.ramservices.co.uk



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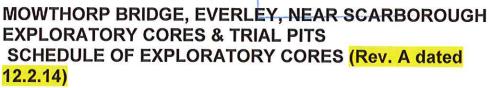
Report compiled by

N K Dymott Report date - 13 May 2014

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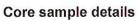




Core	Location of Core	Reference	Diameter	Estimated	Cumulative
No.		Photograph Number	Of Core	Length of Core	Total
NO.		Number	(mm)	(mm)	Core Lengths
1	Northern Span West Elevation	2			Lenguis
1	Northern Span West Elevation  Northern Spandrel Wall	3	50	450 (Was 600)	
2	Northern Span West Elevation	3	50	600	
^	Northern Section of Arch Ring	3	30	(Was 2000)	
3	Northern Span West Elevation	3	50	450	
	Southern Spandrel Wall	, and the second		(Was 600)	
4	West Elevation	3	50	450	
	Column over Pier Cutwater	(29)		(Was 1000)	
5	Southern Span West Elevation	3	50	450	Super-
	Northern Spandrel Wall			(Was 600)	structure = <u>4.8m</u>
6	Southern Span West Elevation	3	50	450	- <u>4.0111</u>
	Southern Spandrel Wall			(Was 600)	(Was 9.6m)
7	Southern Span East Elevation	4	50	450	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Southern Spandrel Wall			(Was 600)	
8	Southern Span East Elevation	4	50	600	
	Southern Section of Arch Ring		20	(Was 2000)	
9	Southern Span East Elevation	4	50	450	
10	Northern Spandrel Wall Northern Span West Elevation	4		(Was 600)	
10	Column over Pier Cutwater	4	50	450 (Was 1000)	
11	South West Wing Wall Top	5	50	(vvas 1000) 450	
	Could vest wing wan rop	3	50	(Was 900)	
12	South West Wing Wall Bottom	5	50	600	
	South Front Fring Fran Bottom	Ü	00	(Was 1500)	ř.
13	North West Wing Wall Top	6	50	450	
			A 5	(Was 900)	Wing
14	North West Wing Wall Bottom	6	50	600	Walls
				(Was 1500)	= <u>4.2m</u>
15	North East Wing Wall Top	7	50	450	(Was 9.6m)
	_			(Was 900)	(vvas 3.0111)
16	North East Wing Wall Bottom	7	50	600	
			// con/	(Was 1500)	
17	South East Wing Wall Top	8	50	450	
40	O			(Was 900)	
18	South East Wing Wall Bottom	8	50	600	
				(Was 1500)	

Original Schedule prepared by Phil Clark, Project Manager Structures, Jacobs UK Ltd on 4 November 2013.





Core ref	ef Description		
4953/01	Fine aggregate concrete well compacted	200mm	
4953/02	Fine aggregate concrete well compacted	600mm	
4953/03	Fine aggregate concrete well compacted	300mm	
4953/04	Fine aggregate concrete well compacted	250mm	
4953/05	Fine aggregate concrete well compacted	200mm	
4953/06	Fine aggregate concrete well compacted	250mm	
4953/07	Mixed aggregate size concrete well compacted	600mm	
4953/08	Mixed aggregate size concrete well compacted	500mm	
4953/09	Fine aggregate concrete well compacted	550mm	
4953/10	Fine aggregate concrete well compacted	350mm	
4953/11	Coarse aggregate concrete well compacted	550mm	
4953/12	?? aggregate concrete well compacted. Clay beyond 350mm	350mm	
4953/13	Fine aggregate concrete to 100mm. Coarse aggregate concrete, voided / fragmented 100 – 300mm	300mm	
4953/14	Fine aggregate concrete well compacted towards ends with extensive small voids in centre	450mm	
4953/15	Coarse aggregate concrete with variable compaction	500mm	
4953/16	Core sample missing	3	
4953/17	Solid sandstone to 300mm deep, coarse aggregate concrete well compacted beyond	550mm	
4953/18	Coarse aggregate concrete well compacted	600mm	

See photographs appended below.

Additional details of core sampling recorded by Jacobs staff on site.















Photo 1 - Core samples 1 - 4

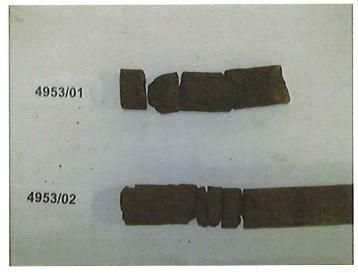


Photo 2 - Detail of core samples 1 - 2



Photo 3 - Detail of core samples 4 - 4







Photo 4 - Core samples 5 - 9



Photo 5 - Detail of core samples 5 - 6



Photo 6 - Detail of core samples 7 - 8





Photo 7 - Detail of core samples 7 - 8



Photo 8 - Detail of core samples 8 - 9



Photo 9 - Detail of core samples 8 - 9







Photo 10 - Core samples 10 - 13

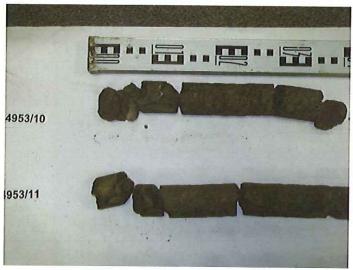


Photo 11 - Detail of core samples 10 - 11



Photo 12 - Detail of core samples 12 - 13

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### Mowthorpe Bridge Core Samping Works



Photo 13 - Core samples 14 - 17

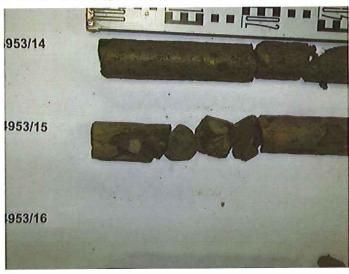


Photo 14 - Detail of core samples 14 - 15 (core 16 missing)

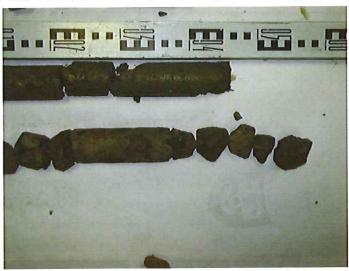


Photo 15 - Detail of core samples 14 - 15





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Photo 16 - Core samples 17 - 18 (core 16 missing)

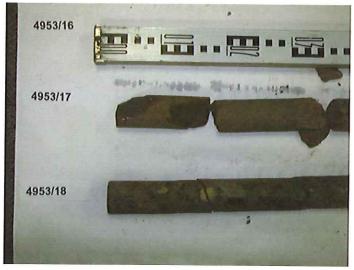


Photo 17 - Detail of core samples 17 - 18

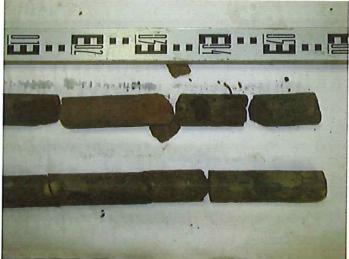


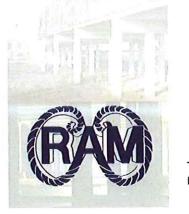
Photo 18 - Detail of core samples 17 - 18



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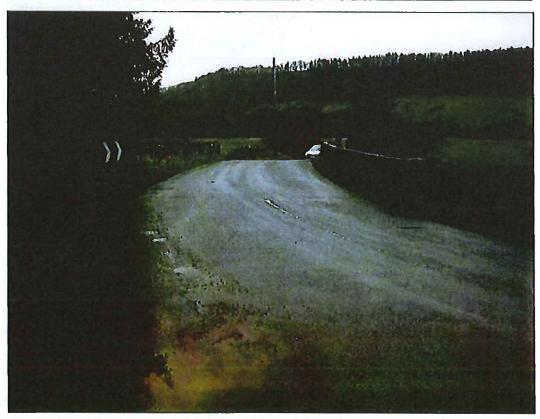
Bridge photographs showing core locations



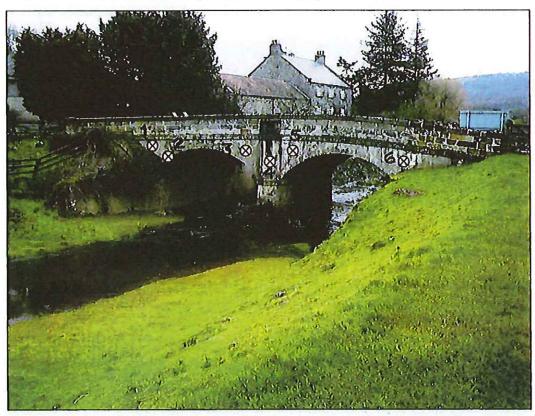




View across bridge from south. Note narrow carriageway width at centre of bridge (4.6m approx.) and poor alignment. Photograph 1:



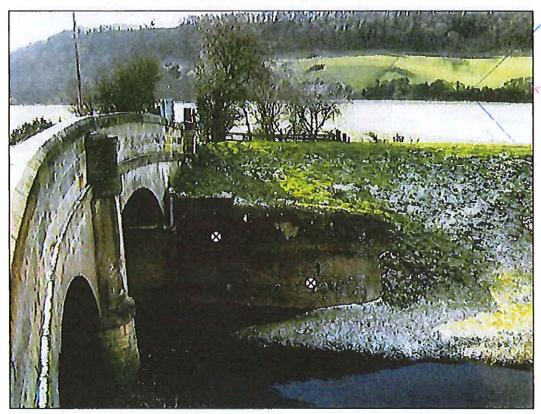
View across bridge from north. Note narrow carriageway width at centre of bridge (4.6m approx.) and poor alignment. Photograph 2:



Photograph 3: West upstream elevation. Vegetation clearance from NW corner and from pier. Cores required in indicative locations as shown.



Photograph 4: East downstream elevation. Vegetation clearance required from NE corner. Cores required in indicative locations as shown.



Photograph 5: South west wing wall. Cores required in indicative locations as shown.



Photograph 6: North west wing wall. Vegetation clearance required from above wall. Cores required in indicative locations as shown.



Photograph 7: North east wing wall. Vegetation clearance required from above wall. Cores required in indicative locations as shown.



Photograph 8: South east wing wall. Cores required in indicative locations as shown.