

Earthwork Inspection 5 Chain Record

Earthwork Type	Soil Cutting - SCHI
Route	
Operational Route	LNE
Strategic Route	G - East Coast and North East
SRS	G.03 - Hertford Loop
Territory (Pre-Nov 2011)	LNER
Earthwork Management Area	3
Classification	London and SE Commuter

Line					
ELR	HDB				
Route Description	Hertford Nth Loop				
Reverse Mileage	False				
Start Mileage (Miles.Yards)	7.1320	End Mileage	7.1430	Side	Down
Start Easting	531,513	Northing	194,503		
End Easting	531,545	Northing	194,597		
Length (Mile.Yards)	0.0109				
Track Name	NT - Not 6ft or 10ft Earthwork	Track ID	2200 Down Slow/Local/Relief		
Reverse Mileage	False				
Disused Line	Open				

Inspection Information

Earthwork Type	Soil Cutting - SCHI
Earthwork Name	-
Inspection Season	Winter 2012/2013
Inspection Type	Cyclical Examination
Weather Conditions	Overcast; Calm
Competence Certificate No.	66020703
EE Recommendations	None
EE Inspection By	[REDACTED], Amey (LNE and Midlands)
EE Inspection Date	19 March 2013
EE Inspection Time	16:04
Last Modified By	[REDACTED], Amey (LNE and Midlands)
Last Modified Date	19 March 2013
Last Modified Time	16:04

Earthwork Inspection 5 Chain Record

CP4

Condition Category	 Marginal
Maximum SSHI Score	6.5
Maximum RSHI Score	0.0
Reason Unfinished	N/A

EHC

Current Inspection Date	19 March 2013
Completed in Current Season	False
Max EHC	 A
Inspection Risk Category	 Average Risk
Inspection Status	Finished
Reason Unfinished	N/A

Inspection Non-compliance Comment

Inspection Non-Compliance Comment
Inspection Non-Compliance Comment By
Inspection Non-Compliance Comment By
Date

Earthwork Inspection 5 Chain Record

CIV028 Failure Incident Information

No Incident Information

Hazard Information

No Hazards recorded

Earthwork Inspection 5 Chain Record

Sketch Information

No Sketch Information

Documents

No Information Available

Additional Documents

EnteredTitle	DocumentType	EnteredDate
Drainage Map GeoPDF (June 2013)	GeoPDF	05/02/2015 14:49:59

Earthwork Inspection 5 Chain Record

Photograph Information

ELR	Start Mileage	Up/Down Side	Photo Date	Photo Time
HDB	7.1326	Down	19 March 2013	14:01
HDB	7.1357	Down	19 March 2013	14:02
HDB	7.1429	Down	19 March 2013	14:03
HDB	7.1430	Down	19 March 2013	14:04
HDB	7.1425	Down	19 March 2013	15:40
HDB	7.1345	Down	19 March 2013	15:52
HDB	7.1392	Down	19 March 2013	16:03


ELR	Start Mileage	Up/Down Side	Photo Date	Photo Time
HDB	7.1424	D	19 March 2013	15:41
HDB	7.1344	D	19 March 2013	15:53

Earthwork Inspection 5 Chain Record

Embankment Information

No Embankment Information

Cutting Information

ELR	Start Mileage	End Mileage	Side	EHC	EACB	Asset Type	Entered Date
HDB	7.1350	7.1430	Down	 A	3	Soil Cutting	19 March 2013

Rock Slope Information

No Rock Slope Information

Risk To Track

Soil Risk to Track

Rotational	 Low Risk
Translational	 Low Risk
Earthflow	 Average Risk
Washout	 Low Risk
Burrowing	 Low Risk

Rock Risk to Track

Toppling	 Not Applicable
Planar	 Not Applicable
Wedge	 Not Applicable
Ravelling	 Not Applicable
Overburden	 Not Applicable

General Risk to Track

Detrimental Vegetation	 Average Risk
Scour	 Low Risk
Drainage Issues	 Low Risk

Overall Risk to Track

Risk Category	 Average Risk
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Earthwork Inspection 5 Chain Record

Comments

Safety Management Information System (SMIS)

Current Season Comments

-

Historic Comments

2013:

EE: layers of dead vegetation cause difficulty in assessing what is superficial veg cover and what is earth. monitor brick retaining wall at cutting toe which is cracked and bulges out slightly due to burden of slope. [REDACTED], Amey (LNE and Midlands): 19/03/13:

CIV28

Major Desk Study

Condition:

Notes and Photo References:

Physical Defects:

Remarks:

Railtrack Report Item Number: NA

Soil Mechanics Report Reference Number:

Remedial Works Recommendations:

Embankment Construction material: NA

Special Notes:

Geology: Alluvium over 'brickearth' over LONDON CLAY / -

Monitoring

Remedial Works

Earthwork Inspection 5 Chain Record

EEE Web Approval

Approval Status

Approved By

Approved Date

Approval Standard Comment

Approval Extended Comment

EEE GISmo Approval

Approval Status

Not Inspected

Earthwork Inspection 5 Chain Record

Reason for Evaluation

Current Evaluation

Web

Evaluated Date

Evaluation Status

Override	Overall

Inspection Frequency (Years)

Evaluated By

Evaluation Type

Evaluation Frequency? (Years)

NR Further Action(s)

Evaluation Comments (incl. Reason for Exam Rejection)

Further Evaluation Required?

Site

Evaluation Status

Not Inspected

Evaluation History

Next Evaluation Due 01 January 1900

Last Cyclical Evaluation

By

Date

Frequency

Status

Further
Reqd./Type

Web

	01 January 1900	10	Not Inspected	
	01 January 1900	10	.	.

GISmo

NR Further Action(s)

No Further Action

Evaluation Comments (incl. Reason for Exam Rejection)

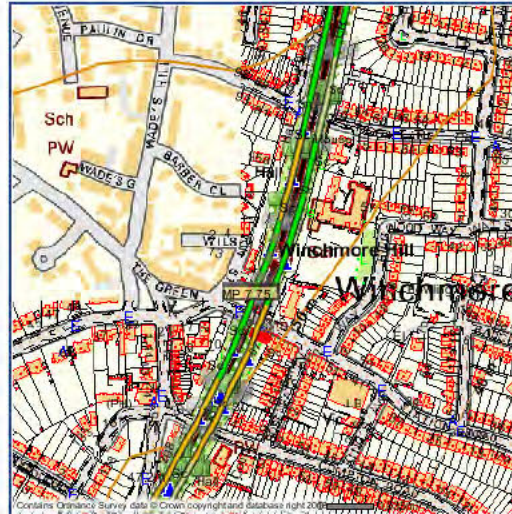
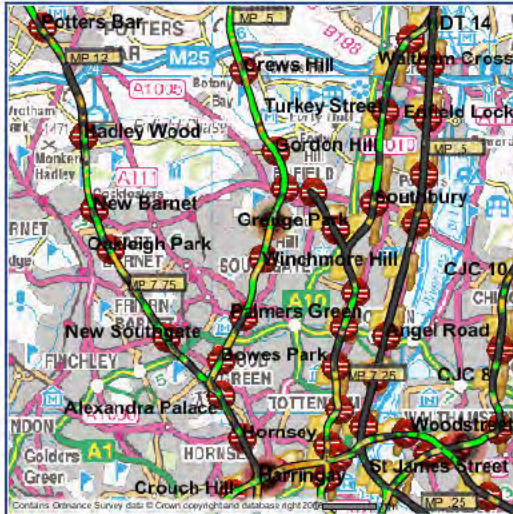
Earthwork Inspection 5 Chain Record

EHC

Current Inspection Date	19 March 2013
Completed in Current Season	False
Maximum EHC	 A
Risk Category	 Average Risk
Inspection Status	Finished
Reason Unfinished	N/A

Earthwork Inspection 5 Chain Record

Overview Maps



Location Map




Reference

HDB_7.1326_D_531522_194505_19_03_2013_14_01_03

Location Information

Linked 5 Chain Reference	HDB_7.1320_D_531513_194503_11_12_2007_22_00_42		
ELR	HDB		
Start Mileage (Miles.Yards)	7.1326	Side	Down
Start Easting	531,522	Northing	194,505

Photograph Information

Subject	Cess Level from start, increasing mileage
Taken Date	19 March 2013
Taken Time	14:01
Filename	FO:LNE:jpg:1441329833
Orientation	Down line
Description	taken from UP. [REDACTED], Amey (LNE and Midlands): 19/03/13:

Inspector Information

Inspected By	[REDACTED], Amey (LNE and Midlands)
Inspected Date	19 March 2013
Inspected Time	14:01


Reference

HDB_7.1357_D_531537_194530_19_03_2013_14_02_18

Location Information

Linked 5 Chain Reference	HDB_7.1320_D_531513_194503_11_12_2007_22_00_42		
ELR	HDB		
Start Mileage (Miles.Yards)	7.1357	Side	Down
Start Easting	531,537	Northing	194,530

Photograph Information

Subject	cutting above wall
Taken Date	19 March 2013
Taken Time	14:02
Filename	FO:LNE:jpg:1441231751
Orientation	Away from line
Description	-

Inspector Information

Inspected By	[REDACTED], Amey (LNE and Midlands)
Inspected Date	19 March 2013
Inspected Time	14:02


Reference

HDB_7.1429_D_531560_194592_19_03_2013_14_03_45

Location Information

Linked 5 Chain Reference	HDB_7.1320_D_531513_194503_11_12_2007_22_00_42		
ELR	HDB		
Start Mileage (Miles.Yards)	7.1429	Side	Down
Start Easting	531,560	Northing	194,592

Photograph Information

Subject	Cess Level from end, decreasing mileage
Taken Date	19 March 2013
Taken Time	14:03
Filename	FO:LNE:jpg:1441135753
Orientation	Away from line
Description	-

Inspector Information

Inspected By	[REDACTED], Amey (LNE and Midlands)
Inspected Date	19 March 2013
Inspected Time	14:03


Reference

HDB_7.1430_D_531559_194593_19_03_2013_14_04_13

Location Information

Linked 5 Chain Reference	HDB_7.1320_D_531513_194503_11_12_2007_22_00_42		
ELR	HDB		
Start Mileage (Miles.Yards)	7.1430	Side	Down
Start Easting	531,559	Northing	194,593

Photograph Information

Subject	Cess Level from end, decreasing mileage
Taken Date	19 March 2013
Taken Time	14:04
Filename	FO:LNE:jpg:1441108087
Orientation	Up line
Description	-

Inspector Information

Inspected By	[REDACTED], Amey (LNE and Midlands)
Inspected Date	19 March 2013
Inspected Time	14:04


Reference

HDB_7.1425_D_531549_194592_19_03_2013_15_40_37

Location Information

Linked 5 Chain Reference	HDB_7.1320_D_531513_194503_11_12_2007_22_00_42		
ELR	HDB		
Start Mileage (Miles.Yards)	7.1425	Side	Down
Start Easting	531,549	Northing	194,592

Photograph Information

Subject	Cess Level from end, decreasing mileage
Taken Date	19 March 2013
Taken Time	15:40
Filename	FO:LNE:jpg:1441180323
Orientation	Up line
Description	-

Inspector Information

Inspected By	[REDACTED], Amey (LNE and Midlands)
Inspected Date	19 March 2013
Inspected Time	15:40


Reference

HDB_7.1345_D_531524_194523_19_03_2013_15_52_43

Location Information

Linked 5 Chain Reference	HDB_7.1320_D_531513_194503_11_12_2007_22_00_42		
ELR	HDB		
Start Mileage (Miles.Yards)	7.1345	Side	Down
Start Easting	531,524	Northing	194,523

Photograph Information

Subject	cutting
Taken Date	19 March 2013
Taken Time	15:52
Filename	FO:LNE:jpg:1441259206
Orientation	Down line
Description	-

Inspector Information

Inspected By	[REDACTED], Amey (LNE and Midlands)
Inspected Date	19 March 2013
Inspected Time	15:52


Reference

HDB_7.1392_D_531541_194562_19_03_2013_16_02_45

Location Information

Linked 5 Chain Reference	HDB_7.1320_D_531513_194503_11_12_2007_22_00_42		
ELR	HDB		
Start Mileage (Miles.Yards)	7.1392	Side	Down
Start Easting	531,541	Northing	194,562

Photograph Information

Subject	Structure Defect
Taken Date	19 March 2013
Taken Time	16:03
Filename	FO:LNE:jpg:1441202994
Orientation	Away from line
Description	mortar cracks within retaining wall. bulging here. [REDACTED], Amey (LNE and Midlands): 19/03/13:

Inspector Information

Inspected By	[REDACTED], Amey (LNE and Midlands)
Inspected Date	19 March 2013
Inspected Time	16:02


Reference

HDB_7.1424_D_531534_194595_19_03_2013_15_41_28

Location Information

Linked 5 Chain Reference	HDB_7.1320_D_531513_194503_11_12_2007_22_00_42		
ELR	HDB		
Start Mileage (Miles.Yards)	7.1424	Side	D
Start Easting	531,534	Northing	194,595

Photograph Information

Subject	Boundary Level from end, decreasing mileage
Taken Date	19 March 2013
Taken Time	15:41
Filename	-
Orientation	Up line
Description	-

Inspector Information

Inspected By	 , Amey (LNE and Midlands)
Inspected Date	19 March 2013
Inspected Time	15:41


Reference

HDB_7.1344_D_531522_194522_19_03_2013_15_53_48

Location Information

Linked 5 Chain Reference	HDB_7.1320_D_531513_194503_11_12_2007_22_00_42		
ELR	HDB		
Start Mileage (Miles.Yards)	7.1344	Side	D
Start Easting	531,522	Northing	194,522

Photograph Information

Subject	Boundary Level from start, increasing mileage
Taken Date	19 March 2013
Taken Time	15:53
Filename	-
Orientation	Down line
Description	-

Inspector Information

Inspected By	 , Amey (LNE and Midlands)
Inspected Date	19 March 2013
Inspected Time	15:53

SCHI Soil Cutting

Reference HDB_7.1350_D_531521_194527_01_04_2004_11_22_01
 EHC  A

Location Information

Inspection 5 Chain Reference	HDB_7.1320_D_531513_194503_11_12_2007_22_00_42				
ELR	HDB				
Start Mileage (Miles.Yards)	7.1350	End Mileage	7.1430	Side	Down
Start Easting	531,521	Northing	194,527		
End Easting	531,545	End Northing	194,597		
Length (Mile.Yards)	0.0081				
Start Connection	-				
End Connection	HDB_7.1430_D_531545_194597_01_04_2004_11_22_01				
Approach	False				
Structure Name	-				

Height Ranges

Start Height (m)	3.0	End Height (m)	3.0
Min. Height (m)	3.0	Max. Height (m)	3.0

Actual Geometry Information

	Slope Angle (deg)	Slope Hyp (m)	Slope Height (m)
Lower Slope	28.0	4.3	2.0
Middle Slope	0.0	0.0	0.0
Upper Slope	36.0	1.7	1.0
Actual Slope to Track Separation (m)	3.0		
Actual Crest Width (m)	1.0		

LIDAR Derived Geometry

LIDAR Adjacent Natural Slope Angle (deg.)	0
LIDAR Adjacent Natural Slope Direction	Not Inspected
LIDAR Maximum Height (m)	0.00
LIDAR Maximum Angle (deg.)	0

SCHI Soil Cutting

Scored Geometry (A-I) Information

(A) Slope Angle and Height	>35 degrees, 3m to <10m High (A8)
(B) Slope Angle Adjacent to Earthwork	(+)ve falls towards e/work <5 degrees (B2)
(D) Construction Activity	None (D1)
(E) Min. Slope to Track Separation	Cutting cess width 3-6m (E2)
(F) Historic Geology	Alluvium / Estuarine Deposits (F3)
(FF) Bedrock Geology	Not Inspected
(FF) Drift Geology	Alluvium / Estuarine Deposits (FF3)
BGS Superficial Geology	-
BGS Bedrock Geology	-
(G) Cutting Slope Crest Width	Crest to boundary <1.5m (G1)
(H) Slope Composition at Crest	Cohesive - low - intermediate plasticity (H5)
(I) Slope Composition at Toe	Mixed granular/cohesive (I4)
(GG) Boulders Present?	None Present (GG1)
(HH) Rock Outcrops \ Faces Present?	None Present (HH1)

Retaining Walls (C) Information

ELR	Start Mileage	End Mileage	Side	Retaining Wall Material	Retaining Wall >= 1m
HDB	7.1348	7.1430	Down	Brick	Minor distress - spalling, pointing etc (C4)

Drainage (J-T) Information

(J) Slope Face Drainage Condition	Face dry (J1)
(K) Drainage of Adjacent Land	None (K1)
(L) Adjacent Catchment Depth	< 100m (L4)
(M) Adjacent Catchment Gradient	< 5degs. (M3)
(N) Catchment Surface	Residential (N6) Industrial/Hardstanding (N7)
(P) Catchment Geology	Mixed (P3)
(Q) Cutting Crest Drainage	None Visible (Q1)
(R) Cutting Crest Concentration Features	None (R5)
(S) Cutting Slope Erosion	None (S5)
(T) Cutting Cess Drainage	None (T1)
(II) Washout and Earthflow Risk (WERM2)	Not WERM2 site (II1)

SCHI Soil Cutting

Movement Indicators (U-EE) Information

(U) Slope Form of Earthwork	Uniform toe (U1) And Uniform Crest (U5)
(V) Geomorphology of Adjacent Land	No Significant Features (V3)
(W) Track Movements	No Significant Features (W2)
(X) Leaning Trees / Structures	Bent tree trunks - convex downslope (X4)
(Y) Cracking	None (Y1)
(Z) Mass Movement	None (Z1)
(AA) History of Instability	None (AA1)
(BB) Mining / Removal of Support	No Significant Features (BB2)
(CC) Animal Activity	Occasional Fox / Badger - <3 burrow holes /50sq.m (CC3)
(DD) Tree Cover	Occasional mature trees - <10 trees /20sq.m on slope angles of >25degrees (DD4)
(EE) Ground Cover	Dense grass / bramble cover (EE4)

No Line Movement Indicators Present
No Point Movement Indicators Present

Intervention Works

Pre-Intervention SCHI -115

No Linear Intervention Works Present
No Point Intervention Works Present

SCHI Soil Cutting

Photograph Information

No Photograph Information

SCHI Soil Cutting



Examiner

Completed in Current Season False
Examined By [REDACTED] Amey (LNE and Midlands)
Examined Date 19 March 2013 15:51


Comments

Current Season Comments -
Historic Comments 2013:
 EE: monitor brick retaining wall at cutting toe which bulges out slightly. [REDACTED], Amey (LNE and Midlands): 19/03/13:

CP4 SSHI

	Rot.	Trans.	Earth.	Wash.	Burrow.
Actual Score	20	20	6	0	5
Potential Score	79	76	52	58	25
SSHI	6.5	6.5	3.9	3.9	2.6
Earthworks Factor	1.3				
Overall SSHI Score	6.5				
SSHI Category	 Marginal				
CP5 Category	 Marginal				

EHC

SCHI -115
EHC  A
Asset Examination Status Full

EACB

CCT Value 0.00483
EACB 3

Asset Examination Frequency (Years)

Scored Asset Examination Frequency 10
Reviewed Asset Examination Frequency 0
Overall Asset Examination Frequency 10