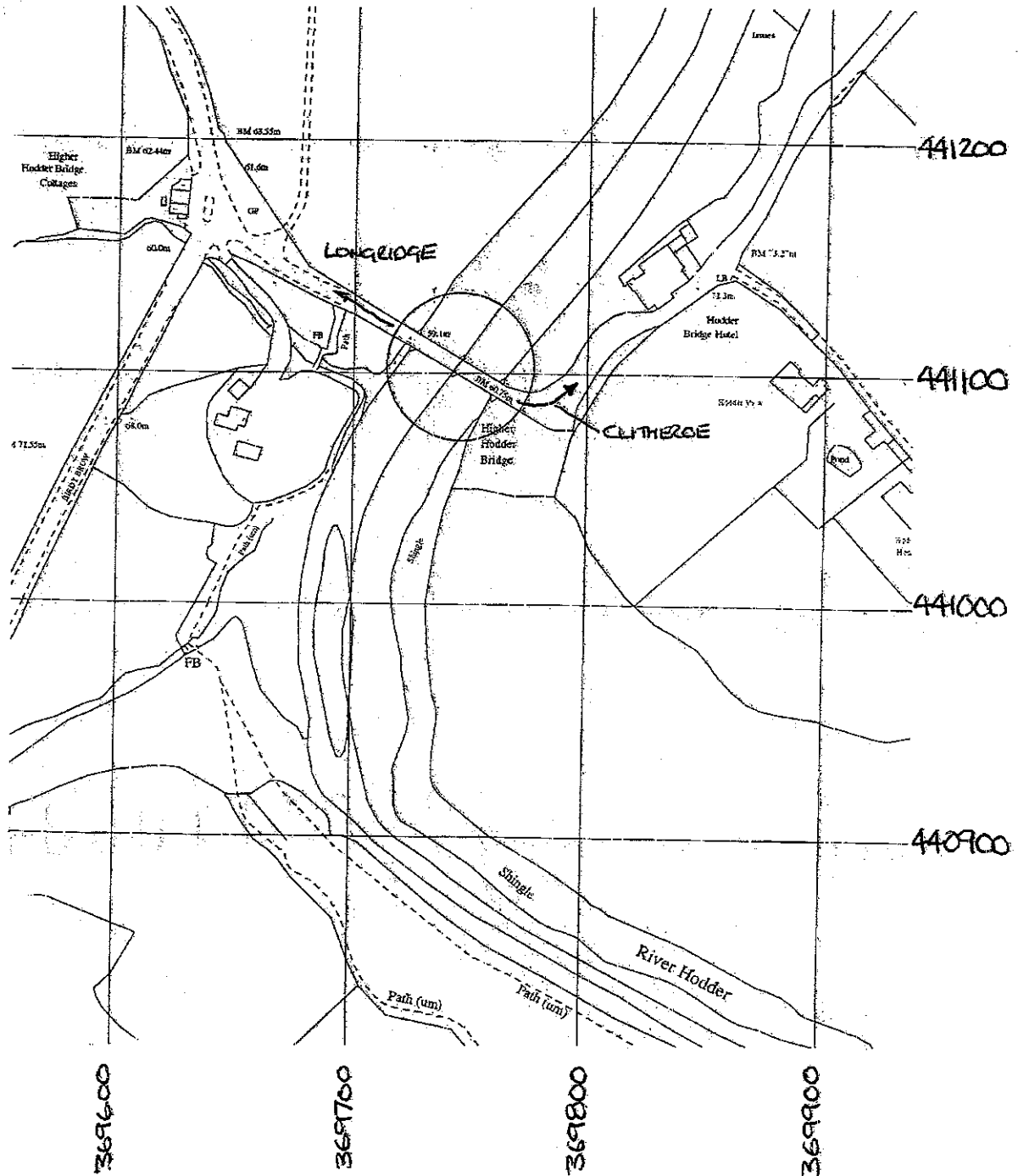


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1. LOCATION PLAN

2. BRIDGE ELEVATIONS



2.1 SOUTH WEST ELEVATION

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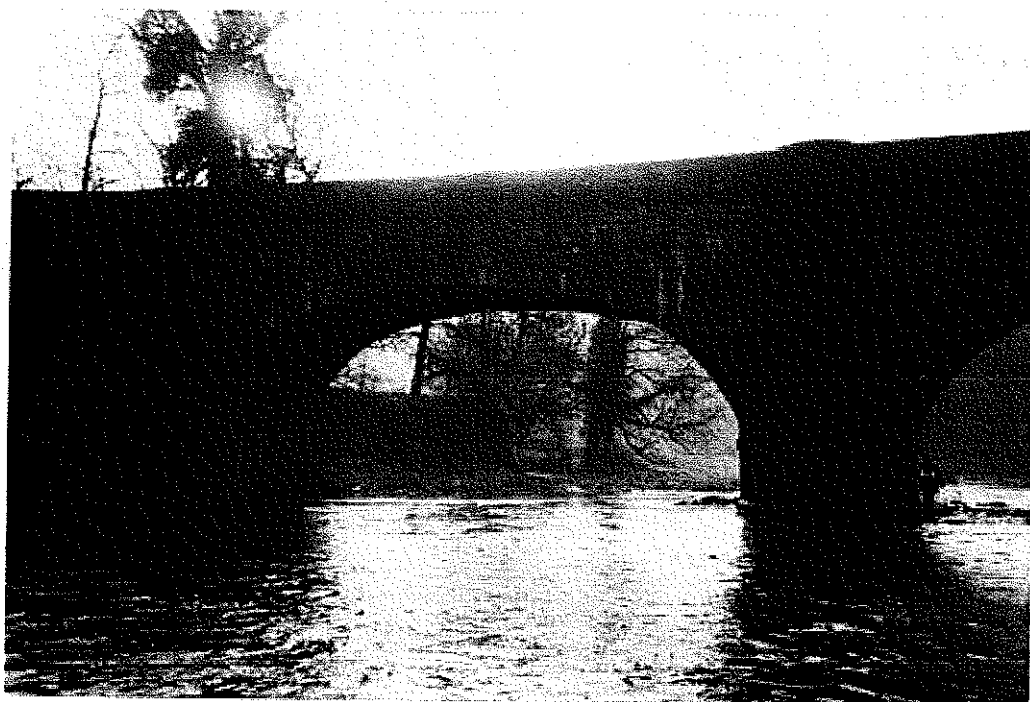


2.2 SOUTH MIDDLE ELEVATION

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2.3 NORTH MIDDLE ELEVATION

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2.4 NORTH WEST ELEVATION

29677/6/19



2.5 NORTH EAST ELEVATION

29677/12/33



2.6 SOUTH EAST ELEVATION

29677/7/19

3. BRIDGE APPROACHES



3.1 EAST APPROACH

29677/12/34



3.2 WEST APPROACH

29677/12/31

**4. INSPECTION PROCEDURE
HODDER HIGHER (No: 1043/B1)**

4.1 DESCRIPTION

The Principal Inspection was carried out by Thorburn Colquhoun on 25 January 1997. The weather conditions during the inspection were dry with sunny spells. The depth of the River Hodder passing under Hodder Higher Bridge was a maximum of 1.2m. It was not necessary to effect any traffic management measures on the C354 in order to carry out the inspection.

The carriageway, footways and parapets could be inspected on foot. The abutments, arch rings and spandrels could be inspected from the River Hodder using waders and binoculars where necessary.

All masonry was inspected for cracking and visible deterioration. All elements were checked for alignment, distortions and deformations.

The carriageway surfacing, kerbs, footways and parapets were inspected for signs of deterioration.

Scour was checked for by probing below the waterline.

4.2 COMPONENTS NOT INSPECTED

The foundations were not exposed for the purpose of a visual inspection, but some indication of their performance and integrity was obtained by carrying out a visual check on alignment and plumb of the abutments, parapets and wing walls.

4.3 EXPLANATORY NOTES ON PRINCIPAL INSPECTION REPORT

The inspection results are presented in tabular form using the component headings given in BE11/94. The suggested timescale for any recommendations/actions are based on the priorities given in Appendix A of Departmental Advice Note BA63/94.

4.4 SPECIAL INSPECTION

A Special Inspection was undertaken with the Principal Inspection and in the form of a topographical survey by Survey Systems Limited on 28 January 1997, to enable the bridge to be assessed in accordance with BD21/93 and BD16/93. See Appendix for results of Special Inspection.

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5. INSPECTION RESULTS - TABULAR

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
			Hodder Higher is a three span masonry structure. Two arches span the River Hodder, the East arch has been infilled at some time and faced with concrete blocks.				
1	Foundations	1A	The foundations were not exposed, there were no signs of distress to the abutments.			No Action	
		1B	The East pier showed isolated minor signs of movement due to minor cracking in recent repair mortar.			Monitor	L
2	Inverts	2A	The river bed consists of an uneven layer of rocks and boulders. Around the middle pier there is a greater depth of water (>1.5m) on the upstream cutwater and an area of shallow silt downstream from the pier with areas of vegetation.			No Action	
4	Piers	4A	The two piers are constructed from close jointed, dressed, coursed masonry. The course depths vary between 200-260mm and joints widths are between 5-10mm. Generally they are in satisfactory condition with isolated areas of active seepage down the faces.	SK1 SK2 SK3	46 47 48	Provide effective membrane waterproofing	L
		4B	There are areas of leaching and algae growth on all faces, leaching tending to be concentrated on the top courses beneath the springing, whilst the algae growth tends to be towards the base of the pier adjacent to the River.	P1 P2	21 21	Clean of deposits and repaint if required.	L

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
		4C	On the West pier there are 2 No. vertical cracks (hairline to 5mm wide) through the bottom 3 courses with active seepage and a small area of spalling to stone face on the South elevation.	P5 P6 P7 P11	24 25 26 29	Monitor	L
		4D	On the North elevation there is general weathering of the masonry. Rocks around the upstream cutwater provided for scour protection by Lancashire County Council as part of remedial works in 1993.	P3	22	No Action	
		4E	On the East elevation of the West pier there is mortar loss to joints of upto 200mm deep and a crack, hairline to 1mm wide, through a stone course.	SK1 P9	46 27	Repoint and monitor	L
		4F	On the West elevation of the West pier there are 5 No. hairline to 3mm wide cracks and areas of mortar loss to the joints of upto 150mm deep.	SK2 P4 P8 P10	47 23 27 28	Repoint and monitor	L
		4G	The East pier has minor cracking in recent repair mortar on the South elevation.			Monitor	L

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
		4H	On the North elevation there are isolated areas of minor spalling to the masonry. There is mortar loss of upto 20mm deep over 15% of the area.	P1	21	Repoint and monitor	L
		4I	The ribs on both piers have weathered and spalled at their corners.	P1 P2	21 21	No Action	
5	Abutments	5A	The abutments to the arch section of the bridge are constructed of close jointed, dressed, coursed masonry. The course depths vary between 220-260mm and the joint widths are between 8 - 10mm.	P12	30	---	
		5B	There is joint loss upto 150 deep in the West abutment along the bottom courses. There is a hairline crack through a stone at the South end.	P13 SK4	30 49	Repoint and monitor	L
		5C	The West abutment face is generally damp with areas of active seepage present on day of inspection.	P12 P14 SK4	30 31 49	Provide effective waterproofing	L
		5D	There is an area of drummy, eroded masonry and potential spall to the North side of the West abutment (1m x 1m approximate area).	P14 SK4	31 49	Repair	L
		5E	The East abutment is not visible since the East span has been infilled and the sides are beneath the earth embankment.			No Action	

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
6	Wing Walls	6A	On the North West side the wing wall is constructed from random coursed, dressed masonry blocks. There are a number of cracks in the top ten courses which go through the full thickness of the wall. Mortar loss is evident in isolated areas of upto 70mm deep. The bottom courses of the wall are generally damp with areas of green staining and leaching.	P15	32	Repoint and monitor	L
				P16	32		
				P17	33		
				SK9	54		
		6B	The South West wing wall is generally in good condition. There are isolated areas of leaching and mortar loss upto 20mm deep. There is moss and ivy growing on the embankment side of the wall over the bottom ten courses. On the embankment side there is a large area of leaching and dampness with a number of hairline cracks through joints. There is a crack upto 2mm wide the full height of the wall on the road side and approximately 1m long on the embankment side.	P18	33	Repoint and monitor cracking	L
				P19	33		
				SK10	55		
		6C	The South East wing wall is generally in good condition with vegetation growing on the bottom metre. There is a horizontal crack of approximately 2m in length across the course where the wall begins to curve out. The mortar is generally loose and friable and 50% of the area has mortar loss of upto 20mm deep.	P20	34	Remove vegetation. Repoint and monitor cracking	L

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
		6D	The joining walls to the South East wing wall are covered in vegetation on the embankment side and have isolated areas of drummy. There is undermining to the concrete/random masonry foundation of approximately 200mm.			Remove vegetation. Backfill undermining with compatible material	L
		6E	On the North East wing wall there is 20% mortar loss over the embankment face upto 20mm deep. It is generally obscured with vegetation.	SK9	54	Repoint and remove vegetation	L
7	Training Walls	7A	The South West training wall consists of uncoursed, rubble masonry. Approximately half the face is covered with vegetation and a tree is growing out of a joint. There are no signs of major distress to the wall due to the tree. Towards the base of the wall adjacent to the West abutment there are signs of movement with a number of stones having dropped with mortar loss and undermining upto 200mm deep. This movement does not seem to be recent.	P21	36	Remove tree and repoint. Monitor movement	L
		7B	The North West training wall consists of random coursed, dressed masonry.	P22	36	Repoint	L

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
			The top half of the wall is covered by vegetation with an area of active seepage from the 250mm diameter drain pipe. There is mortar loss in the bottom courses at river level of upto 100mm deep. There are trees to the North end of the wing wall, but these are causing no distress to the wall.				
16	Arch Ring	16A	The arch rings are constructed of coursed, dressed masonry. The courses are orientated perpendicular to the bridge elevation. The joint widths range between 6 - 15mm with an average of 10mm.				
		16B	The South West arch barrel elevation is in good condition. There is mortar loss to the vertical joints adjacent to the West abutment. Localised cracking and mortar loss is present between the interface of the spandrel and the elevation of the ring. There is active water seepage near the springing of the West abutment.	P23 SK6	37 51	Repoint. Provide waterproofing membrane effective	L
		16C	The North West arch barrel elevation has been recently repointed and is in good condition. There are isolated areas of leaching along its length.	SK5	50	Provide effective waterproofing membrane	L

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
		16D	The North East elevation has areas of leaching along its length with mortar loss to vertical joints at the crown position.	SK5	50	Repoint. Provide waterproofing membrane effective	L
		16E	The South East elevation has isolated areas of wetness and leaching with a small area of mortar loss. There is mortar loss between the interface of the spandrel and the elevation of the ring from quarter point to crown.	P24 SK6	37 51	Repoint. Provide waterproofing membrane effective	L
16	Arch Soffit Middle Arch	16F	The middle arch soffit has at the crown position a large area of black staining probably due to past seepage.	P25 P27 SK7	38 39 52	Remove staining	L
	Middle Arch	16G	There is extensive leaching and dampness on the outside 1.5m strips of the barrel, with isolated areas of active seepage.	P27	39	Provide waterproofing	L
	Middle Arch	16H	At quarter point position in the North East area there is an area of spalling with areas of mortar loss. There is a crack approximately 500mm long, 0.5mm wide.			Repoint and monitor cracking	L
	West Arch	16I	The West arch soffit has black staining along the middle length.	P26 P28 SK8	38 40 53	Remove staining. Repoint	L

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
	West Arch	16J	There are 3 large areas of mortar loss adjacent to the West pier with open joints upto 40mm wide and mortar loss upto 100mm deep. There is active water seepage in these areas.	P26 P28	38 40	Repoint	L
	West Arch	16K	There is substantial leaching at the springing area of the abutment and up along the outside edges of the soffit.	P12	30	Remove staining	L
17	Spandrels	17A	The spandrels consist of close jointed dressed, coursed masonry. All faces are in good condition.				
		17B	The South West elevation has a line of open joints above the voussers. There is active water seepage at both springing positions with a crack emanating from the South West pier buttress up the face approximately 1.5m long.	P30 SK6	41 51	Provide waterproofing. Repoint. Monitor cracking	L
		17C	The North West elevation has a course of mortar loss from the North West pier with associated leaching.	SK5	50	Repoint. Provide waterproofing	L
		17D	The middle arch North elevation has extensive areas of wetness with leaching through the joints staining the face.	P29 SK5	41 50	Provide waterproofing	L

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
		17E	The middle arch South elevation has a line of vegetation growing above the barrel and localised areas of wetness. A note should be made that the South side of the arch may have dried out during the day due to direct sunlight.	SK6	51	Remove vegetation	L
		17F	The South East elevation has a line of leaching from a course at approximately middle span. There is a vertical course of open joints adjacent to the South East pier with a mortar loss of 20mm depth.	SK6	51	Repoint. Provide waterproofing	L
		17G	The North East elevation is in good condition with only isolated wet areas and green staining. Note should be made of large hole in embankment in front of the structure.			Backfill hole with compatible material	L
19	Drainage System	19A	There is a drain outlet holes in the spandrels of the East arch. No evidence of seepage was noted during inspection. Only the North side gully above the East arch is visible, it is assumed that the drain on the South side has been surfaced over.			No Action	
		19B	The North West wing wall has weep holes at road level at approximately 3m centres which are in good condition. They were dry on day of inspection.			No Action	

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
		19C	There is a gully on the North side of the West approach which is connected to a drain which goes through the adjacent North West wing wall and down an external steel pipe discharging into the field on the other side of the wall. A strap restraining the pipe to the wall has corroded and broken.			Repair strap	L
		19D	On the North West training wall there are 7 No. 100mm diameter weep holes with a large 250 diameter pipe. All appear to be in good working condition.			No Action.	
20	Waterproofing	20A	The staining which originates from the joints in the arch soffit indicates that if any waterproofing system exists, it has broken down.			Provide waterproofing membrane	L
21	Surfacing	21A	The tarmacadam carriageway surfacing is generally in good condition, but the surface has worn away at the East approach curve at the bottom of the approach hill.	P31	42	Repair	L
		21B	There is a kerb margin either side of the road approximately 600mm wide. They are in satisfactory condition.	P32 P31	42 42	Remove vegetation. Replace cracked flags	L

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COMPONENT		INSPECTION RESULT		PHOTO/ SKETCH	PAGE No.	RECOMMENDATIONS/ACTION	TIME SCALE
No.	LOCATION	No.	DESCRIPTION				
24	Parapets	24A	Both lengths of parapets are constructed of 4 large courses of dressed masonry seated on the stringcourse. The general alignment of the walls is satisfactory.	P31 SK5 SK6	42 50 51	---	
		24B	There are a number of vertical cracks in both parapets which extend full depth. At the North West side there is a large crack through the wall with slight movement of the blocks.	P33 SK5 SK6	43 50 51	Monitor	L
		24C	There are areas of moss in the joints with approximately 10% of the North parapet having joint loss of upto 10mm deep and South parapet having approximately 15% of joint loss upto 10mm deep.	SK5 SK6	50 51	Remove vegetation	L
		24D	At the South West pier there are a number of loose stones with no mortar on the outside face and road level. There are signs of movement of the blocks.	P34 SK5 SK6	43 50 51	Investigate movement	M

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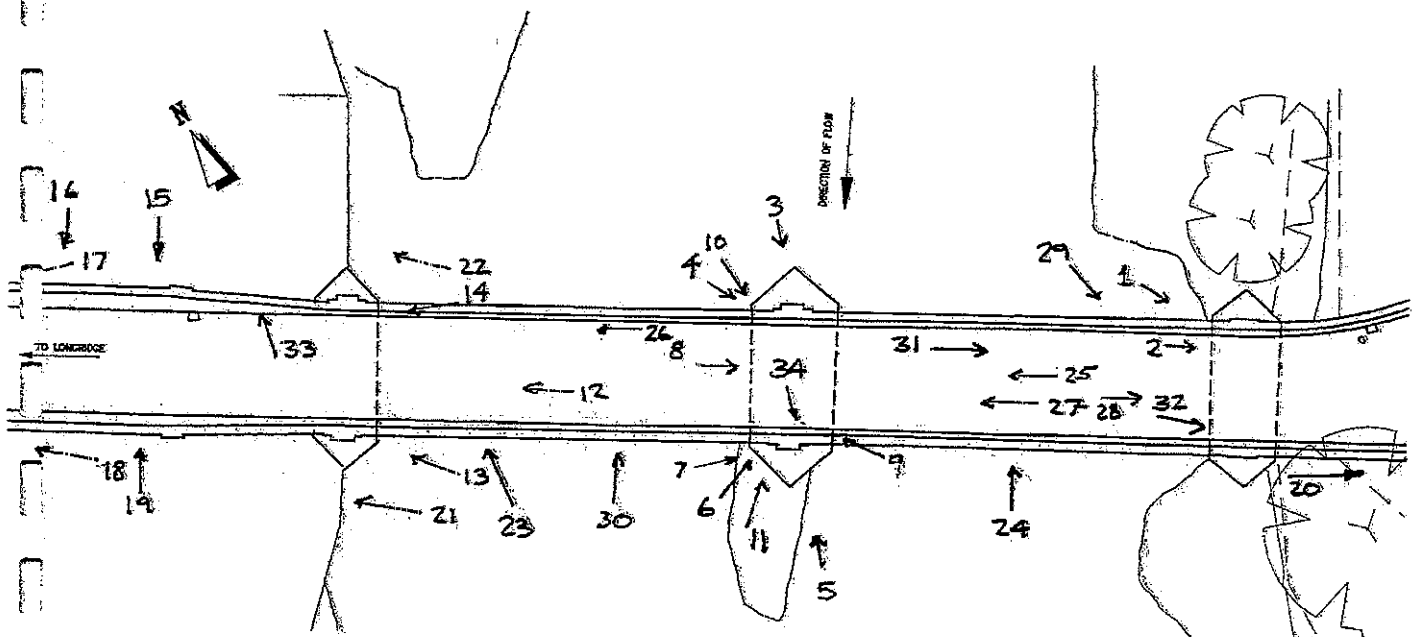
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6. INSPECTION RESULTS - PHOTOGRAPHS

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PHOTOGRAPH
LOCATION PLAN



P1 STAINING TO WEST SIDE OF EAST PIER

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P2 SPALLED NOGGINS AND LEACHING

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P3 GENERAL VIEW OF NORTH END OF WEST PIER

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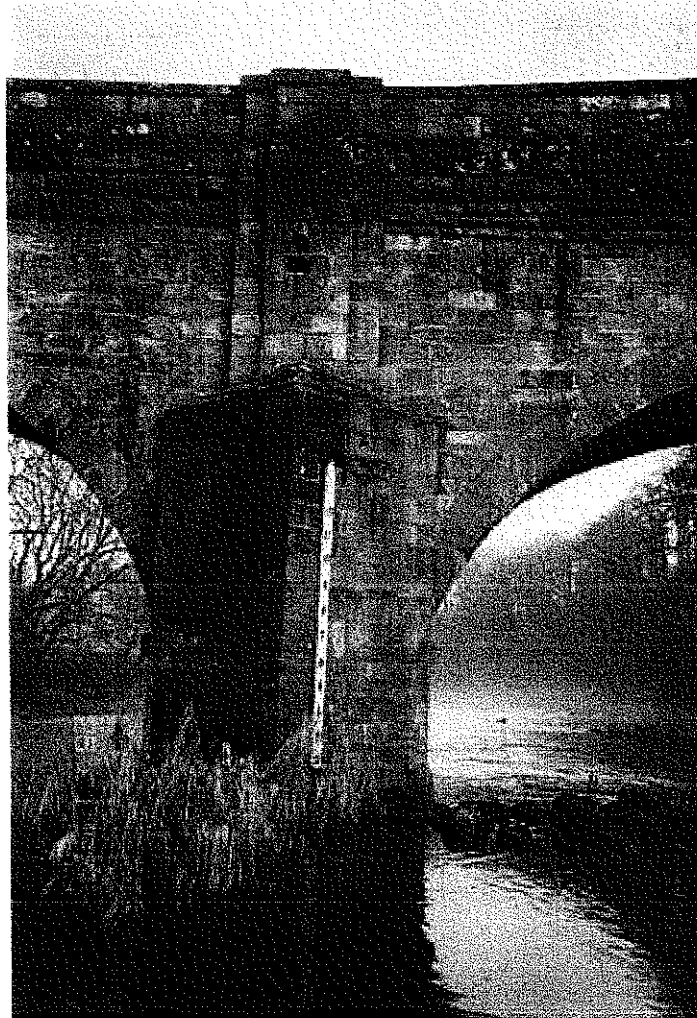


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P4 CRACKING IN PIER ON WEST SIDE

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**P5 GENERAL VIEW OF SOUTH END
SHOWING SHALLOW WATER AND VEGETATION**

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P6 ACTIVE WATER SEEPAGE AT FOOT OF PIER

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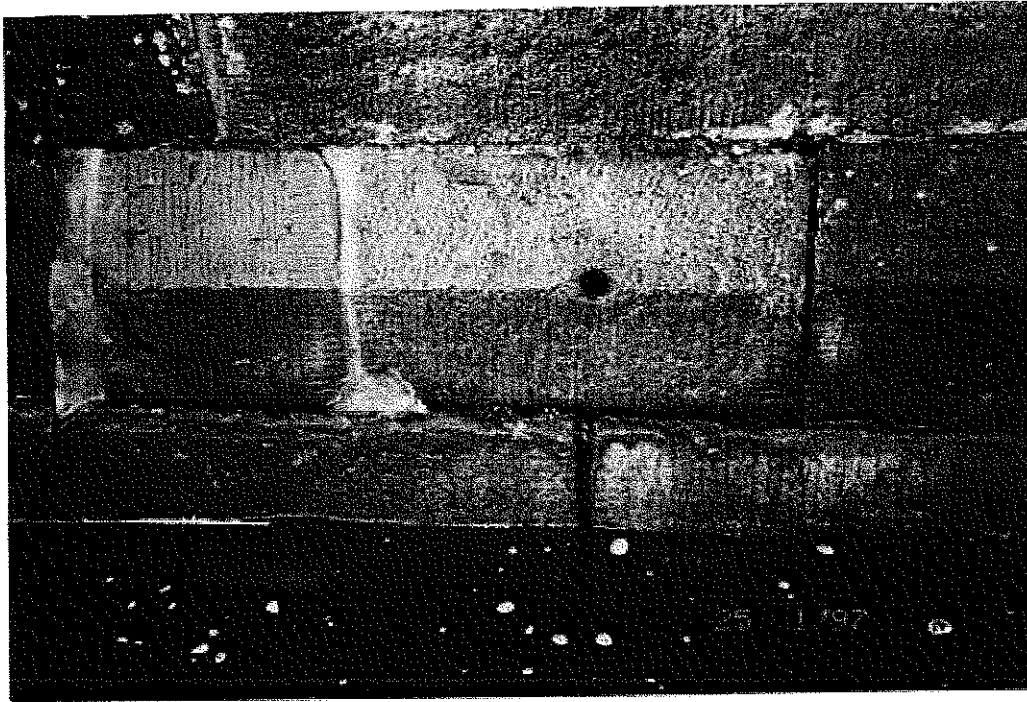
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P7 SPALLED MASONRY BLOCK

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P8 MORTAR LOSS AND CRACKING TO WEST PIER

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P9 CRACKING AND SPALLING TO STONE BLOCK IN WEST PIER

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P10 CRACKING IN CORNER OF WEST PIER (NORTH END)

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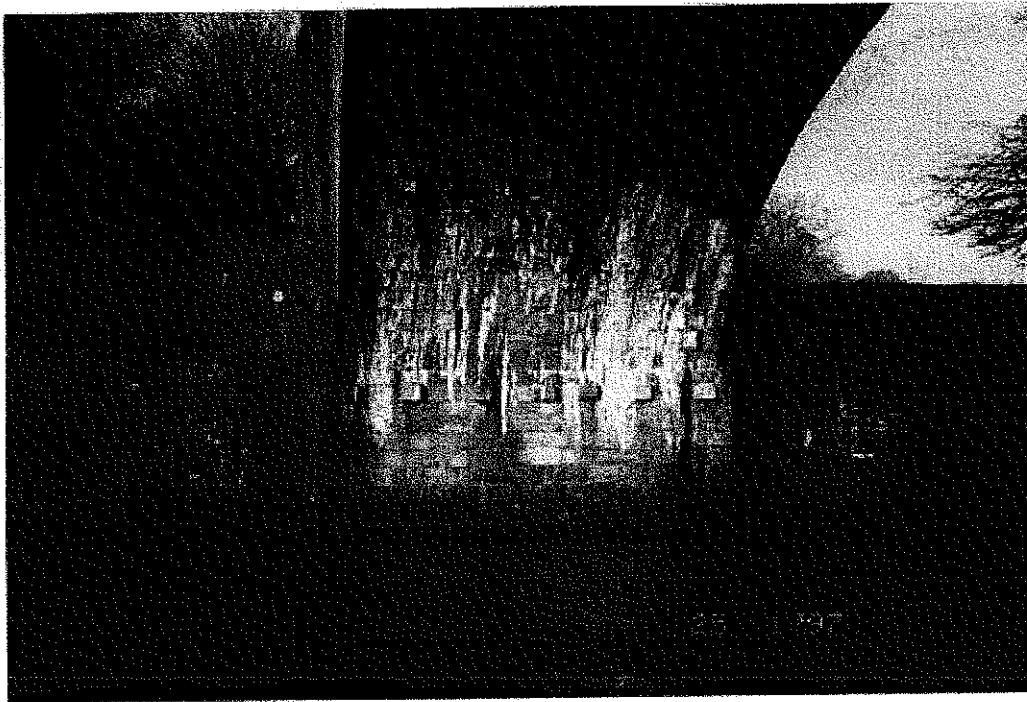


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P11 CRACK AT BOTTOM OF WEST PIER (SOUTH END)

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P12 GENERAL VIEW OF WEST ABUTMENT

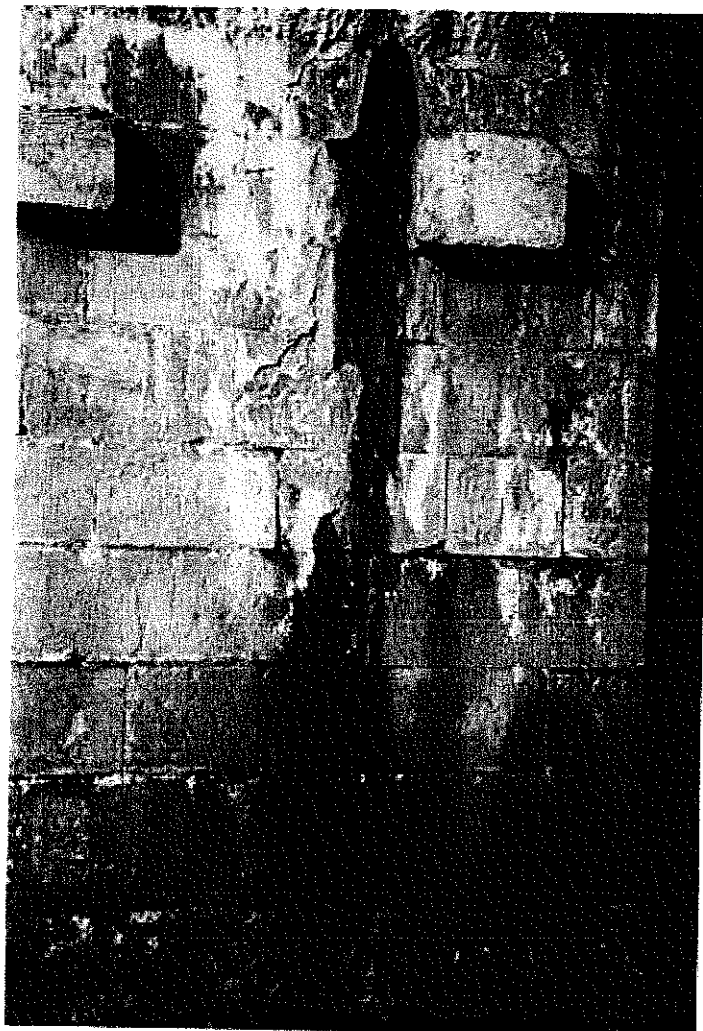
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P13 OPEN JOINTS IN BOTTOM COURSE WITH HAIRLINE CRACKING OF BLOCK 29677/6/11

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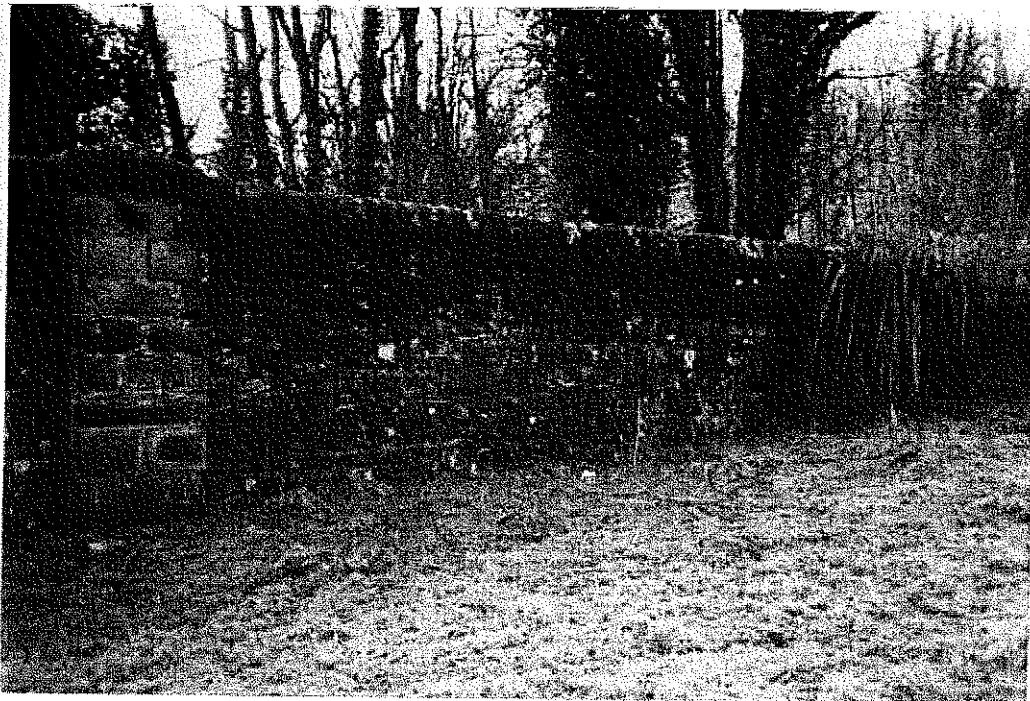


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P14 LEACHING AND POTENTIAL SPALLING OF WEST ABUTMENT

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P15 VIEW OF NORTH WEST WING WALL

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P16 CRACKING OF NORTH WEST WING WALL
(INDICATED BY YELLOW ARROWS)

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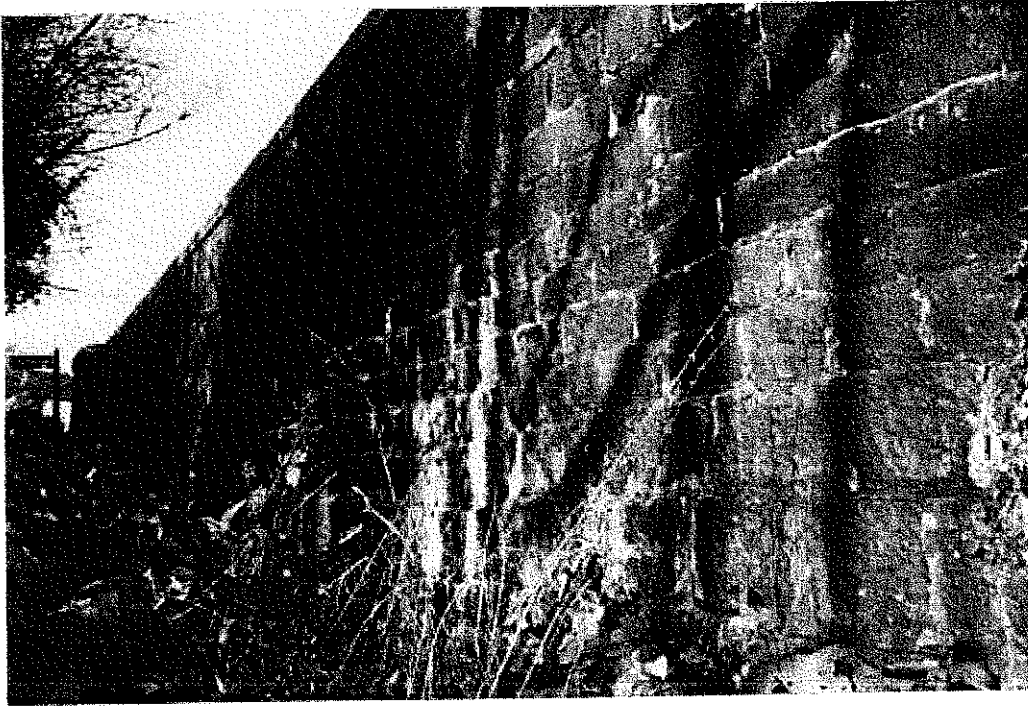


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**P17 OPEN JOINTS AND CRACKING IN NORTH WEST
WING WALL**

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P18 GENERAL VIEW LOOKING WEST OF EMBANKMENT SIDE
OF SOUTH WEST WING WALL

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P19 AREA OF LEACHING AND HAIRLINE CRACKS - SOUTH WEST WINGWALL

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P20 VIEW LOOKING EAST OF EMBANKMENT
SIDE OF SOUTH EAST WING WALL

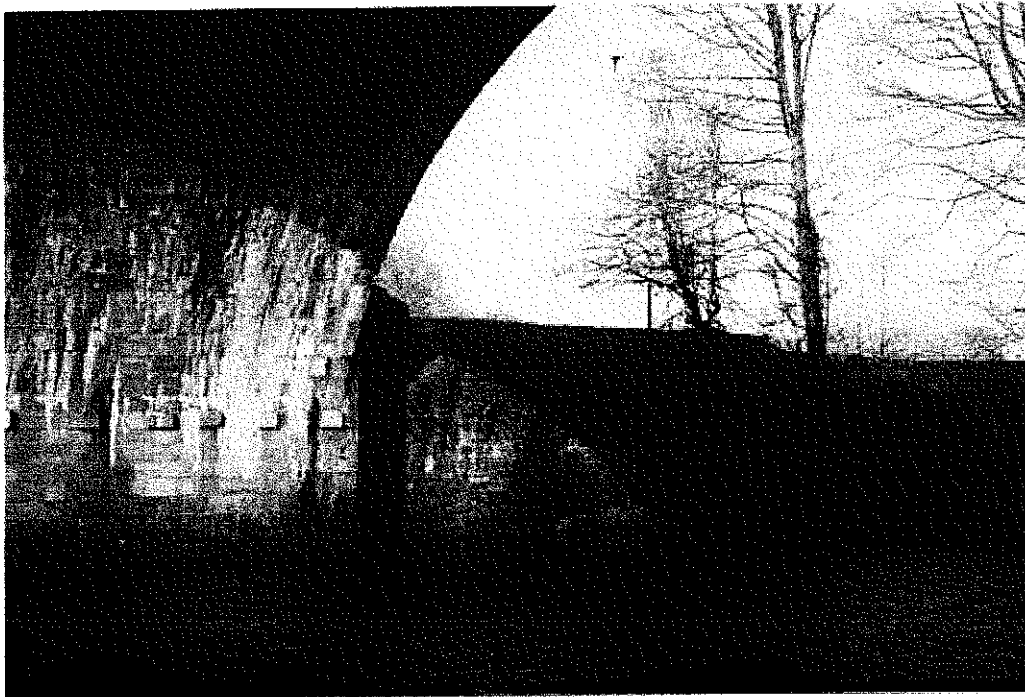
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P21 GENERAL VIEW OF SOUTH WEST TRAINING WALL

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P22 GENERAL VIEW OF NORTH WEST TRAINING WALL

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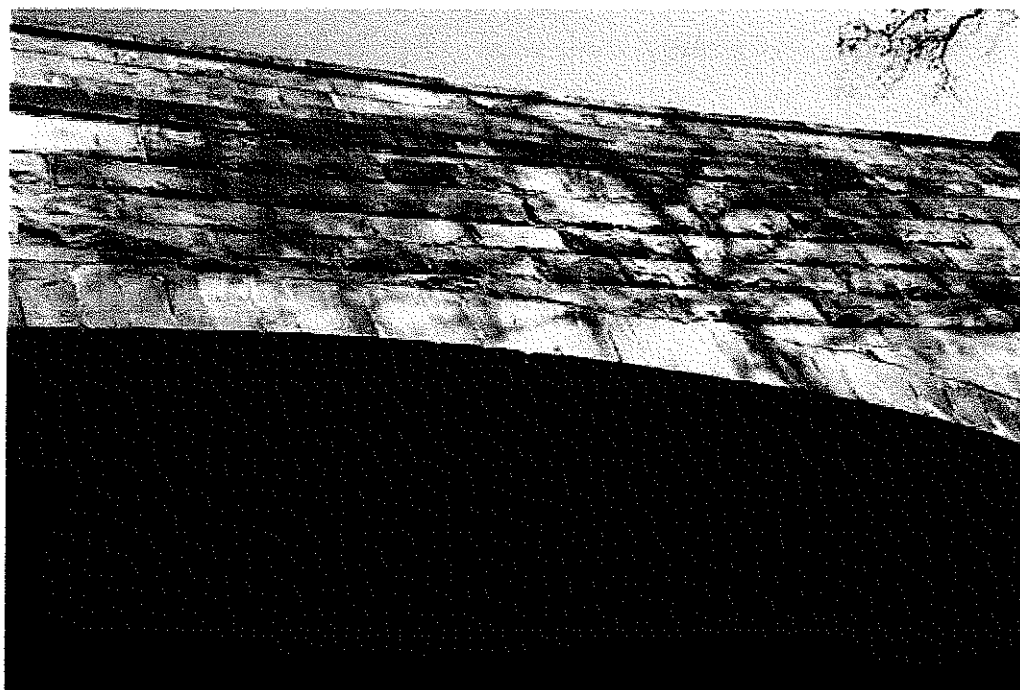
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P23 WATER STAINING AND MORTAR LOSS IN SOUTH WEST ELEVATION

29677/6/8

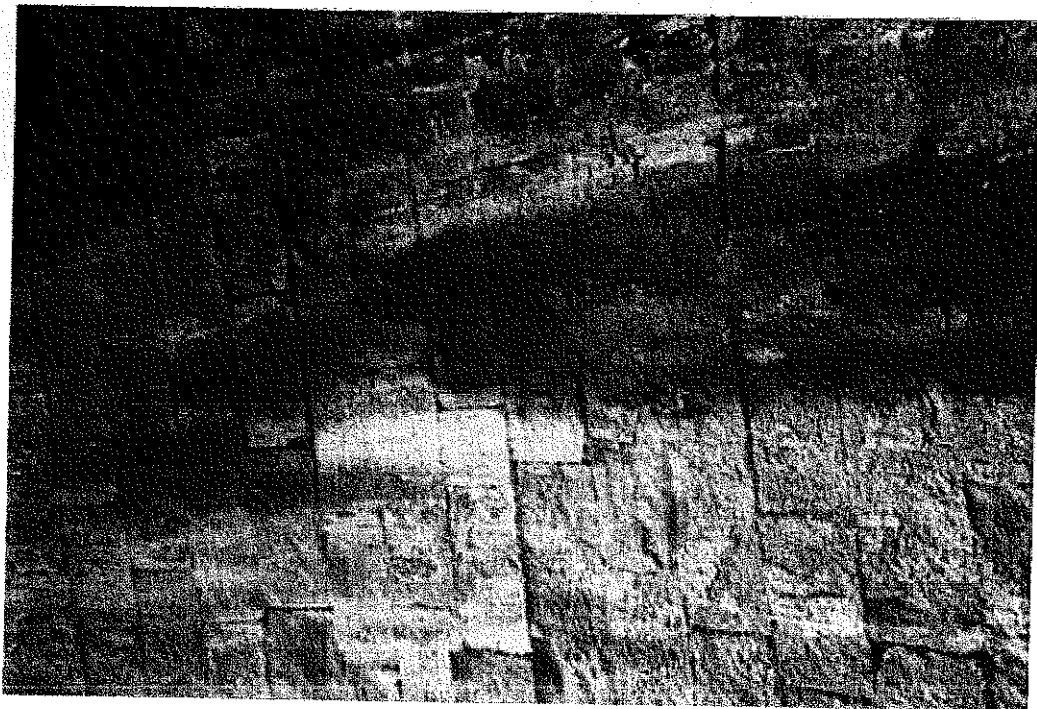


P24 LEACHING THROUGH JOINTS ON SOUTH EAST ELEVATION

29677/6/24

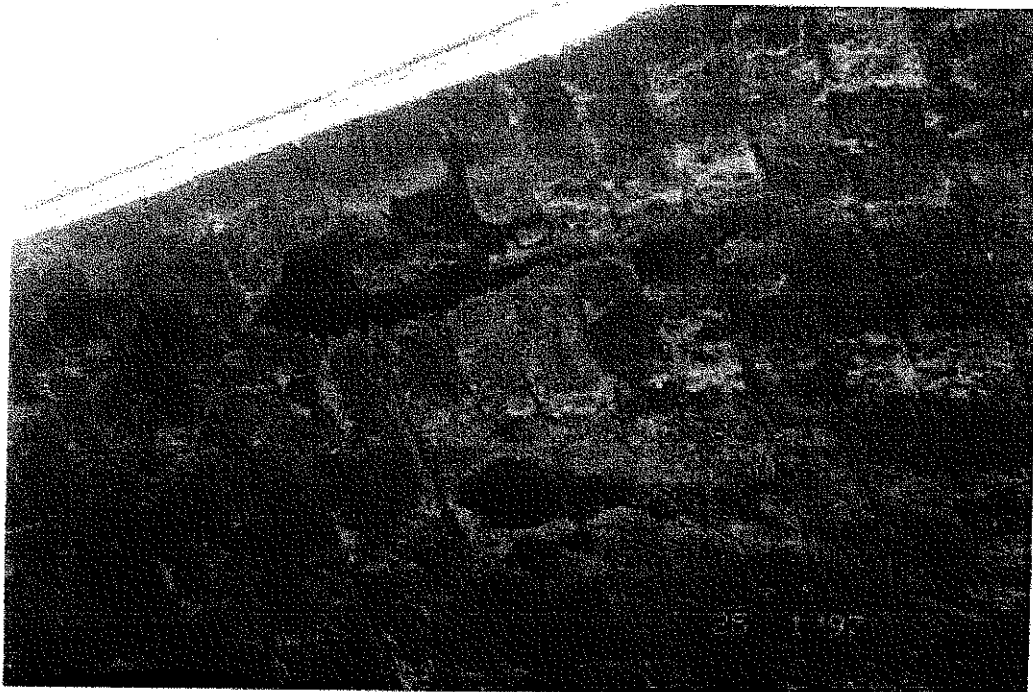
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P25 BLACK STAINING TO SOFFIT OF MIDDLE SPAN

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P26 WATER STAINING AND LEACHING TO EDGE OF WEST SPAN SOFFIT

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**P27 GENERAL VIEW OF MIDDLE SPAN
SOFFIT LOOKING WEST**

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P28 GENERAL VIEW OF WEST SOFFIT LOOKING EAST

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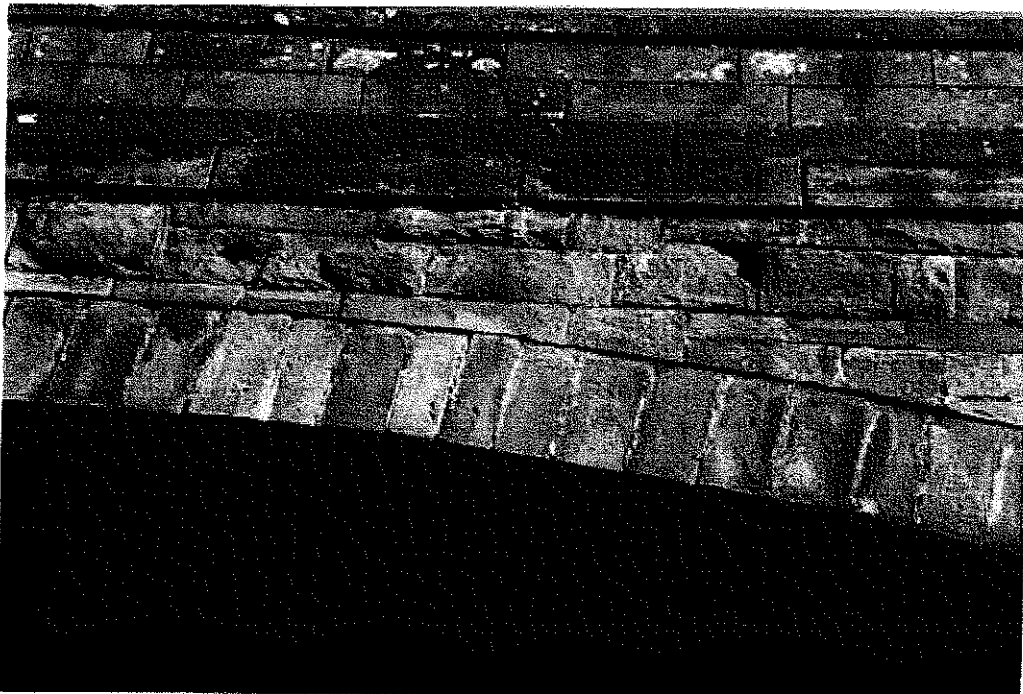
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P29 WATER STAINING OF NORTH MIDDLE ELEVATION SPANDRELS

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P30 SPALLING OF SOUTH WEST SPANDREL

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P31 GENERAL VIEW LOOKING EAST

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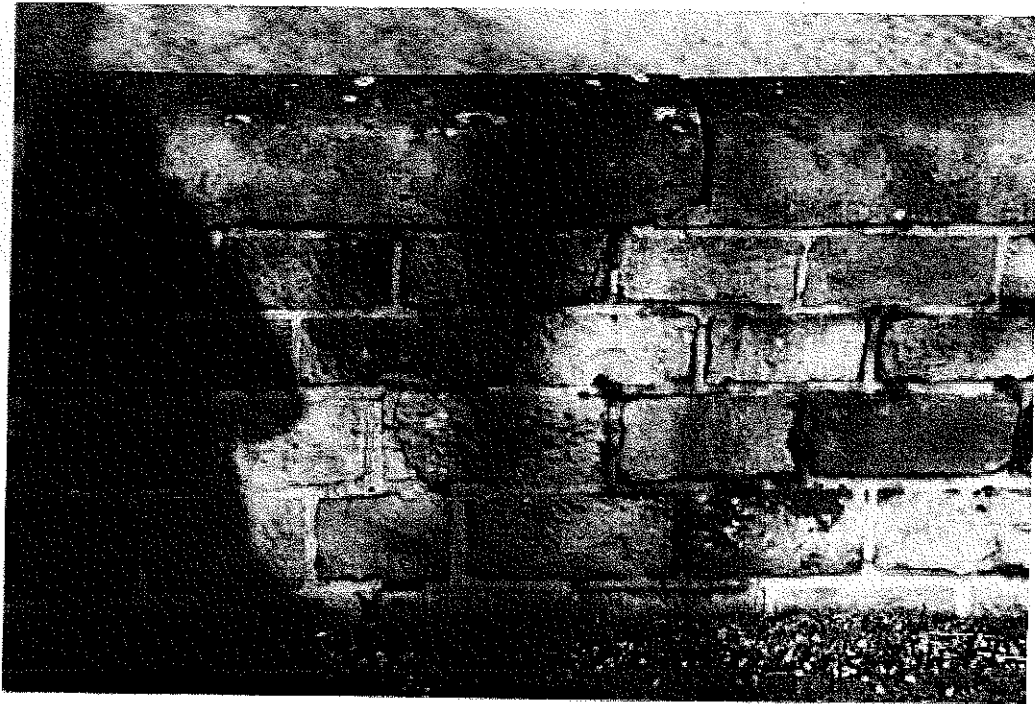


P32 VEGETATION GROWTH ON ROADSIDE OF SOUTH EAST WING WALL

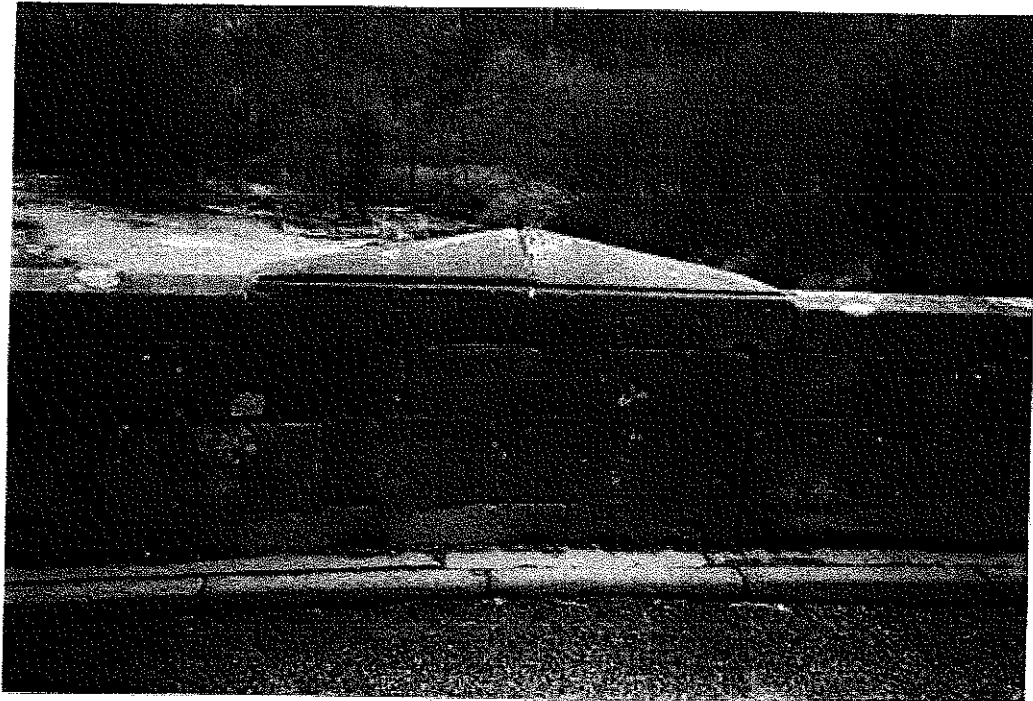
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P33 CRACKING THROUGH FULL DEPTH OF JOINT IN NORTH WEST PARAPEL 29677/7/10

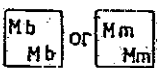


P34 OPEN JOINTS AT SOUTH PIER POSITION 29677/12/32

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Hodder Higher Bridge (No. 1043) - PBI

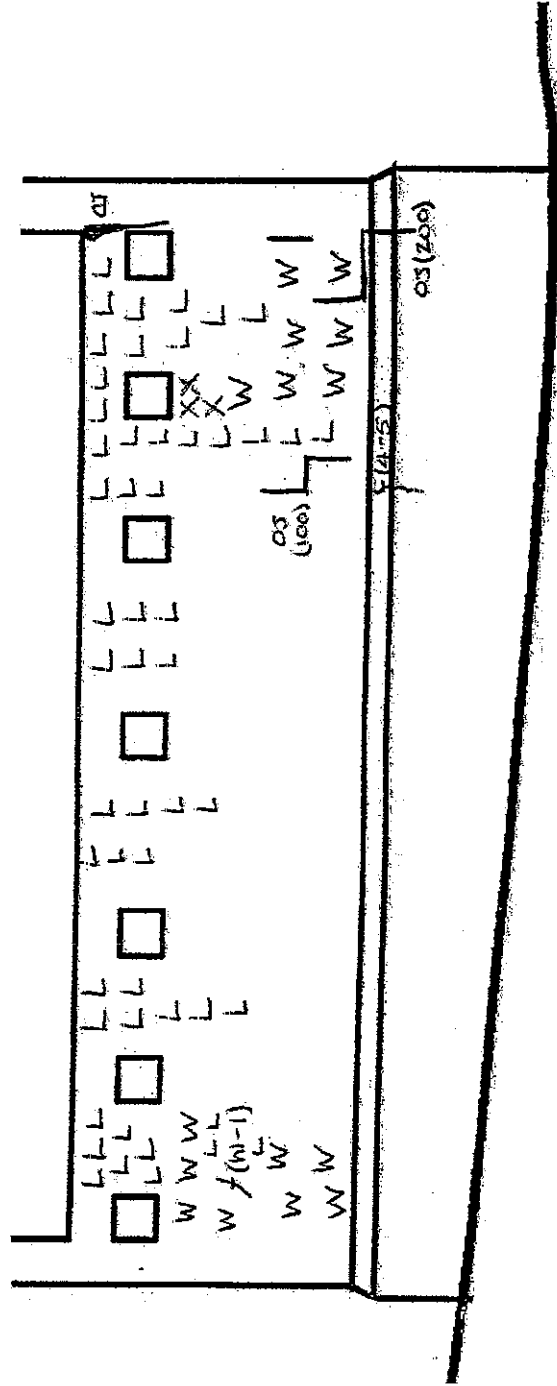
7.0 INSPECTION RESULTS - SKETCHES

	Bulging
	Drummy
	Efflorescence
	Erosion depth of erosion (mm)
	Fractures and cracks hairline or dimension (mm) 5 denotes step between planes of fracture (mm)
	Joint loss (mortar) depth (mm) friable
	Leached deposits calcium carbonate silicate and gels ST denotes stalactites
	Missing brickwork or missing masonry
	Repairs
	Spalling and depth (mm)
	Surface deposits (dirt soot etc)
	Vegetation
	Active water seepage
	Wet and damp areas
	Open joints. depth (mm)

STANDARD DEFECT NOTATION

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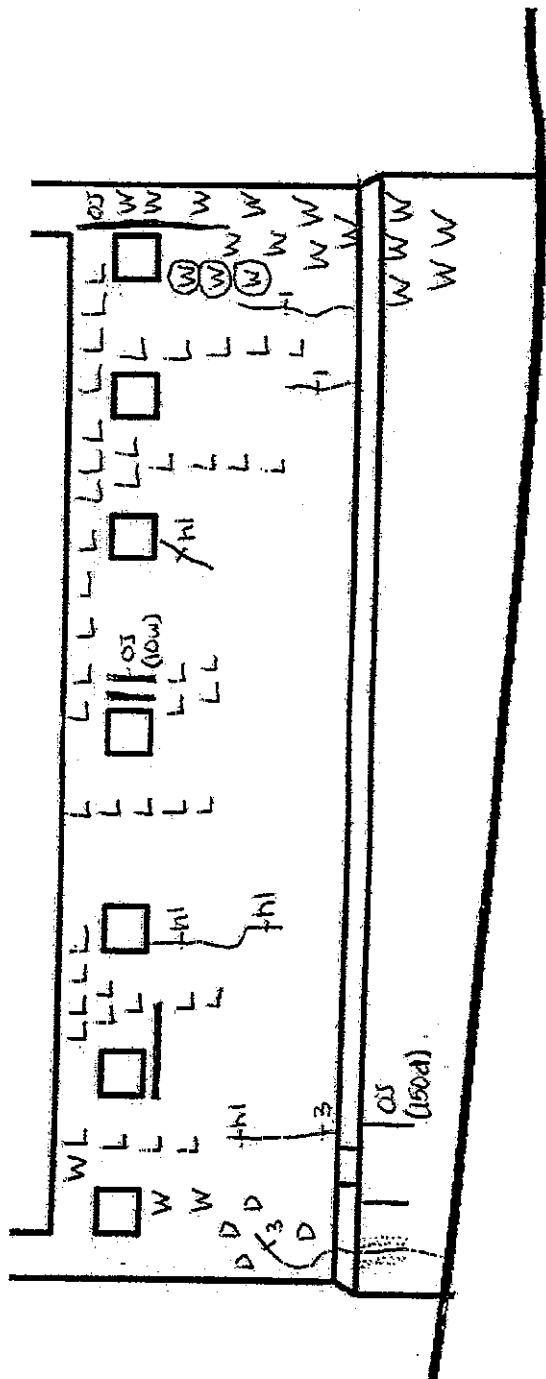


SKI EAST ELEVATION OF WEST PIER

3/8/16KK/1J
29677MA

September 1997

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Hodder Higher Bridge (No: 1043) - PBI



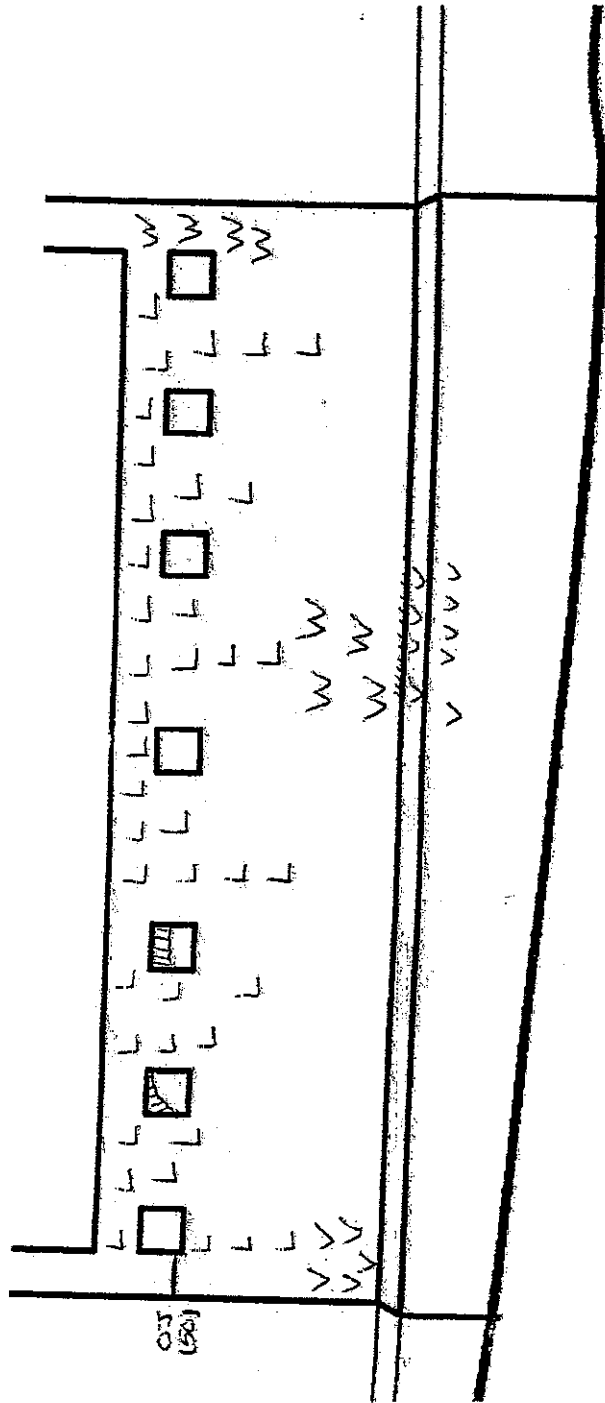
SK2 WEST ELEVATION OF WEST PIER

3/8/16KK/11
29677MA

September 1997

320111063P

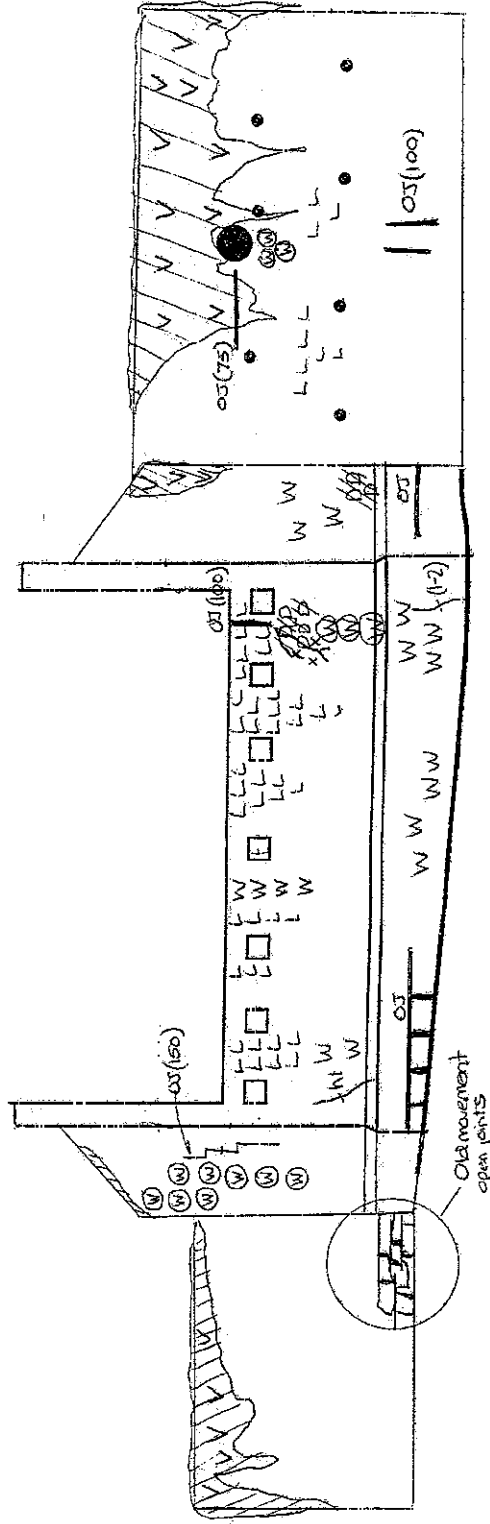
Lancashire County Council
Hodder Higher Bridge (No: 1043) - PBI



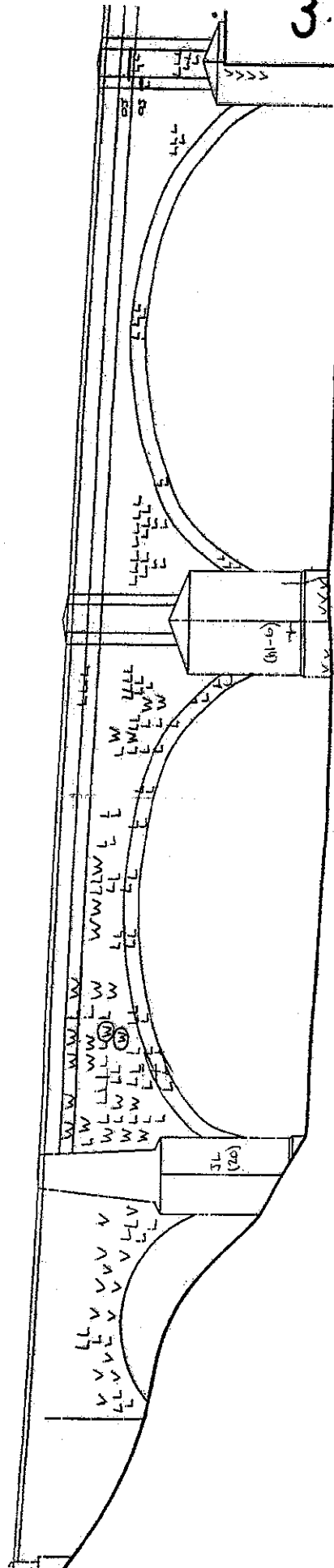
SK3 WEST ELEVATION OF EAST PIER

3/8/16KK/1J
29677MA

September 1997



SK4 ELEVATION OF WEST ABUTMENT

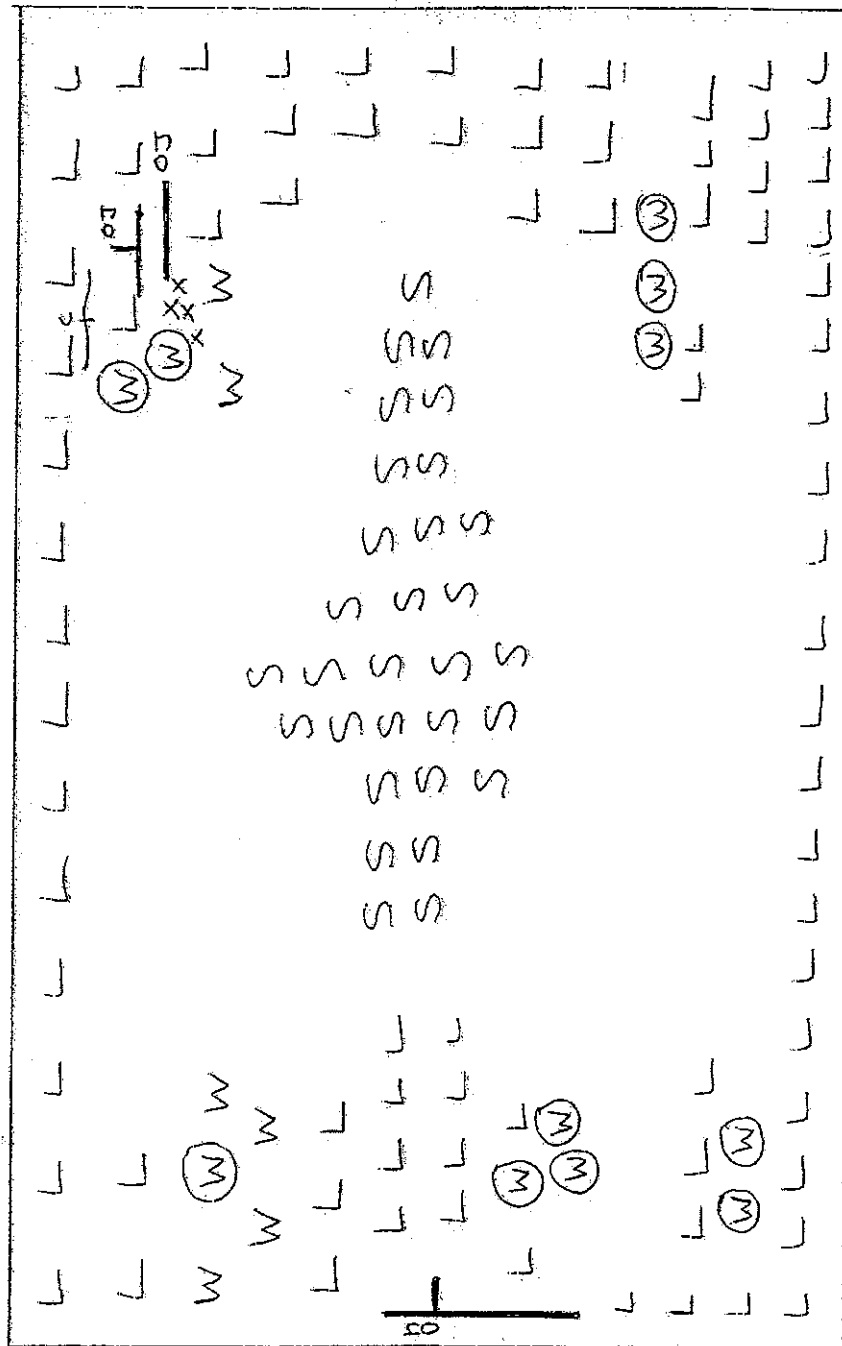


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SK5 NORTH ELEVATION

3/8/16KK/IJ
29677MA

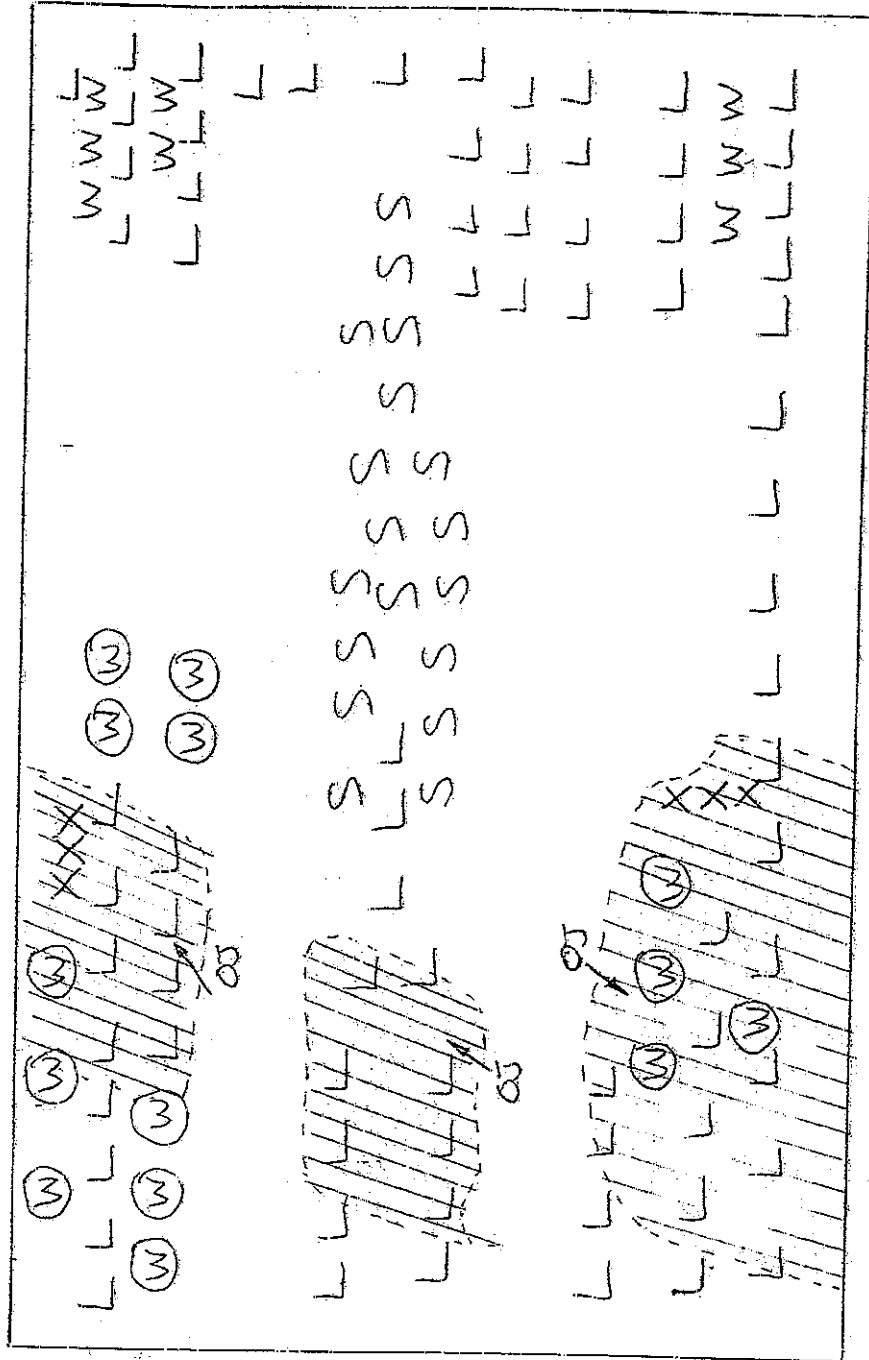
September 1997



SK7 MIDDLE ARCH SOFFIT

320111063P

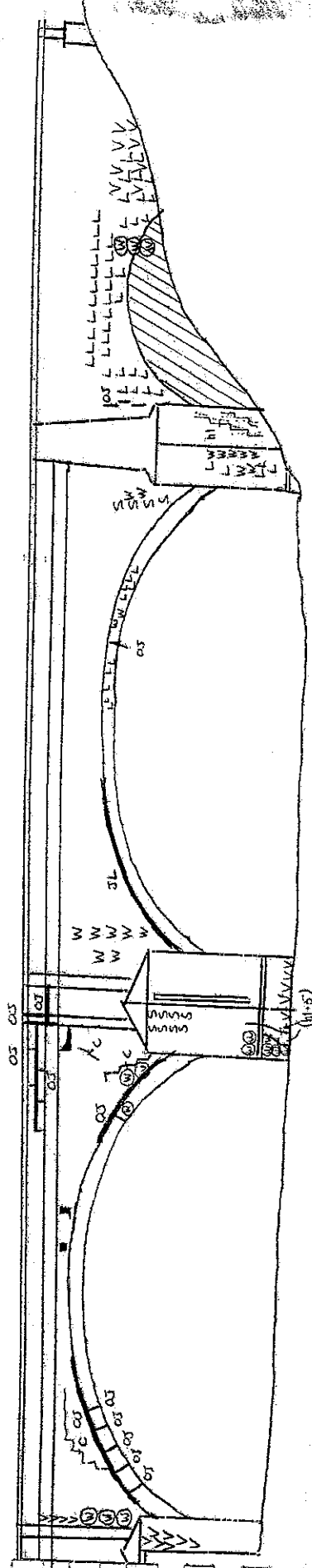
Lancashire County Council
Hodder Higher Bridge (No: 1043) - PBI



SK8 WEST ARCH SOFFIT

3/8/16KK/IJ
29677MA

September 1997

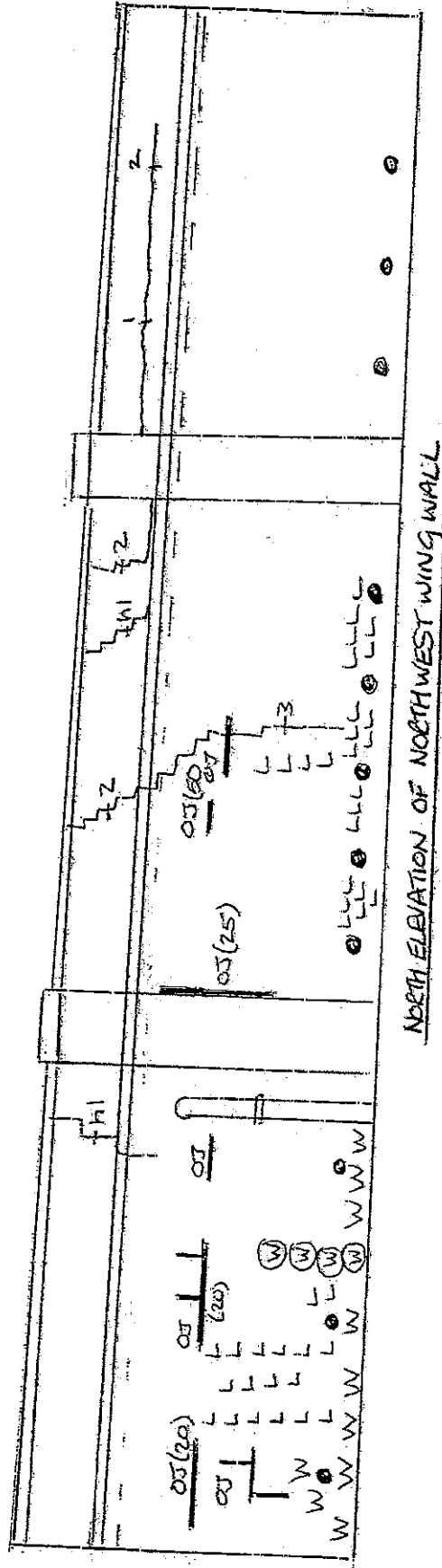


SK6 SOUTH ELEVATION

3/8/16KK/IJ
29677MA

320111063P

Lancashire County Council
Hodder Higher Bridge (No: 1043) - FBI

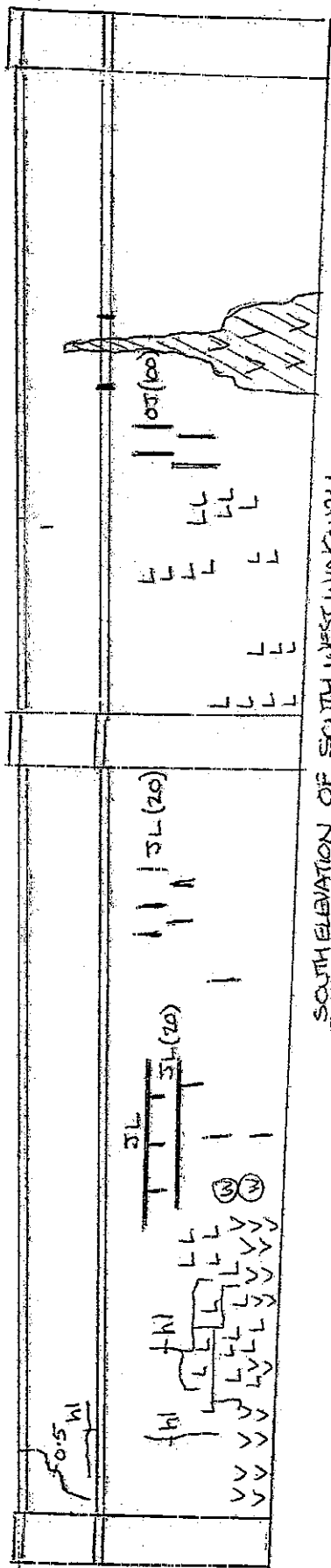


SK9 NORTH WING WALL ELEVATIONS

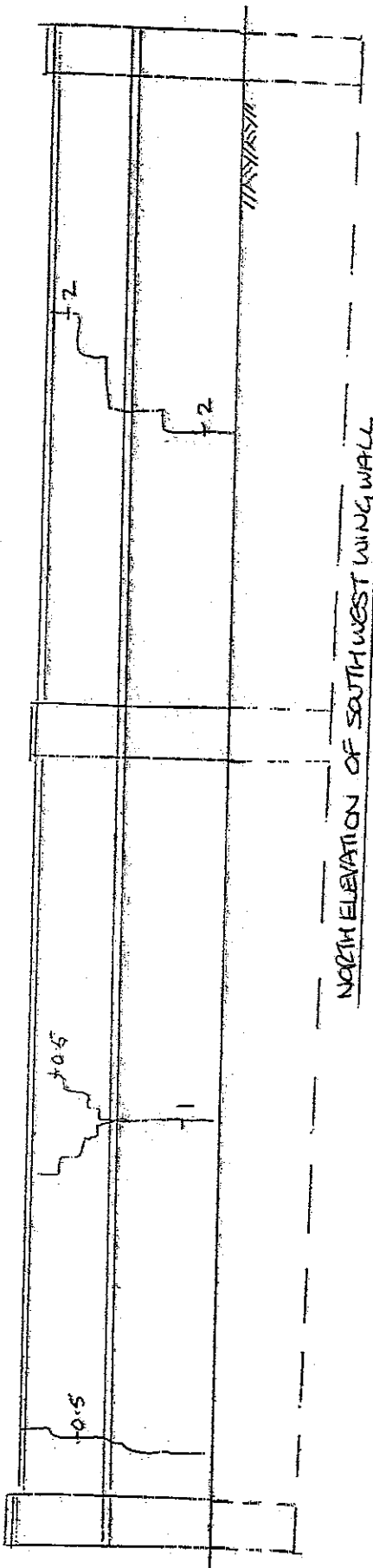
3/8/16KK/1J
29677MA

September 1997

Lancashire County Council
Hodder Higher Bridge (No: 1043) - PBI



SOUTH ELEVATION OF SOUTH WEST WING WALL



NORTH ELEVATION OF SOUTH WEST WING WALL

SK10 SOUTH WING WALL ELEVATIONS

3/8/16KK/1J
29677MA

September 1997

320111063P

Lancashire County Council
Hodder Higher Bridge (No: 1043) - PBI

APPENDIX A
SPECIAL INSPECTION REPORT

APPENDIX A : SPECIAL INSPECTION REPORT

A1. INTRODUCTION

- A1.1. The Special Inspection was undertaken by Thorburn Colquhoun on the 25 and 28 January 1997, on behalf of Lancashire County Council.
- A1.2. The inspection was undertaken to enable the bridge to be assessed in accordance with BD21/93 Chapter 2, and was carried out at the time of the Principal Inspection.
- A1.3. This Report refers to the Principal Inspection Report dated August 1997 and should be read in conjunction with it.

A2. OBJECTIVES

- A2.1. The objectives of the Special Inspection were:
- i) Produce General Arrangement Drawing Number 1043/01
- A2.2. The objectives were achieved by:
- i) Checking dimensions on site by taping
 - ii) Undertaking a topographical survey.

A3. RESULTS

- A3.1. Results of Dimensional Surveys.
- i) Production of General Arrangement Drawing Number 1043/01
- A3.2. Defect Assessment.
- i) Loss of section or other structural defect.
 - Minor cracking to the centre arch soffit.
 - Mortar loss/soft mortar to areas of arch soffits.
 - iii) Recommended Condition Factors (BA16/93 Chapter 3).

	West Arch	Centre Arch
• Condition Factor, Fc	0.9	0.9
• Barrel Factor, Fb	1.4	1.4
• Fill Factor, Ff	0.7	0.7
• Joint Factor, Fw	0.9	0.9
• Mortar Factor, Fmo	0.9	0.9
• Depth Factor, Fd	0.9	0.9

- A3.3. Comments on elements to be subjected to qualitative assessment only (as BD21/93 Chapter 8).
- i) No direct signs of scour or settlement.
 - ii) The substructure is considered to be showing no signs of structural distress, and there is no increase of fill or other dead load, therefore the abutments are assumed to be adequate as BD21/93 Section 8/5.

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Lancashire County Council
Hodder Higher (No: 1043/B1) - SI

A4. RECOMMENDATIONS

- No further investigations are needed, unless the bridge fails the initial assessment, in which case, in accordance with BCI 9.1E, consideration will be given as to whether a Special Investigation to determine the barrel thickness and depth of fill at crown is required.

A5. FURTHER INFORMATION

- None required to carry out initial assessment

APPENDIX B
SPECIAL INSPECTION REPORT II

APPENDIX B :- SPECIAL INSPECTION REPORT II**B1. INTRODUCTION**

B1.1. The Special Inspection was undertaken by Thorburn Colquhoun on 8 May 1998, on behalf of Lancashire County Council.

B1.2. The Inspection was undertaken to determine whether the small relieving arch at the West end of the bridge had been infilled.

B1.3. This Report refers to the Principal Inspection Report dated September 1997, and should be read in conjunction with it.

B2. OBJECTIVES

B2.1. The objectives were to determine:

- a) whether the arch had been filled,
- b) the quality of any fill material, and
- c) the quality of the fill operation and whether any voids existed

B2.2. The objective was achieved by making a small hole (300mm sq) in the Northern elevation infill block wall at, (approximately) the West quarter point of the arch directly below the arch ring.

B3. RESULTS

B3.1. The infill blockwork was coursed stone. Behind, the arch was densely infilled with graded material and small sandstone blocks. The graded material appeared bound, probably with lime.

There was no internal arch barrel, the backfill material completely filled the area up to the underside of the rock sub-base material to the road above. There were no voids.

It appears that the arches, which are visible on both the North and South elevations are architectural features to relieve the solid appearance of both elevations at the West end of the bridge

B4. REINSTATEMENT

Reinstatement of the hole was carried out using a dry packed material containing a non-shrink additive. The stone facing block was then replaced.

B5. RECOMMENDATIONS

No further works are necessary, the bridge should be accessed in accordance with BD21/97 and BA16/97 as original Principal Bridge Inspection Report dated September 1997.