

Woodbarn Farm

(/A404//13.10//) SMIS Structure Key: 18761

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



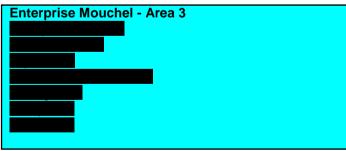
Principal Inspection

20 January 2014



enterprise**m ouchel**

HA Regional Office South East Federated House London Road Dorking RH4 1SZ





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Signatures		
Inspected by	Signature	Date
		_
Checked by	Signature	Date
Authorised by	Signature	Date
Authorised by		Date



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Reviewed Maintenance Actions from Sources other than Inspections

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Annex 1 - Structure Report



Summary

Structure Key 18761 Agent Name Enterprise Mouchel - Area 3

Commissioned 01/01/1972 **O.S. Grid Ref East/North** 486063 / 188795

Bridge Type Accommodation Access Underbridge

Length8.50Number of Spans1Date Inspected20/01/2014Overall ConditionFair

Weather Clear, Dry, Cool

Inspected by Authorised by

Authorised by
Authorisation date 17/02/2014
Method of Inspection On Foot, Visual PPE, Inspection Tools

Parts of Structure Not Foundations, Waterproofing, Buried Surfaces

Inspected

General Description

N/A

Articulation

N/A

Inspection Summary

Structure found to be in generally fair condition due to active water penetration through to the south abutment, areas of major cracking across the crarriageway surfacing and exposed reinforcement to the parapet edge beams.

Minor defects include cracking to the abutments and deck verges.



Inspection Photographs



01 - East Elevation 20.1.14



02 - West Elevation 20.1.14





03 - North Abutment 20.1.14



04 - South Abutment 20.1.14





05 - North East Wing Wall 20.1.14



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08 - South West Wing Wall 20.1.14





09 - Deck Soffit Looking West 20.1.14



10 - View Over Northbound Carriageway Looking North 20.1.14





11 - View Over Northbound Carriageway Looking South 20.1.14



12 - View Over Southbound Carriageway Looking South 20.1.14





13 - View Over Southbound Carriageway Looking North 20.1.14



14 - East Parapet 20.1.14





15 - West Parapet 20.1.14



Observations/Defects Confirmed at this Inspection



Observations/Defects Confirmed at this Inspection

Not Applicable

Components Centre Deck - West Parapet Plinth, Centre Deck - East Parapet Plinth

Defect Type ER - Exposed reinforcement

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

Exposed reinforcement to west edge beam, north end 20.1.14



Exposed reinforcement to west edge beam elevation 20.1.14





Observations/Defects Confirmed at this Inspection

Exposed reinforcement to west edge beam elevation 20.1.14



Exposed reinforcement to west edge beam elevation 20.1.14





Observations/Defects Confirmed at this Inspection

Exposed reinforcement to east edge beam elevation 20.1.14



Exposed reinforcement to west edge beam elevation 20.1.14





Observations/Defects Confirmed at this Inspection

Substructure
Components South Abutment - Abutment Wall for South Abutment

Defect Type WS - Water stain

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 Running water and water staining to south abutment west end

Water staining to south abutment,

west end 20.1.14



Running water to south abutment west end return 20.1.14





Observations/Defects Confirmed at this Inspection

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

Abutment

Defect Type DSCr - Drying shrinkage crack

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 Minor cracking to abutment walls

Vertical cracking to north abutment

20.1.14



Vertical cracking to north abutment 20.1.14





Observations/Defects Confirmed at this Inspection

Vertical cracking to south abutment 20.1.14



Minor vertical cracking to north abutment from weephole 20.1.14





Observations/Defects Confirmed at this Inspection

Minor vertical cracking to north abutment from weephole 20.1.14



Vertical cracking to south abutment 20.1.14



Components North Abutment - Abutment Wall for North Abutment

Defect Type CLe - Calcite Leaching

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 Minor leachate through cracking to north abutment



Observations/Defects Confirmed at this Inspection

Minor leachate through cracking to north abutment 20.1.14



Components South Abutment - Abutment Wall for South Abutment

Defect Type WS - Water stain

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

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

Comments Water staining to south abutment centre construction joint

Minor water staining to south

abutment centre at construction joint

20.1.14



North Abutment - Abutment Wall for North Abutment Components

Defect Type WS - Water stain

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

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 Water staining at top of north abutment, west end



Observations/Defects Confirmed at this Inspection

Water staining at top of north abutment, west end 20.1.14



Components North Abutment - West Wing Wall

Defect TypeVeg - Vegetation growth on the structure or encroaching on the structure **Extent**SB - Defect present in not more than 5% of area or length of element

Severity X2 - Defects unlikely to affect condition of adjacent elements now or in the near future

Priority Low

Comments

Vegetation along top of north west wing wall

Vegetation along top of north west

wing wall 20.1.14



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

Abutment

Defect Type WStA - Water stain (appearance only)

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

Severity A1 - Defect in tolerable condition

Priority Low

Comments Minor water staining to abutments due to active weepholes



Observations/Defects Confirmed at this Inspection

Active weepholes to north abutment 20.1.14



Active weepholes to south abutment 20.1.14





Observations/Defects Confirmed at this Inspection

y .	
ts Centre Deck - Northbound Surfacing, Centre Deck - Southbound Surfacing	
e CrCo - Cracked	
SB - Defect present in not more than 5% of area or length of element	in the
D3 - Moderate: Defect is probably causing damage to element or structure, or is likely to do so in the near future	
Medium	
Cracking across northbound and southbound carriageway surfacing above buried joints due to lack of provision for movement	İ
<u> </u>	CrCo - Cracked SB - Defect present in not more than 5% of area or length of element D3 - Moderate: Defect is probably causing damage to element or structure, or is likely to do so in the near future Medium Cracking across northbound and southbound carriageway surfacing above buried joints due to lack of

Cracking across southbound lane 2, south end 20.1.14

Major cracking across northbound lane 2 towards north end 20.1.14





Observations/Defects Confirmed at this Inspection

Major cracking across northbound lane 2, north end 20.1.14



Cracking across northbound lane 2, south end 20.1.14





Observations/Defects Confirmed at this Inspection

Cracking across southbound lane 2, north end 20.1.14



Components Centre Deck - Northbound Surfacing, Centre Deck - Southbound Surfacing

Defect Type CrCo - Cracked

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 Minor cracking to deck verges

Cracking to east verge, south end

20.1.14





Observations/Defects Confirmed at this Inspection

Cracking along west verge 20.1.14



Components Centre Deck - Southbound Surfacing

Defect Type Disp - Displaced or misaligned

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 Displaced east verge kerbstone, north end

Displaced east verge kerbstone,

north end 20.1.14







Observations/Defects Confirmed at this Inspection

Superstructure
Components Centre Deck - Main Slab, Longitudinal Beams - Longitudinal Beams West edge 1, Centre Deck -

Longitudinal Beams

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 Cracked edge beam at east side of south abutment

Components Longitudinal Beams - Longitudinal Beams 23, Longitudinal Beams - Longitudinal Beams 22

Defect Type WS - Water stain

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 Minor water staining to main beam soffit near mid span

Minor water staining to main beam soffit near mid span 20.1.14



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 ObjectExpansion JointMaintenance ActionProvideEstimated Cost£6,000Recomm. Action Date01/08/2010Priority Category3Risk Score78

Comments Saw cut above buried joints and insert bituminous filler

Maintenance ObjectConcrete DeckMaintenance ActionRepairEstimated Cost£20,000Recomm. Action Date01/01/2013

Priority Category 3 Risk Score 25
Comments Repair exposed reinforcement to west parapet edge beam



Outstanding Observations/Defects NOT Confirmed at this Inspection

Not Applicable

Components Centre Deck - East Parapet Plinth

Defect Type Al - Algal growth

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 Low Emergency? No

No. of images 0 Date last confirmed 30/01/2012

Comments Minor algae staining to parapets

Restraint System

Components Centre Deck - West Parapet

Defect Type Al - Algal growth

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 Low Emergency? No

No. of images 0 Date last confirmed 30/01/2012

Comments Minor algae staining to parapets

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.

No other maintenance actions outstanding

Other Planned Inspections

N.B. These are the planned inspections in SMIS at the time of report production (Monday, 17 February, 2014), NOT at the time of the inspection.

Type	Target Date	Reason
General	17/12/2015	
General	17/12/2017	
Principal	17/12/2019	

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 18761

Road A404 O.S. Grid Ref East/North 486063 / 188795

Commissioned 1972 **Constructed** 1972

Maintaining Agent-Area Enterprise Mouchel - Area 3-Area 3

Geographical Area Buckinghamshire Custodian-Region HA-South East

Designer Buckinghamshire County Council

Last Principal Inspection 20/01/2014 Last General Inspection 30/01/2012

PI Frequency (years) 6

Structure Type Bridge And Large Culvert

Bridge Type Accommodation Access Underbridge

High Load RouteNoHeavy Load RouteNoScour SusceptibleNoDBFONo

Original Design Loading HA + 37.5 HB

Number of Spans 1 Length 8.50

Tensioning Pre-Tensioned Overall Construction Concrete

Description of Structure

No information entered

Articulation

No information entered

Load Management for C&U and STGO Live Loading

Location All Traffic Lanes **Direction** Both

ALL 24 Tonnes (Design Traffic Loading)

HB with LL 37.50 (Design Traffic Loading)

SV with LL

SV without LL

Assessments, Inspection and Maintenance History Completed Inspections

Inspection Type	Inspection Date	Inspection Reason
Principal Inspection	20/01/2014	
General Inspection	30/01/2012	
General Inspection	10/07/2009	
Principal Inspection	04/12/2007	
General Inspection	07/03/2006	
General Inspection	14/04/2003	
Principal Inspection	17/12/2001	
General Inspection	09/06/1999	
General Inspection	21/08/1997	
General Inspection	15/01/1996	
Principal Inspection	08/03/1994	

Completed Assessments

No completed assessments found

Maintenance Actions Completed Through Projects Created In SMIS

No maintenance actions found

Additional Maintenance History

No information entered

Features

Bridge and Large Culvert has the Main Carriageway of the road A404 running over it maintained by Highways Agency Centre Span has an Accommodation Access running under it with a headroom of 5.60 metres which was last checked on 04/12/2007 maintained by Highways Agency reference Mid-span, east edge

Centre Span has an Accommodation Access running under it with a critical headroom of 5.56 metres which was last checked on 04/12/2007 maintained by Highways Agency reference Mid-span west, west edge

Interim Measures

No interim measures present

Constraints			
Component	Туре	Name	Description
Bridge and Large Culvert	Materials	Amphibole Asbestos excluding Crocidolite	Presumed ACM - Cover blocks, drainage, joint sealant, joint filler - refer to AAP Section 3
MAIN BEAMS/TUN.PORTL	Materials	Amphibole Asbestos excluding Crocidolite	Known ACM - Permanent formwork

Departures

No departures present

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.

•			
South Abutment			
Support Type	Cantilever Abutment	Material Type	Insitu Reinforced Concrete
Connection Type	Proprietary Elastomeric Bearings	Facing Material	None
South Transition Slab -	(Inspection Element)		
Туре	TRB - Buried transition slab		
South Bearings			0.4 /0.4 /4.070
Туре	Elastomeric	Installation Date	01/01/1972
Product		No. of Bearings	44
West Wing Wall			
Anchoring System	Not Known	Length	
0,		Height	
East Wing Wall			
Anchoring System	Not Known	Length	
Anchoring System	NOT KHOWH	Height	
		Height	
South Foundation			
Туре	Spread Footings		
Abutment Wall for Sout	h Abutment		
Support Type	Cantilever Abutment	Material Type	Insitu Reinforced
Connection Type	Proprietary Elastomeric	Facing Material	None
Centre Span			
Structural Form Type	Other	Skew	0.00
Min Width Between	0.00	Date Min Width Last	
Supports		Checked	
Features Data			
Critical Headroom		Critical Headroom	
		Last Checked	
Centre Deck			
Structure Form Type	Simply Supported	Length	8.50
Construction Type	Beam And Slab	Width	23.20
Enclosure Type	Not Applicable	Construction Date	01/01/1972
Material Type	Precast Prestressed Concrete	Material Name	PRIMARY
Material Type	Insitu Reinforced Concrete	Material Name	SECONDARY
Pretensioning Type	T-Beam Debonded & Straight Strand		



West Derenst			
West Parapet Location	Deck Edge	Installation Date	01/01/1972
Form	· ·	Modified	Not Modified
Designer	Vehicle Parapet Not Known	Modification Date	Not wodined
M'facturer/Fabricator	H D A Ltd	Nominal Height	1
		Modification Date	'
Baco Parapet Type	Not Applicable Other		
Barrier Type		(Baco post only)	A luma imiruma
Material Infill Cont Perf Class	Mesh Infill	Primary Material	Aluminium
	Not Applicable	Parapet Group	Not Applicable
Safety Fence Approac	Y	Working Width	Not Applicable
Protection System Protection Reason	•	Safety Fence Departure	N
	Not Applicable	Protection System	N
BA 37/92 Ranking Dat Assessed	a	Assessed Date	
1 10 0 0 0 0 0 0	Not Cooling		
Contain Capacity Req	Not Known	Containment Ranking	
	Not Known	Biok Himburov Comical Out	
Risk Features Below		Risk Highway Carried Out Risk Containment Features	
Risk Layout	0.00		0.00
Risk Ranking	0.00	Priority Ranking	0.00
West Parapet Plinth			
Material Type	Precast Reinforced Concrete		
South Joint			
Type	Buried Joint(Continuous Surfacing)	Installation Date	01/01/1972
Type	Buried Joint(Continuous Surfacing)	No. of Joints	1
Product	Not Known Buried Joint	NO. OF SOURCE	'
Northbound Surfacing			
Туре	SUR - Carriageway surfacing		
Lengitudinal laint			
Longitudinal Joint	Puriod Joint/Continuous Curfosing)	Installation Date	01/01/1972
Туре	Buried Joint(Continuous Surfacing)	No. of Joints	• ', • ', · • ' =
Product	Not Known Buried Joint	NO. OF JOINES	1
Southbound Surfacing			
Туре	SUR - Carriageway surfacing		
Newtherlands			
North Joint	D 3 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1	Installation Date	04/04/4070
Туре	Buried Joint(Continuous Surfacing)	Installation Date	01/01/1972
Due due (Notice of Description	No. of Joints	1
Product	Not Known Buried Joint		
Main Slab			
Form	Slab Flat	Туре	Solid
Material	Insitu Reinforced Concrete	StrengtheningType	None
Longitudinal Rooms			
Longitudinal Beams	T-beam	Strongthoning Type	None
Shape	Precast Solid	Strengthening Type	None Y
Type Material	Precast Solid Precast Reinforced Concrete	Edge Beam?	1
	r recast ivenimorced contrete		
East Parapet Plinth			
Material Type	Precast Reinforced Concrete		



1

Location	Deck Edge	Installation Date	01/01/1972
Form	Vehicle Parapet	Modified	Not Modified

DesignerNot KnownModification DateM'facturer/FabricatorH D A LtdNominal Height

Baco Parapet TypeNot ApplicableModification DateBarrier TypeOther(Baco post only)

Material InfillMesh InfillPrimary MaterialAluminiumCont Perf ClassNot ApplicableParapet GroupNot ApplicableSafety Fence Approach NWorking WidthNot Applicable

Protection Reason Not Applicable Working Width No Protection System Not Applicable Protection System Not Applicable Protection System Not Applicable Protection System Not Applicable Not

BA 37/92 Ranking Data

East Parapet

Assessed Date

Contain Capacity Req Not Specified Containment Ranking
Containment Basis Not Known

Risk Features Below
Risk Layout
Risk Containment Features

Risk Ranking 0.00 Priority Ranking 0.00

South Footway (L.A.) - (Inspection Element)

Type FTP - Footpath

Support Type Contileyer Abutment Material Type Incity Painforced Concrete	north Abutment			
Support Type Cantilever Abutment Material Type insitu Kelmorceu Concre	Support Type	Cantilever Abutment	Material Type	Insitu Reinforced Concrete

Connection Type Proprietary Elastomeric Bearings Facing Material None

North Transition Slab - (Inspection Element)

Type TRB - Buried transition slab

North Bearings
Type Elastomeric Installation Date 01/01/1972

Product No. of Bearings 44

West Wing Wall

Anchoring System Not Known Length
Height

East Wing Wall

Anchoring System Not Known Length

Height

North Foundation

Type Spread Footings

Abutment Wall for North Abutment

Support Type Cantilever Abutment Material Type Insitu Reinforced

Connection Type Proprietary Elastomeric Facing Material None

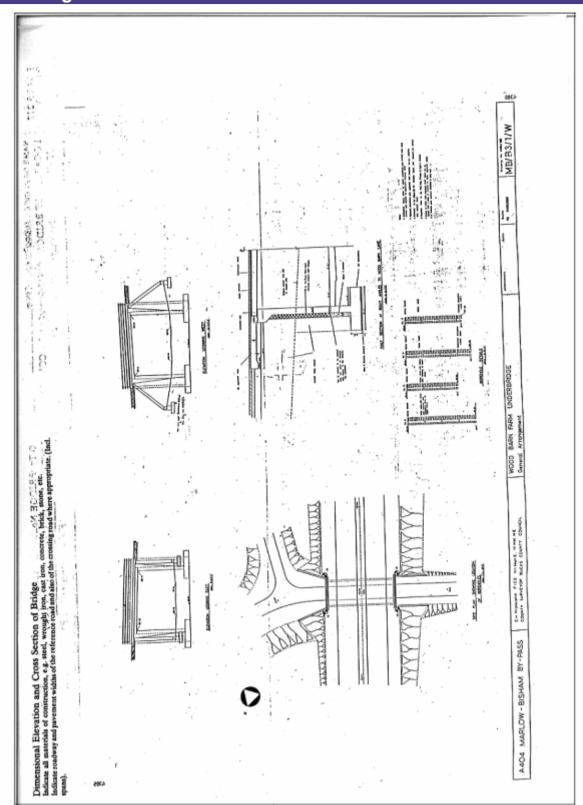


General Photograph



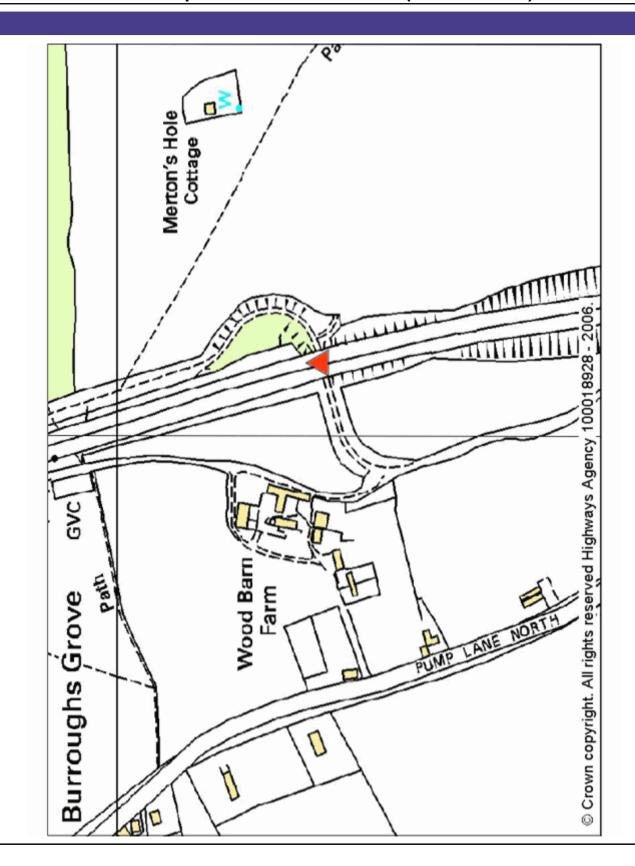


Elevation Drawing





Мар





1:50,000 Map

