

Summary

 Structure Key
 9942
 Agent Name
 Kier Highways - Area 6

 Commissioned
 01/01/1975
 O.S. Grid Ref East/North
 612890 / 249610

Bridge Type Highway Underbridge

Length32.30Number of Spans3Date Inspected04/12/2018Overall ConditionGood

Weather Bright and dry

Inspected by
Authorised by
Authorisation date
Method of Inspection
Equipment Used

22/01/2019
Visual
Camera

Parts of Structure Not Buried foundations, waterproofing and parts at height

Inspected

General Description

The structure is a simply supported three span underbridge and carries the A14, two lane, dual carriageway all purpose trunk road and two verges over the B1113 interchange through the centre span.

The bridge has two side spans of 9.0m and a main span of 14.25m and an overall width of 31.45m. The bridge is square to the A14.

The bridge comprises a cast in situ reinforced concrete top slab and 28no. type M1 precast prestressed beams with precast prestressed concrete type B2 box edge beams supported by cast in situ reinforced concrete bank seat abutments and two intermediate cast in situ reinforced concrete multiple leg portal piers. The bankseats and piers are founded on spread foundations. Flying wingwalls are cantilevered from the back of the bank seats. The deck has a longitudinal joint.

The dual 2 lane A14 on the bridge has carriageways 9.3m wide with 1m wide verges and a 9.9m wide central reserve. Asphaltic plug joints and a longitudinal joint are provided to accommodate movement of the bridge.

Articulation

The deck is supported on rubber pad type bearings. The simply supported structure is fixed at the south abutment and free at the north abutment with corresponding fixity over the intermediate supports.

Inspection Summary

A14 Claydon I/C North was found to be in good condition. The carriageway and joints have been replaced /resurfaced but the is deterioration of the departure of the eastbound carriageway over the south abutment.



Inspection Photographs



01 - West elevation



02 - North piers





03 - South piers



04 - East elevation



Observations/Defects Confirmed at this Inspection







Observations/Defects Confirmed at this Inspection

Staining to the north pier portals

Substructure	
Components	North Pier - Cross head (north), South Pier - Cross head (south), North Abutment - Abutment Wall for North Abutment, South Abutment - Abutment Wall for South Abutment
Defect Type	Al - Algal growth
Extent	SC - Defect present in 5% to not more than 20% of area or length of element
Severity	D3 - Moderate: Defect is probably causing damage to element or structure, or is likely to do so in the near future
Priority	Medium
Comments	The portal piers are heavily stained with algal deposit and scaling. Water seepage is evident on the pier cross beam.
Cause	Fixings Failure Certainty Medium
Comment on	Joint failure above supports.
Cause	The central reserve drainage gully may also have failed.

Components	North Pier - tensioned corrugated beam safety fencing (B1113)		
Defect Type	MissCo - Missing		
Extent	SB - Defect present in not more than 5% of area or length of element		
Severity	D2 - Minor: Defect is unlikely to be causing damage to the element or structure now or unlikely to do so in the near future		
Priority	Medium		
Comments	There are no connections between the safety fence and the parapets. Presence of full height anchor instead.		
Cause Comment on Cause	Construction Issue Certainty High		



Observations/Defects Confirmed at this Inspection

Full height anchor block



Components North Abutment - Abutment Wall for North Abutment, South Abutment - Abutment Wall for South

Abutment

Defect Type Cr - Crack of uncertain origin or a combination of causes

Extent SB - Defect present in not more than 5% of area or length of element

Severity D2 - Minor: Defect is unlikely to be causing damage to the element or structure now or unlikely to do so

in the near future

Priority Low

Comments The South abutment, a number of cracks were noted which are showing damp and rust staining.

Delaminated concrete is common adjacent to these cracks. Cracking also noted in the North bankseat

wall.

Cracking to the north abutment





Observations/Defects Confirmed at this Inspection

Cracking to the south abutment



Components South Pier - Piers / Columns for South Pier

Defect Type Debo - Debonding

Extent SB - Defect present in not more than 5% of area or length of element

Severity D2 - Minor: Defect is unlikely to be causing damage to the element or structure now or unlikely to do so

in the near future

Priority Low

Comments The polysulphide joints sealant have degraded and are debonding.

Typical deterioration of the polysulphide sealant





Observations/Defects Confirmed at this Inspection

Components North Pier - Piers / Columns for North Pier

Defect Type Sp - Spalled area

Extent SB - Defect present in not more than 5% of area or length of element

Severity D2 - Minor: Defect is unlikely to be causing damage to the element or structure now or unlikely to do so

in the near future

Priority Low

Comments North piers, at the base of the fifth column from the west, two areas of spalling (approx 300m long x

100mm wide and 20mm deep) and a crack 400mm long and 0.55mm wide. There is corrosive staining in

the vicinity of the spall. Delamination now extends to 600x500mm. Other areas of delaminated concrete were noted to pier bases.

Spalling to the north pier leg



Components	South Abutment -	Abutment Wall for	South Abutment

Defect Type Cr - Crack of uncertain origin or a combination of causes

Extent SC - Defect present in 5% to not more than 20% of area or length of element

Severity D1 - Defect is definitely not causing damage to element or structure

Priority Medium

Comments Longitudinal crack (approx 6m) at the West end of the South abutment. There is a rusty leak at the East

end of that crack.



Observations/Defects Confirmed at this Inspection

Cracking to the south abutment



Components South Pier - Piers / Columns for South Pier

Defect Type MissCo - Missing

Extent SB - Defect present in not more than 5% of area or length of element **Severity** D1 - Defect is definitely not causing damage to element or structure

Priority High

Comments There is no safety fence protection to the south pier portal.

No safety fence protection to the

south pier portal









Observations/Defects Confirmed at this Inspection

Restraint System

Components West Deck (north side span - west) - West Parapet, East Deck (north side span - east) - East Parapet, West Deck (south side span - west) - West Parapet, West Deck(main span - west) - West Parapet, East Deck (south side span - east) - East Parapet

Defect Type PDeg - Other degradation or breakdown

Extent SC - Defect present in 5% to not more than 20% of area or length of element

Severity P2 - Minor loss of protection likely in the near future

Priority Low

Comments The parapet rails and posts are subject to loss and general deterioration of the paint system. The infill

mesh fixings are suffering from corrosion.

Cause Corrosion Certainty High

Comment on Cause

Deterioration of the parapet paint

system



Components East Deck(south side span - east) - East Parapet

Defect Type AD - Impact (accident) damage other

Extent SC - Defect present in 5% to not more than 20% of area or length of element

Severity D2 - Minor: Defect is unlikely to be causing damage to the element or structure now or unlikely to do so

in the near future

Priority Low

Comments The mesh infill to the east parapet has minor impact damage approximately 15m long.

Cause Accident Damage Certainty High

Comment on

Cause



Observations/Defects Confirmed at this Inspection

Mesh infill to the east parapet has minor impact damage



Components East Deck (north side span - east) - East Parapet, East Deck(south side span - east) - East Parapet

Defect Type MissCo - Missing

Extent SB - Defect present in not more than 5% of area or length of element

Severity D2 - Minor: Defect is unlikely to be causing damage to the element or structure now or unlikely to do so

in the near future

Priority Medium

Comments There are no connections between the safety fence and the parapets. Presence of full height anchor

instead.

Cause Construction Issue Certainty High

Comment on

Cause

Full height anchor block









Observations/Defects Confirmed at this Inspection

Carriageway

Components East Deck (main span - east) - Joint 2 east (north verge piers), East Deck (main span - east) - Joint 3

east (south verge piers), West Deck(main span - west) - Joint 3 west (south verge piers), East

Deck(south side span - east) - Joint 4 east (south abutment), West Deck (south side span - west) - Joint 4 west (south abutment), West Deck (north side span - west) - Joint 1 (north abutment - west bound), East Deck (north side span - east) - Joint 1 (north abutment - east bound), West Deck(main span - west)

- Joint 2 west (north verge piers)

Defect Type

CrCo - Cracked

Extent

SC - Defect present in 5% to not more than 20% of area or length of element

Severity

D3 - Moderate: Defect is probably causing damage to element or structure, or is likely to do so in the

Certainty

near future

Priority

High Comments

There is no sealant across portions of the saw cuts in the carriageway surfacing above deck joints which

may be a point of entrance for water damaging elements below.

Cause Comment on

Cause

Southbound south joint

Maintenance Issue



Medium

East Deck (north side span - east) - A14 east bound surfacing (replaced Nov 07) Components

Defect Type

CrCo - Cracked

Extent

SB - Defect present in not more than 5% of area or length of element

Severity

D3 - Moderate: Defect is probably causing damage to element or structure, or is likely to do so in the

near future

Priority

Medium

Comments

There was cracking in the carriageway on the departure to the Eastbound carriageway behind the

abutment.

Unable to Determine

Cause

Cause

Comment on

Certainty Medium



Observations/Defects Confirmed at this Inspection

Deterioration of the eastbound carriageway departure



Components West Deck(main span - west) - Joint 2 west (north verge piers)

Defect Type Debo - Debonding

Extent SB - Defect present in not more than 5% of area or length of element

Severity D2 - Minor: Defect is unlikely to be causing damage to the element or structure now or unlikely to do so

in the near future

Priority Low

Comments The polysulphide joints sealant have degraded and are debonding.

Typical deterioration of the polysulphide sealant









Observations/Defects Confirmed at this Inspection

Components West Deck(main span - west) - A14 westbound surfacing (replaced Sept 09), West Deck (north side span - west) - A14 westbound surfacing (replaced Sept 09), East Deck (north side span - east) - Joint 1

(north abutment - east bound), East Deck (main span - east) - Joint 2 east (north verge piers)

Defect Type PH - Pothole

Extent SB - Defect present in not more than 5% of area or length of element **Severity** D1 - Defect is definitely not causing damage to element or structure

Priority Low

Comments RESURFACED Potholing and surfacing deterioration is present to the eastbound carriageway at North

pier and over abutment.

Pothole has been reported to NCC for repair in 24HRS ref.51023525-51023760. 50-2016 G.I.

Cause Age Expired Certainty High

Comment on Lack of binding agent to the aggregate leading to movement of material and breakup of the surfacing. **Cause**

Resurfaced carriageway



 Components We	st Deck	(north side span	- west) - Waterpr	oofina (V	√est dec	:k)
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Defect Type Debo - Debonding

Extent SB - Defect present in not more than 5% of area or length of element **Severity** D1 - Defect is definitely not causing damage to element or structure

Priority Low

Comments RESURFACED The waterproofing membrane to the areas exposed during pothole patch repairs was

found to be debonded from the substrate and was subsequently removed to allow bonding of the surfacing. This has left the concrete deck exposed to the ingress of chlorides through water ingress.

Cause Bond Failure Certainty High

Comment on The bond failure can probably be attributed to the failure of the surfacing above.

Cause



Observations/Defects Confirmed at this Inspection

Components West Deck (south side span - west) - parapet cantilever, North Abutment - north abutment bearings

Defect Type FO - Foreign object

Extent SB - Defect present in not more than 5% of area or length of element

Severity D2 - Minor: Defect is unlikely to be causing damage to the element or structure now or unlikely to do so

in the near future

Priority Low

Superstructure

Comments In the west cantillever at the south end there is an area of corroding ferrous material with a spall, approx

60mm diameter.

Similar defect in the same area approximately 1m south of the south pier. Also, a small area of exposed

corroding steel on the north abutment east end.

Corroding ferrous material with a spall









Reviewed Maintenance Actions confirmed through this and outstanding from other Inspections N.B. The Origin of Work for each of these Maintenance Actions is Routine Inspection (currently Principal, General, Special and Monitoring).

Maintenance Object	Safety Fance	Maintenance Action	Install
Estimated Cost	•		
	£20,000	Recomm. Action Date	
Priority Category	2	Risk Score	92
Comments	Provide safety fence protection to the		
Maintenance Object		Maintenance Action	Repair
Estimated Cost	£30,000	Recomm. Action Date	
Priority Category	3	Risk Score	72
Comments	Repair areas of delaminated concre	<u> </u>	
Maintenance Object	•	Maintenance Action	Replace
Estimated Cost	£25,000	Recomm. Action Date	30/09/2014
Priority Category	3	Risk Score	65
Comments	Investigate cause of water seepage.	If joints are found to lea	k repair joints. Note the defect is
	likely to occur at the interface of the		
			may be the cause of water seepage.
	In addition to the above joint repairs	will be required as a cor	sequence of resurfacing works.
Maintenance Object	Pier/Column	Maintenance Action	Repair
Estimated Cost	£1,000	Recomm. Action Date	01/04/2016
Priority Category	3	Risk Score	41
Comments	Undertake minor concrete repair to a	areas of spalling.	
Maintenance Object	Concrete Deck	Maintenance Action	Repair
Estimated Cost	£1,000	Recomm. Action Date	01/04/2016
Priority Category	3	Risk Score	25
Comments	Remove corroding objects and repa	ir spalling on the west de	eck cantillever soffit.
Maintenance Object	Revetment	Maintenance Action	Repair
Estimated Cost	£500	Recomm. Action Date	01/04/2016
Priority Category	3	Risk Score	25
Comments	Replace missing slab on the north re	evetment.	
Maintenance Object	Parapet	Maintenance Action	Paint
Estimated Cost	£6,000	Recomm. Action Date	01/04/2016
Priority Category	3	Risk Score	25
Comments	Localised paint repairs to parapet		
Maintenance Object	Parapet	Maintenance Action	Repair
Estimated Cost	£2,000	Recomm. Action Date	01/04/2016
Priority Category	3	Risk Score	25
Comments	Replace deformed mesh infill east p	arapet.	

Unreviewed Maint' Actions confirmed through this and outstanding from other Inspections

N.B. The Origin of Work for each of these Maintenance Actions is Routine Inspection (currently Principal, General, Special and Monitoring).

Maintenance Object	Surfacing	Maintenance Action	Replace
Estimated Cost	£80.000	Recomm. Action Date	30/09/2014

Comments Resurfacing of westbound lane 1 over the entire structure. Repairs/replacement of burried joint

and waterproofing will also be required.







Outstanding Observations/Defects NOT Confirmed at this Inspection

Not Applicable			
Components	North Pier - bearing plinth (north piers)		
Defect Type	Cr - Crack of uncertain origin or a combina	ation of causes	
Extent	SB - Defect present in not more than 5% of	of area or length of e	lement
Severity	D3 - Moderate: Defect is probably causing	damage to element	or structure, or is likely to do so in the
	near future		
Priority	Medium En	nergency?	No
No. of images	0 Da	te last confirmed	20/05/2015
Comments	An obvious crack was noted in the Wester inspections.	rn most bearing plint	h of the North pier. Monitor crack at future
	แบงกะเดิดแจ้		

	inspections.				
Substructure					
Components	South Abutment - Abutment Wall for South Abutment, South Pier - Cross head (south), North Pier - Cross head (north), North Abutment - Abutment Wall for North Abutment				
Defect Type	Holl - Hollow (delaminated) area				
Extent	SB - Defect present in not more than 59	% of area or length of e	element		
Severity	D3 - Moderate: Defect is probably caus near future	ing damage to elemen	t or structure, or is likely to do so in the		
Priority	Medium	Emergency?	No		
No. of images	0	Date last confirmed	20/05/2015		
Comments	Areas of delaminated concrete were noted to the bankseat walls and pier crossheads.				
Components	South Pier - Cross head (south), North Pier - Cross head (north)				
Defect Type	FRep - Failed repair				
Extent	SB - Defect present in not more than 5% of area or length of element				
Severity	•	sing damage to the ele	ment or structure now or unlikely to do so		
.	in the near future	_			
Priority		Emergency?	No		
No. of images		Date last confirmed			
Comments	A number of repairs at core hole testing	g locations to pier cross	sheads have failed.		





Outstanding Observations/Defects NOT Confirmed at this Inspection

Restraint System

Components East Deck (main span - east) - East Parapet, East Deck(south side span - east) - East Parapet, West

Deck (south side span - west) - West Parapet, West Deck (north side span - west) - West Parapet, West

Deck(main span - west) - West Parapet

Defect Type MissCo - Missing

Extent SB - Defect present in not more than 5% of area or length of element

Severity D2 - Minor: Defect is unlikely to be causing damage to the element or structure now or unlikely to do so

in the near future

Priority Medium Emergency? No

No. of images 0 Date last confirmed 15/06/2010

Comments Parapet Defects identified during SMIS Capture exercise but not viewed during 2004 GI due to H & S

including

Bolt fixings - inspect all fixings and tighten loose bolts

Parapet Fixings near north end

Clean Parapet General Paint Loss

Joint Sealant to Parapet edge beams

Components West Deck (north side span - west) - West Parapet, West Deck(main span - west) - West Parapet, West

Deck (south side span - west) - West Parapet, East Deck (north side span - east) - East Parapet, East

Deck (main span - east) - East Parapet, East Deck(south side span - east) - East Parapet

Defect Type Deg - Degraded

Extent SB - Defect present in not more than 5% of area or length of element

Severity D2 - Minor: Defect is unlikely to be causing damage to the element or structure now or unlikely to do so

in the near future

Priority Low Emergency? No

No. of images 0 Date last confirmed 09/05/2016

Comments IAN 97/07 Assessment - Monitor parapet condition in future PI/GI inspections.

Watercourses and Earthworks

Components North Abutment - north revetment

Defect Type MissCo - Missing

Extent SB - Defect present in not more than 5% of area or length of element Severity D1 - Defect is definitely not causing damage to element or structure Priority Low Emergency? No

No. of images 0 Date last confirmed 09/05/2016 Comments The north revetment has a slab missing at the base of the north east pier.

Reviewed Maintenance Actions from sources other than Inspections

N.B. Currently these would be maintenance actions with an Origin of Work not set to Routine Inspection, e.g. BACO Parapets or ASR.

No other maintenance actions outstanding.

Unreviewed Maintenance Actions from sources other than Inspections

N.B. Currently these would be maintenance actions with an Origin of Work not set to Routine Inspection, e.g. BACO Parapets or ASR.

Maintenance Object Waterproofing Maintenance Action Replace

Origin of Work Incident

Estimated Cost £40,000 Recomm. Action Date 30/09/2014

Comments Repair areas of debonded/delaminated waterproofing whilst carrying out resurfacing operations.



Other Planned Inspections

N.B. These are the planned inspections in SMIS at the time of report production (Tuesday, 22 January, 2019), NOT at the time of the inspection.

Туре	Target Date	Reason
Special	31/03/2006	Expansion joints have failed resulting in long term contamination of underlying structure.
		Waterproofing membrane probable failure.
Special	01/07/2013	Mesh damage only to the westbound parapet.
Principal	23/07/2020	

Annex 1

Structure Report



WARNING - Asbestos is present. Be familiar with SMIS Help Guide and the AAP, follow your own safe working procedures.

Structure Summary key 9942

Road A14 **O.S. Grid Ref East/North** 612890 / 249610

Commissioned 1975 Constructed 1975

Maintaining Agent-Area Kier Highways - Area 6-Area 6

Geographical Area Suffolk Custodian-Region HA-East

Designer Eastern Rcu

Last Principal Inspection 20/05/2015 Last General Inspection 04/12/2018

PI Frequency (years) 6

Structure Type Bridge And Large Culvert

Bridge Type Highway Underbridge

High Load RouteNoHeavy Load RouteNoScour SusceptibleNoDBFONo

Original Design Loading HA + 45 HB

Number of Spans3Length32.30TensioningNot TensionedOverall ConstructionConcrete

Description of Structure

The structure is a simply supported three span underbridge and carries the A14, two lane, dual carriageway all purpose trunk road and two verges over the B1113 interchange through the centre span.

The bridge has two side spans of 9.0m and a main span of 14.25m and an overall width of 31.45m. The bridge is square to the A14.

The bridge comprises a cast in situ reinforced concrete top slab and 28no. type M1 precast prestressed beams with precast prestressed concrete type B2 box edge beams supported by cast in situ reinforced concrete bank seat abutments and two intermediate cast in situ reinforced concrete multiple leg portal piers. The bankseats and piers are founded on spread foundations. Flying wingwalls are cantilevered from the back of the bank seats. The deck has a longitudinal joint.

The dual 2 lane A14 on the bridge has carriageways 9.3m wide with 1m wide verges and a 9.9m wide central reserve. Asphaltic plug joints and a longitudinal joint are provided to accommodate movement of the bridge.

Articulation

The deck is supported on rubber pad type bearings. The simply supported structure is fixed at the south abutment and free at the north abutment with corresponding fixity over the intermediate supports.

Load Management for C&U and STGO Live Loading

Location All Traffic Lanes Direction Both

ALL 40/44 tonnes (Assessment)

HB with LL 45 (Assessment) HB without LL SV with LL SV without LL



Completed Inspections					
Inspection Type	Inspection Date	Inspection Reason			
General Inspection	04/12/2018				
General Inspection	09/05/2016				
Principal Inspection	20/05/2015				
General Inspection	20/06/2012				
Special Inspection (Special Inspection following incident)	17/01/2011	Potholes appearing to the surfacing			
General Inspection	15/06/2010				
Special Inspection (IAN 97/07 Assessment)	28/07/2009	Special Inspection to record IAN 97/07 results.			
Principal Inspection	28/04/2009				
Special Inspection (Resilience assessment)	06/01/2009	Special inspection for initial resilience assessment.			
General Inspection	31/05/2006				
General Inspection	13/06/2004				
Principal Inspection	23/07/2002				
General Inspection	17/09/1998				
Principal Inspection	14/08/1996				
General Inspection	08/09/1994				
General Inspection	18/03/1993				
Principal Inspection	03/12/1990				
General Inspection	01/10/1986				
Principal Inspection	01/02/1982				
General Inspection	01/09/1980				

Completed Assessments		
Assessment Type Assessment Date		
Parapet Assessment	03/02/2006	
40 Tonne Assessment	19/08/1996	

Maintenance Object	Maintenance Action	Date Completed	Comments	Project Name
Expansion Joint	Repair	23/09/2009	Replace longitudinal joint to prevent further contamination.	A14 Claydon Waterproofing W/B.
Surfacing	Repair	23/09/2009	Repair damaged surfacing if waterproofing work is likely to be delayed.	A14 Claydon Waterproofing W/B.
Expansion Joint	Replace	23/09/2009	Replace joints in westbound carriageway to prevent further damage to the crossheads.	A14 Claydon Waterproofing W/B.
Waterproofing	Replace	23/09/2009	Westbound carriageway - replace age expired waterproofing that has shown evidence of failure	A14 Claydon Waterproofing W/B.
Expansion Joint	Replace	01/12/2007	Replace failed expansion joints to eastbound carriageway	A14 CLAYDON WATERPROOFING
Waterproofing	Replace	01/12/2007	Eastbound carriageway - replace age expired waterproofing	A14 CLAYDON WATERPROOFING

Additional Maintenance History

May 2010 - Birse provided saw cut and seal to previous location of surfacing/expansion joint repair..September 2009 - Waterproofing Part 2 Westbound - under the Area 6 MAC Contract Atkins sub-contracted this scheme to Jacksons Civil Engineering. The scope of the scheme was to replace the waterproofing membrane, expansion joints, surfacing, install a combined kerb drain system and a sub-surface drainage system; all to the westbound carriageway only. In this scheme the waterproofing was replaced with a Pitchmastic PMB membrane, the expansion joints were replaced with Pitchmastic BP1 Buried joints, and shallow Envirokerb and Dri-deck sub-surface drainage systems were installed. November 2008 - Birse carried out a surfacing repair over the eastbound north pier expansion joint following pothole at expansion joint location. Bridging plate had been displaced, possibly from surfacing operations, plate replaced and fixed in position.November 2007 - Waterproofing Part 1 Eastbound - Birse Civils Limited replaced the waterproofing membrane, expansion joints, polysulphide joints, surfacing and installed Hydrodeck kerb drainage units to the eastbound carriageway only. As part of the works the centre reserve was partially hardened to allow maintenance of two narrow lanes during peak time working. The expansion joints were replaced with Sentinel buried joints and the waterproofing membrane with Stirling Lloyd Eliminator. October 2010 - Ducting added to external face of westbound parapet beam for comms cables for A14 VMS contract.

Features

Main Span has Lane 1 of the Main Carriageway of an unspecified road running under it with a critical headroom of 5.63 metres which was last checked on 20/05/2015 maintained by Suffolk County Council reference B1113

South Side Span has Natural Ground (Eg Valley) running under it maintained by Highways Agency

West Parapet has some unknown services fixed to it maintained by Highways Agency

West Parapet has some unknown services fixed to it maintained by Highways Agency

West Parapet has some unknown services fixed to it maintained by Highways Agency

Main Span has Lane 2 of the Main Carriageway of an unspecified road running under it with a headroom of 5.68 metres which was last checked on 20/05/2015 maintained by Suffolk County Council reference B1113

Bridge and Large Culvert has an Electricity service

Bridge and Large Culvert has Lane 1 of the Main Carriageway of the road A14 (Uplink) running over it maintained by Highways Agency reference Southbound.

Bridge and Large Culvert has Lane 2 of the Main Carriageway of the road A14 (Uplink) running over it maintained by Highways Agency reference Southbound.

Bridge and Large Culvert has Lane 1 of the Main Carriageway of the road A14 (Downlink) running over it maintained by Highways Agency reference Northbound.

Bridge and Large Culvert has Lane 2 of the Main Carriageway of the road A14 (Downlink) running over it maintained by Highways Agency reference Northbound.

North Side Span has Natural Ground (Eg Valley) running under it maintained by Highways Agency

Interim Measures

No interim measures present

Constraints			
Component	Туре	Name	Description
Claydon I/C North	Environmental/Heritage	Protected Species W&CA - Flora	Interchange roundabout
Claydon I/C North	Materials	Crocidolite	Asbestos cement permanent shutting

Departures		
Departure No.	Standard Departed From	Status
	1700 - Aspects not covered : Specification, Structures SHW, MCHW VOL 1 Series 1700 Structural Concrete	Approved with comments

Coating System for Steelwork

No Coating Systems for Steelworks present



Coating System for Concrete

No Concrete Coating Systems Present



Inventory

N.B. Inspection Elements are added for Inspection purposes only. They are shown here for information only, and it should be noted that the list of Inspection elements is not comprehensive.

North Abutment			
	Doub Cook	Matarial True	In site. Deinforced Consents
Support Type	Bank Seat	Material Type	Insitu Reinforced Concrete
Connection Type	Proprietary Elastomeric Bearings	Facing Material	None
Foundation 1			
Туре	Spread Footings		
	1 5		
north revetment	0. /		
Туре	Surface		
north east wingwall			
Anchoring System	Sub Surface	Length	
		Height	
north west wingwall			
Anchoring System	Sub Surface	Length	
		Height	
bearing shelf (north)			
Material Type	Insitu Mass Concrete		
	4 = 4		
ballast wall (north) - (In			
Туре	BAL - Ballast wall		
north abutment bearing	10		
Type	Elastomeric	Installation Date	01/01/1975
Product	Elasionelic	No. of Bearings	30
Floduct		No. or bearings	30
north embankment - (In	spection Element)		
Туре	EMB - Embankment or adjacent earthy	works	
Abutment Wall for Nort			
Support Type	Bank Seat	Material Type	Insitu Reinforced
Connection Type	Proprietary Elastomeric	Facing Material	None
North Side Span			
	Beam/Girder - At/Below Deck Surface	Skew	0.00
Min Width Between	7.00	Date Min Width Last	
Supports		Checked	
Features Data			
Critical Headroom		Critical Headroom	
		Last Checked	
Foot Dools (worth abl			
East Deck (north side s		Longith	0.00
Structure Form Type	Simply Supported	Length	9.00
Construction Type	Beam And Slab	Width	15.72
Enclosure Type	Void Inaccessible	Construction Date	01/01/1975
Material Type	Precast Prestressed Concrete	Material Name	PRIMARY
Material Type	Insitu Reinforced Concrete	Material Name	SECONDARY
Joint 1 (north abutmen	t - east bound)		
Туре	Buried Joint(Continuous Surfacing)	Installation Date	26/11/2007
J		No. of Joints	1
1	Otinlin at Llauri Cantin at D40		-

Stirling Lloyd Sentinel B10

Product



East Parapet			
Location	Deck Edge	Installation Date	01/01/1975
Form	Vehicle Parapet	Modified	Not Modified
Designer	B S C (Steel)	Modification Date	
M'facturer/Fabricator	B S C (Steel)	Nominal Height	1
Baco Parapet Type	Not Applicable	Modification Date	
Barrier Type	Other	(Baco post only)	
Material Infill	Mesh Infill	Primary Material	Steel
Cont Perf Class	Not Applicable	Parapet Group	P2(113)
Safety Fence Approac	ch N	Working Width	Not Applicable
Protection System	N	Safety Fence Departure	N
Protection Reason	Not Applicable	Protection System	N
BA 37/92 Ranking Dat	a		
Assessed	Υ	Assessed Date	31/03/2002
Contain Capacity Req	Normal	Containment Ranking	1.00
Containment Basis	Not Applicable		
Risk Features Below	1.00	Risk Highway Carried Out	3.00
Risk Layout	0.00	Risk Containment Features	0.00
Risk Ranking	4.00	Priority Ranking	4.00

A14 east bound surfacing (replaced Nov 07) - (Inspection Element)

Type SUR - Carriageway surfacing

Box beam concre	Box beam concrete east				
Shape	Box	Strengthening Type	Not Known		
Туре	Precast Hollow	Edge Beam?	Υ		
Material	Precast Prestressed Concrete				

Longditudinal joint (replaced Nov 07) - (Inspection Element)

Type LNJ - Longitudinal joint

parapet cantilever east - (Inspection Element)

Type EDG - Edge beam or edge cantilever

Slab			
Form	Slab Flat	Туре	Solid
Material	Insitu Reinforced Concrete	StrengtheningType	Not Known
West Deck (north side	span - west)		
Structure Form Type	Simply Supported	Length	9.00
Construction Type	Beam And Slab	Width	15.72
Enclosure Type	Void Inaccessible	Construction Date	01/01/1975
Material Type	Precast Prestressed Concrete	Material Name	PRIMARY
Material Type	Insitu Reinforced Concrete	Material Name	SECONDARY
Joint 1 (north abutmen	it - west bound)		
Туре	Buried Joint(Continuous Surfacing)	Installation Date	23/09/2009
		No. of Joints	1
Product	Bayer (Uk) Ltd Bp1 Buried Joint		



1

Ν

West ParapetLocationDeck EdgeInstallation Date01/01/1975FormVehicle ParapetModifiedNot Modified

DesignerB S C (Steel)Modification DateM'facturer/FabricatorB S C (Steel)Nominal Height

Baco Parapet TypeNot ApplicableModification DateBarrier TypeOther(Baco post only)

Material InfillMesh InfillPrimary MaterialSteelCont Perf ClassNot ApplicableParapet GroupP2(113)

Safety Fence Approach N Working Width P2(113)

Not Applicable

Protection SystemNSafety Fence DepartureNProtection ReasonNot ApplicableProtection SystemN

BA 37/92 Ranking Data

Assessed Y Assessed Date 31/03/2002

Contain Capacity Req Normal Containment Ranking 1.00

Containment Basis Not Applicable

Risk Features Below1.00Risk Highway Carried Out3.00Risk Layout0.00Risk Containment Features0.00Risk Ranking4.00Priority Ranking4.00

central reserve - integral sub-surface drainage system, installed '09 - (Inspection Element)

Type CRV - Central reserve

longitudinal joint - (Inspection Element)

Type LNJ - Longitudinal joint

double sided open box beam

Location Verge Installation Date

Form Safety Barrier Modified Modification Status

Designer Not Known Modification Date

M'facturer/Fabricator Not Known Nominal Height Not Specified

Baco Parapet TypeNot ApplicableModification DateBarrier TypeDROBB(Baco post only)

Material InfillNo InfillPrimary MaterialNot KnownCont Perf ClassNot ApplicableParapet GroupNot ApplicableSafety Fence Approach NWorking WidthNot Applicable

Protection System N Safety Fence Departure

Protection Reason Not Applicable Protection System N

BA 37/92 Ranking Data

Assessed Date

Contain Capacity Req Not Specified Containment Ranking

Containment Basis Not Known

Risk Features Below Risk Highway Carried Out Risk Layout Risk Containment Features

Risk Ranking 0.00 Priority Ranking 0.00

A14 westbound surfacing (replaced Sept 09) - (Inspection Element)

Type SUR - Carriageway surfacing

Box beam concrete west

Shape Box Strengthening Type Not Known

Type Precast Hollow Edge Beam? Y

Material Precast Prestressed Concrete

parapet cantilever west - (Inspection Element)

Type EDG - Edge beam or edge cantilever



Slab			
Form Material	Slab Flat Insitu Reinforced Concrete	Type StrengtheningType	Solid Not Known
lorth Pier			
Support Type	Concrete Frame	Connection Type	Proprietary Elastomeric
Assessment Data			
Strengthening	N	Permanent Protection	N
Completed Construction Date			
Foundation	Canada Fastinas		
Туре	Spread Footings		
	peam safety fencing - (Inspection Ele	ment)	
Туре	FEN - Fender		
Cross head (north)			
Material	Insitu Reinforced Concrete	Height	<u> </u>
		Length	
		Width	
pearing plinth (north p	iers)		
Material Type	Insitu Mass Concrete		
ensioned corrugated b	peam safety fencing (B1113) - (Inspec	tion Floment)	
Type	FEN - Fender	tion Element)	
1,700	1 ETC 1 GHGGI		
Bearing 2 (north verge			
Type	Elastomeric	Installation Date	01/01/1981
Product		No. of Bearings	30
Bearing 3 (north verge			
Туре	Elastomeric	Installation Date	01/01/1981
Product		No. of Bearings	30
Piers / Columns for No	rth Pier		
Support Type	Concrete Frame	Connection Type	Proprietary
Main Span			
•	Beam/Girder - At/Below Deck Surface	Skew	0.00
Min Width Between	14.25	Date Min Width Last	
Supports		Checked	
Features Data			
Critical Headroom		Critical Headroom	
		Last Checked	
East Deck (main span -			
Structure Form Type	Simply Supported	Length	14.30
Construction Type	Beam And Slab	Width	14.25
Enclosure Type	Void Inaccessible	Construction Date	01/01/1975
Material Type	Precast Prestressed Concrete	Material Name	PRIMARY
Material Type	Insitu Reinforced Concrete	Material Name	SECONDARY
Joint 2 east (north verg			
Туре	Buried Joint(Continuous Surfacing)	Installation Date	26/11/2007
Dec least	000000000000000000000000000000000000000	No. of Joints	1

Stirling Lloyd Sentinel B20

Product



Joint 3 east (south verg	ge piers)		
Туре	Buried Joint(Continuous Surfacing)	Installation Date	26/11/2007
		No. of Joints	1
Product	Stirling Lloyd Sentinel B15		
East Parapet			
Location	Deck Edge	Installation Date	01/01/1975
Form	Vehicle Parapet	Modified	Not Modified
Designer	B S C (Steel)	Modification Date	
M'facturer/Fabricator	B S C (Steel)	Nominal Height	1
Baco Parapet Type	Not Applicable	Modification Date	
Barrier Type	Other	(Baco post only)	
Material Infill	Mesh Infill	Primary Material	Steel
Cont Perf Class	Not Applicable	Parapet Group	P2(113)
Safety Fence Approac	ch N	Working Width	Not Applicable
Protection System	N	Safety Fence Departure	N
Protection Reason	Not Applicable	Protection System	N
BA 37/92 Ranking Dat	a		
Assessed	Υ	Assessed Date	31/03/2002
Contain Capacity Req	Normal	Containment Ranking	1.00
Containment Basis	Not Applicable	_	

A14	4 eastbound surfacing (replaced Nov 07)	- (Inspection I	Element)
	OUID O		

Type SUR - Carriageway surfacing

1.00

0.00

4.00

Risk Features Below

Risk Layout

Product

Risk Ranking

Box beam concr	Box beam concrete east				
Shape Box Strengthening Type Overspan Slab					
Type	Precast Hollow	Edge Beam?	Υ		
Material	Precast Prestressed Concrete				

Risk Highway Carried Out

Priority Ranking

Risk Containment Features

3.00

0.00

4.00

1

longditudinal joint (replaced Nov 07) - (Inspection Element)

Type LNJ - Longitudinal joint

parapet canti	er - (Inspection Element)	
Туре	EDG - Edge beam or edge cantilever	

-) -			
Slab			
Form	Slab Flat	Туре	Solid
Material	Precast Reinforced Concrete	StrengtheningType	Not Known
West Deck(main span	- west)		
Structure Form Type	Simply Supported	Length	14.30
Construction Type	Beam And Slab	Width	14.25
Enclosure Type	Void Inaccessible	Construction Date	01/01/1975
Joint 2 west (north ver	ge piers)		
Туре	Buried Joint(Continuous Surfacing)	Installation Date	23/09/2009
		No. of Joints	1
Product	Bayer (Uk) Ltd Bp1 Buried Joint		
Joint 3 west (south ver	ge piers)		
Туре	Buried Joint(Continuous Surfacing)	Installation Date	23/09/2009

No. of Joints

Bayer (Uk) Ltd Bp1 Buried Joint



West Parapet			
Location	Deck Edge	Installation Date	01/01/1975
Form	Vehicle Parapet	Modified	Not Modified
Designer	B S C (Steel)	Modification Date	
M'facturer/Fabricato	r BSC (Steel)	Nominal Height	1

Baco Parapet Type Not Applicable Modification Date
Barrier Type Other (Baco post only)

Material InfillMesh InfillPrimary MaterialSteelCont Perf ClassNot ApplicableParapet GroupP2(113)Safety Fence Approach NWorking WidthNot Applicable

Safety Fence Approach N

Protection System N

Safety Fence Departure N

Protection System N

Safety Fence Departure N

Protection Reason Not Applicable Protection System N
BA 37/92 Ranking Data

Assessed Y Assessed Date 31/03/2002 Contain Capacity Req Normal Containment Ranking 1.00

Containment BasisNot ApplicableRisk Features Below1.00Risk Highway Carried Out3.00Risk Layout0.00Risk Containment Features0.00Risk Ranking4.00Priority Ranking4.00

double sided open box beam

LocationDeck EdgeInstallation DateFormSafety BarrierModifiedModification Status

Designer Not Known Modification Date

M'facturer/Fabricator Not Known Nominal Height Not Specified

Baco Parapet TypeNot ApplicableModification DateBarrier TypeDROBB(Baco post only)

Material InfillNo InfillPrimary MaterialNot KnownCont Perf ClassNot ApplicableParapet GroupNot ApplicableSafety Fence Approach NWorking WidthNot Applicable

Protection System N
Protection Reason Not Applicable Safety Fence Departure N
Protection System N

BA 37/92 Ranking Data

Assessed Assessed Date

Contain Capacity Req Not Specified Containment Ranking

Containment Basis Not Known

Risk Features Below
Risk Layout
Risk Ranking
0.00
Risk Highway Carried Out
Risk Containment Features
Priority Ranking
0.00

longitudinal joint - (Inspection Element)

Type LNJ - Longitudinal joint

A14 westbound surfacing (replaced Sept 09) - (Inspection Element)

Type SUR - Carriageway surfacing

Box beam concrete west

Shape Box Strengthening Type Not Known

Type Precast Hollow Edge Beam? Y

Material Precast Prestressed Concrete

central reserve - integral sub-surface drainage system, installaed '09 - (Inspection Element)

Type CRV - Central reserve

parapet cantilever west - (Inspection Element)

Type EDG - Edge beam or edge cantilever



Slab			
Form	Slab Flat	Туре	Solid
Material	Insitu Reinforced Concrete	StrengtheningType	Not Known
South Pier			
Support Type	Concrete Frame	Connection Type	Proprietary Elastomeric
Assessment Data	N	Downson out Ductoction	N.I.
Strengthening Completed	N	Permanent Protection	N
Construction Date			
Foundation 3			
Туре	Spread Footings		
Cross head (south)			
Material	Insitu Reinforced Concrete	Height	
		Length	
		Width	
bearing plinth (South p			
Material Type	Insitu Mass Concrete		
Bearing 4 (south verge			
Type Product	Elastomeric	Installation Date	01/01/1981
		No. of Bearings	30
Bearing 5 (south verge		Installation Date	04/04/4004
Type Product	Elastomeric	Installation Date No. of Bearings	01/01/1981 30
	of Block	ge	33
Piers / Columns for Sor Support Type	Concrete Frame	Connection Type	Proprietary
	Concrete Frame	обинсской турс	Торпскагу
South Side Span	Poom/Cirdon At/Polow Pook Surface	Ckow	0.00
Min Width Between	Beam/Girder - At/Below Deck Surface 0.00	Date Min Width Last	0.00
Supports	0.00	Checked	
Features Data			
Critical Headroom		Critical Headroom Last Checked	
		Last Cilected	
East Deck(south side s Structure Form Type		Longth	9.00
Construction Type	Simply Supported Beam And Slab	Length Width	9.00 14.25
Enclosure Type	Void Inaccessible	Construction Date	01/01/1975
Joint 4 east (south abu	tment)		
Type	Buried Joint(Continuous Surfacing)	Installation Date	26/11/2007
		No. of Joints	1
Product	Stirling Lloyd Sentinel B5		



East Parapet				
Location	Deck Edge	Installation Date	01/01/1975	
Form	Vehicle Parapet	Modified	Not Modified	
Designer	B S C (Steel)	Modification Date		
M'facturer/Fabricator	B S C (Steel)	Nominal Height	1	
Baco Parapet Type	Not Applicable	Modification Date		
Barrier Type	Other	(Baco post only)		
Material Infill	Mesh Infill	Primary Material	Steel	
Cont Perf Class	Not Applicable	Parapet Group	P2(113)	
Safety Fence Approac	ch N	Working Width	Not Applicable	
Protection System	N	Safety Fence Departure	N	
Protection Reason	Not Applicable	Protection System	N	
BA 37/92 Ranking Data				
Assessed	Υ	Assessed Date	31/03/2002	
Contain Capacity Req	Normal	Containment Ranking	1.00	
Containment Basis	Not Applicable			
Risk Features Below	1.00	Risk Highway Carried Out	3.00	
Risk Layout	0.00	Risk Containment Features	0.00	
Risk Ranking	4.00	Priority Ranking	4.00	

A14 surfacing east bound (replaced Nov 2007) - (Inspection Element)

Type SUR - Carriageway surfacing

Box beam concrete east				
Shape	Box	Strengthening Type	Not Known	
Туре	Precast Hollow	Edge Beam?	Υ	
Material	Precast Prestressed Concrete			

longitudinal joint (replaced Nov 2007) - (Inspection Element)

Type LNJ - Longitudinal joint

parapet cantilever - (Inspection Element)

Type EDG - Edge beam or edge cantilever

Slab			
Form	Slab Flat	Туре	Solid
Material	Precast Reinforced Concrete	StrengtheningType	Not Known
West Deck (south side	span - west)		
Structure Form Type	Simply Supported	Length	9.00
Construction Type	Beam And Slab	Width	14.25
Enclosure Type	Void Inaccessible	Construction Date	01/01/1975
Material Type	Precast Prestressed Concrete	Material Name	PRIMARY
Material Type	Insitu Reinforced Concrete	Material Name	SECONDARY
Joint 4 west (south abutment)			
Туре	Buried Joint(Continuous Surfacing)	Installation Date	23/09/2009
		No. of Joints	1
Product	Bayer (Uk) Ltd Bp1 Buried Joint		



1

West ParapetLocationDeck EdgeInstallation Date01/01/1975FormVehicle ParapetModifiedNot Modified

DesignerB S C (Steel)Modification DateM'facturer/FabricatorB S C (Steel)Nominal Height

Baco Parapet TypeNot ApplicableModification DateBarrier TypeOther(Baco post only)

Material InfillMesh InfillPrimary MaterialSteelCont Perf ClassNot ApplicableParapet GroupP2(113)

Safety Fence Approach N Working Width Not Applicable Protection System N Safety Fence Departure N

Protection Reason Not Applicable Protection System N

BA 37/92 Ranking Data

Assessed Y Assessed Date 31/03/2002

Contain Capacity Req Normal Containment Ranking 1.00

Containment Basis Not Applicable

Risk Features Below1.00Risk Highway Carried Out3.00Risk Layout0.00Risk Containment Features0.00Risk Ranking4.00Priority Ranking4.00

A14 surfacing west bound (replaced Sept 09) - (Inspection Element)

Type SUR - Carriageway surfacing

longitudinal joint - (Inspection Element)

Type LNJ - Longitudinal joint

Box beam concrete west
Shape Box Strengthening Type Not Known

Type Precast Hollow Edge Beam? Y

Material Precast Prestressed Concrete

central reserve - integral sub-surface drainage system, installed '09 - (Inspection Element)

Type CRV - Central reserve

Double sided open box beam safety fence

Location Verge Installation Date

Form Safety Barrier Modified Modification Status

Designer Not Known Modification Date

M'facturer/Fabricator Not Known Nominal Height Not Specified

Baco Parapet TypeNot ApplicableModification DateBarrier TypeDROBB(Baco post only)

Material InfillNo InfillPrimary MaterialNot KnownCont Perf ClassNot ApplicableParapet GroupNot ApplicableSafety Fence Approach NWorking WidthNot Applicable

Protection System N Safety Fence Departure N
Protection Reason Not Applicable Protection System N

Protection Reason Not Applicable BA 37/92 Ranking Data

Assessed Assessed Date

Contain Capacity Req Not Specified Containment Ranking

Containment Basis Not Known

Risk Features Below Risk Highway Carried Out Risk Layout Risk Containment Features

Risk Ranking 0.00 Priority Ranking 0.00

parapet cantilever - (Inspection Element)

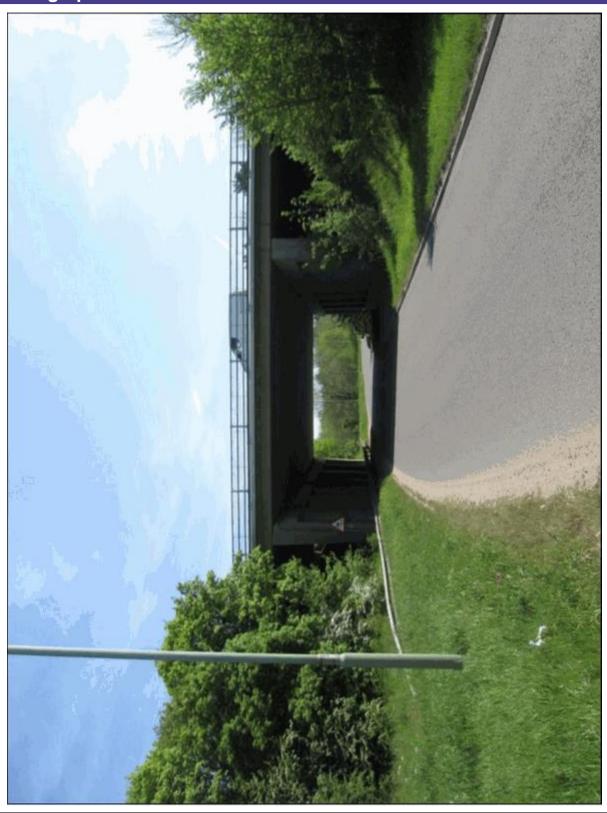
Type EDG - Edge beam or edge cantilever



Slab			
Form	Slab Flat	Туре	Solid
Material	Insitu Reinforced Concrete	StrengtheningType	Not Known
South Abutment			
Support Type	Bank Seat	Material Type	Insitu Reinforced Concrete
Connection Type	Proprietary Elastomeric Bearings	Facing Material	None
Foundation 4			
Туре	Spread Footings		
Bearing shelf south			
Material Type	Insitu Mass Concrete		
Wingwall south west			
Anchoring System	Sub Surface	Length	
		Height	
Wingwall south east			
Anchoring System	Sub Surface	Length	
		Height	
ballast wall (south) - (l	Inspection Element)		
Туре	BAL - Ballast wall		
couth ambankment (n	ature recerve) (Inchestion Floment)		
Type	ature reserve) - (Inspection Element) EMB - Embankment or adjacent earth		
. 1960		IWOING	
south abutment bearing		1 1 1 1 = 1	24/24/42=
Type	Elastomeric	Installation Date	01/01/1975
Product		No. of Bearings	30
South Revetment			
Туре	Surface		
Abutment Wall for Sou	uth Abutment		
Support Type	Bank Seat	Material Type	Insitu Reinforced
Connection Type	Proprietary Elastomeric	Facing Material	None

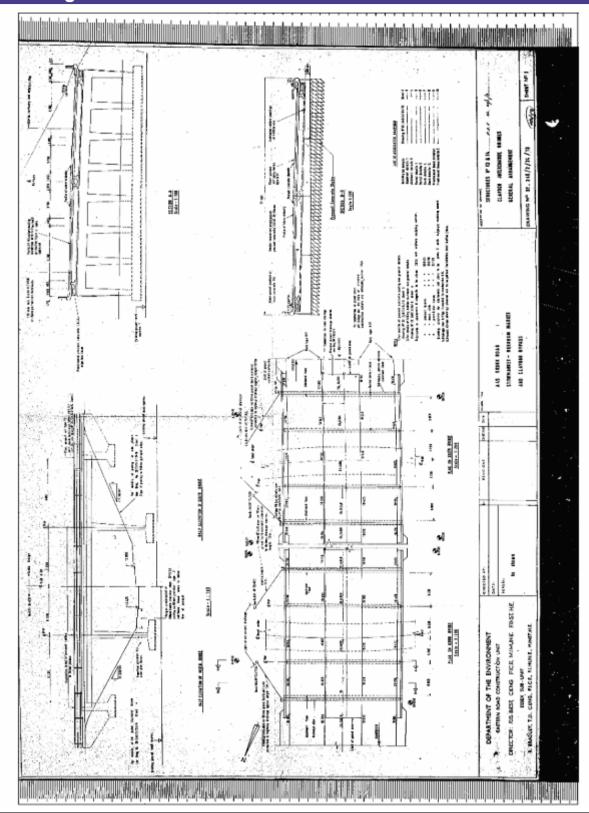


General Photograph



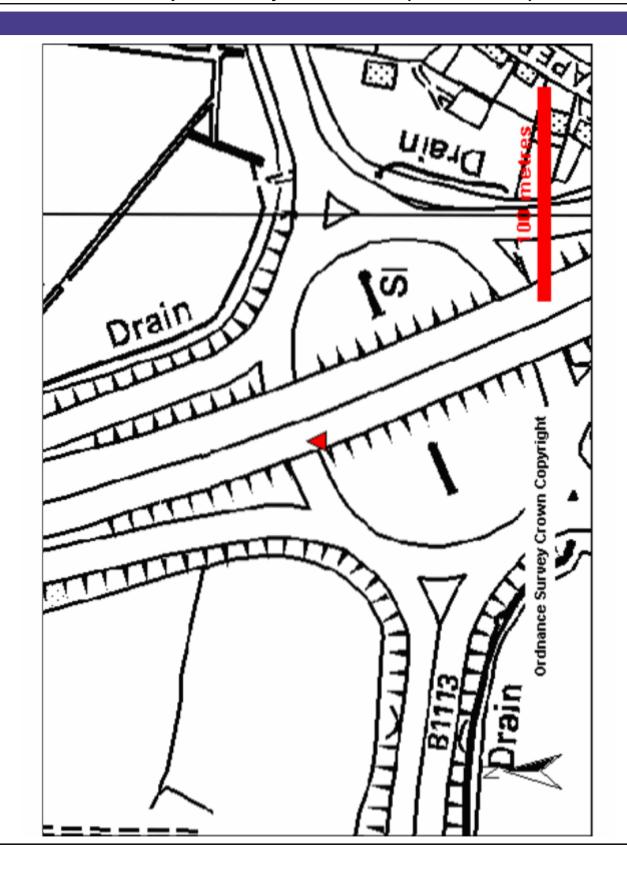


Elevation Drawing





Мар





1:50,000 Map

