



### C305 – Eastern Running Tunnels

I&M Close out report for Instrumentation from Pudding Mill Lane to Stepney Green (Drive Z)

CRL Document Number: C305-DSJ-C2-RGN-CRG03-50385

Supplier Document Number: N/A

Contract MDL reference C13.023

#### 1. Contractor Document Submittal History:

Revision:	Date:	Prepared by:	Checked by:	Approved by:	Reason for Issue:
2.0	08-06-16	[Redacted]	[Redacted]	[Redacted]	For approval

#### 2a. Stakeholder Review Required? YES NO

Stakeholder submission required: LU  NR  DLR  RfL  LO  Other: \_\_\_\_\_

Purpose of submission: For no objection  For information

This document has been reviewed by the following individual for coordination, compliance, integration and acceptance and is acceptable for transmission to the above stakeholder for the above stated purpose:

Sign: \_\_\_\_\_ Role: \_\_\_\_\_ Name: \_\_\_\_\_ Date: \_\_\_\_\_

Sign: \_\_\_\_\_ Role: \_\_\_\_\_ Name: \_\_\_\_\_ Date: \_\_\_\_\_

#### 2b. Review by Stakeholder (if required):

Stakeholder Organisation	Job Title	Name	Signature	Date	Acceptance
					<input type="checkbox"/>
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#### 3. Acceptance by Crossrail:

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I&M Close out Report for Instrumentation from Pudding Mill Lane to Stepney Green Shaft (Drive Z) C305-DSJ-C2-RGN-CRG03-50385 Rev 2.0				
<b>C305 Crossrail Eastern Running Tunnels</b>				
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<b>Current Version of the Documents &amp; Signatures :</b>				
Revision:	Date:	Prepared by:	Checked by:	Engineering Approved by:
2.0	08.06.2016			
<b>Document History :</b>				
Revision:	Date:	Prepared by:	Checked by:	Engineering Approved by:
1.0	29.04.2016			



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APPENDIX A: LOCATION OF THE WORKS

APPENDIX B: SUMMARY OF INSTRUMENTATION INSTALLED ON SITE

APPENDIX C: MINUTES CLOSE OUT MEETING AREA

APPENDIX D: DEFLECTION RATIO

1. CLOSE OUT REPORT PURPOSE

As stated in the specification: C122-OVE-Z4-RSP-CR001-00007 Rev 7.0, the purpose of this close-out report is to summarize the data from the instrumentation included in this document and to relate the recorded movements to the construction activities which produce any observed changes. For construction activities it is intended excavation of the C305 twin bored tunnels and dewatering of cross passages; impacts from cross passage excavation or from other CRL contracts are not included in this report.

The long term readings have been used to demonstrate that the subsequent movement has reached an acceptably stable rate within the accuracy of the system in order to decommission and/or that C305 works are no longer impacting the area concerned.

As stated in the specifications the settlement rate of 2 mm/year (yr) has been defined. Where this is not achieved this report seeks agreement from all parties that the rate is acceptably low enough to cease monitoring and decommission.

2. LOCATION OF THE WORKS

All instruments covered by this report are located within Area 14, along Drive Z, between Pudding Mill Lane and Stepney Green Shaft; project chainage 83450 to 80700.

All permissions were requested and received before any instruments were installed.

Drawings showing locations of Area 14 instruments are included as Appendix A.

### 3. DOCUMENTATION SUMMARY

METHOD STATEMENT	Crossrail Number
I&M Eleanor Street Shaft Control Section "C2" Boreholes	C305-DSJ-C2-GMS-CR094_WS108-50002
SNC Eleanor Bhs - Change of Locations	C305-DSJ-C2-CCN-CR094_WS108-50005
MS Shallow Datums 28No Bhs Drive Z	C305-DSJ-C2-GMS-CRG03-50033
SNC SDZ2 Shallow Datum Contaminated	C305-DSJ-C2-CCN-CRG03-50043
WPP Shallow Datums near NR Bridges FSS1 599 & 597 in Drive Z (82000-81800)	C305-DSJ-C2-STP-CR094_PT002-50002
MS MILE END Section C2 Bhs	C305-DSJ-C2-GMS-CR094_PT002-50017
SNC Mile End Boreholes Joseph Street ME-15 to ME-21 Change of Location	C305-DSJ-C2-CCN-CR094_PT002-50026
MS H&W Sockets & Studs Detached Houses	C305-DSJ-C2-GMS-CR094_PT002-50007
SNC H&W Site LP's to be Replaced	C305-DSJ-C2-CCN-CR094_PT002-50030
MS National Grid Asset Protection 17No Long LP 400kV	C305-DSJ-C2-GMS-CR094_PT002-50009
MS 400KV Cable Horizontal Displacement	C305-DSJ-C2-GMS-CR094_PT002-50015
MS LEVELLING POINTS PML-SG (81000 to 83300)	C305-DSJ-C2-GMS-CR094_PT002-50018
MS SOCKETS & PRISMS PML-SG	C305-DSJ-C2-GMS-CR094_PT002-50023
SNC River Lea East Cofferdam 3D Monitoring	C305-DSJ-C2-CCN-CR094_PT002-50016
MS River Lea West Cofferdam 3D Monitoring	C305-DSJ-C2-GMS-CR094_PT002-50019
MS West River Wall Targets from Boat	C305-DSJ-C2-GMS-CR094_PT002-50024
MS LUL Electrical Substation Sockets & Prisms (Rounton Road)	C305-DSJ-C2-GMS-CR094_PT002-50026
SNC Rescue Rope & Monitoring PML	C305-DSJ-C2-CCN-CR094_PT002-50002
MS I&M St. Dunstan Church Sockets & Nails	C305-DSJ-C2-GMS-CR094_WS108-50007

INSTALLATION REPORTS	Crossrail Number
IR for I&M installed as per "I&M Ham & Wick Control Section "E" Borehole MS"	C305-DSJ-C2-RGN-CRG03-50126
IR for I&M MS "Eleanor Street Shaft Control Section "C2" Boreholes"	C305-DSJ-C2-RGN-CRG03-50180
IR for I&M MS "Drive Z Shallow Datums (82300-80900)"	C305-DSJ-C2-RGN-CRG03-50183
IR for I&M for Section C2 Mile End Area (Drive Z)	C305-DSJ-C2-RGN-CRG03-50184
I&M Installation report for Sockets, Levelling points & Prisms from Pudding Mill Lane to Stepney Green (Drive Z)	C305-DSJ-C2-RGN-CRG03-50379
I&M Installation report for Sockets & Nails at St Dunstan Church (Drive Y)	C305-DSJ-C2-RGN-CRG03-50161
I&M Installation report for Galsworthy Avenue, Niche 3 Piezometers (Drive Z)	C305-DSJ-C2-RGN-CRG03-50182 Rev 1.0

#### 4. SUMMARY OF INSTALLED INSTRUMENTATION ON SITE

The total number of instruments installed, as per installation report listed in Section 6 above, was:

- 1263 Levelling points
- 288 Sockets
- 107 3D Prisms and Retro Targets
- 19 Shallow Datum
- 14 Inclinometers (not clear in app B)
- 21 Rod Extensometers
- 18 Piezometers
- 13 Tape Extensometers points

Detailed information of the installed instrumentation is reported in Appendix B.

The average commissioning readings included in Appendix B have been used to calculate the relative movements provided in the graphs of this report.

In some of them, new values were determined as a zero readings according to the requirement of the client in CTC meetings. The dates of the new zero readings are as follows:

Levelling points	Date	Sockets	Date
C305-LP140301-C305-LP140347	13/09/2013	C305-LB144601-C305-LB144604	01/04/2014
C305-LP140401-C305-LP140435	16/09/2013	C305-LB148001-C305-LB148033	28/10/2013
C305-LP140501-C305-LP140540	25/09/2013		
C305-LP140601-C305-LP140639	26/09/2013		
C305-LP140801-C305-LP140821	27/09/2013		
C305-LP141001-C305-LP141050	01/10/2013		
C305-LP141101-C305-LP141139	17/10/2013		
C305-LP141501-C305-LP141522	24/10/2013		
C305-LP141601-C305-LP141635	24/10/2013		
C305-LP141410-C305-LP141426	28/10/2013		
C305-LP141943-C305-LP141962	11/11/2013		
C305-LP142101-C305-LP142138	28/10/2013		
C305-LP146101-C305-LP146118	05/11/2013		
C305-LP142440-C305-LP142443	06/11/2013		
C305-LP142801-C305-LP142831	07/11/2013		
C305-LP142901-C305-LP142933	10/12/2013		
C305-LP143101-C305-LP143113	10/12/2013		
C305-LP143201-LPC305-LP143226	12/11/2013		
C305-LP143601-LPC305-LP143634	10/01/2014		
C305-LP143801-LPC305-LP143840	17/01/2014		

**5. CONSTRUCTION ACTIVITY**

**TBM Passage**

DRIVE Z	RINGS	PROJECT CHAINAGE	DATES
Eastbound (EB)	0-1698	83450 – 80680	22/08/2013 to 05/02/2014
Westbound (WB)	0-1751	83450 – 80700	27/02/2014 to 13/06/2014

Stoppage Period Drive Z Eastbound:

RING	DATES		DAYS	PROJECT CHAINAGE
23	22/08/13	30/08/13	8	83412
41	01/09/13	04/09/13	3	83383
69	08/09/13	20/09/13	12	83337
93	22/09/13	28/09/13	7	83298
1225	20/12/13	06/01/14	17	81443

Stoppage Period Drive Z Westbound:

RING	DATES		DAYS	PROJECT CHAINAGE
24	28/02/14	07/03/14	7	83412
27	07/03/14	10/03/14	3	83408
52	11/03/14	14/03/14	3	83368
82	16/03/14	24/03/14	8	83321
1605	30/05/14	02/06/14	2	80929
1724	07/06/14	09/06/14	2	80742

The periods of TBM passage and stoppage are related to the rings located close to the instrumentation included in this close out report.

**DEWATERING/ CONSTRUCTION DATES NICHE 3**

Dewatering: 23<sup>rd</sup> of June 2014 to 5<sup>th</sup> of February 2015

Niche construction: July 2014 to September 2014

Sump construction: September 2014 to January 2015

**6. METHODOLOGY**

To determine the settlement rate the following methodology has been used. A Linear Regression has been applied for a defined period using long term readings is recorded after TBM construction. This uses the following formula:

$$b = \frac{\sum_{i=1}^n (X_i - \bar{X}_i) \cdot (Y_i - \bar{Y}_i)}{\sum_{i=1}^n (X_i - \bar{X}_i)^2}$$

Where:

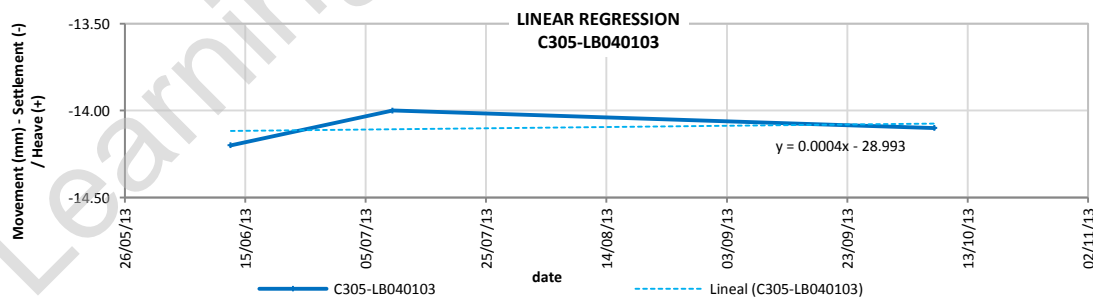
- B =gradient
- X = date
- Y = vertical movement

From this, the settlement rate per day can be calculated and rate per year determined (negative value is for settlement, positive is for heave). For these values, the percentage at or below 2 mm/yr will be used to determine the trend of the section/area being considered. Also for comparison, values at or below 3mm/year are presented to highlight that the rate is close to achieving the 2 mm/yr.

Note the percentages of settlement rate presented in the sections below refer to values rounded to the nearest integer.

One example of this calculation can be seen below for the socket C305-LB040103 and its projection included in this Close Out Report.

	Registered movement (mm)			RATE mm/year
	12/06/2013	09/07/2013	07/10/2013	
C305-LB040103	-14.20	-14.00	-14.10	0.146





**CALCULATION - C305-LB040103**

$X_i$	$Y_i$	$X_i - \bar{X}_i$	$Y_i - \bar{Y}_i$	$(X_i - \bar{X}_i)^2$	$(X_i - \bar{X}_i) \cdot (Y_i - \bar{Y}_i)$
12/06/2013	-14.2	-47.94	-0.10	2298.67	4.794
09/07/2013	-14	-21.03	0.10	442.17	-2.103
07/10/2013	-14.1	68.97	0.00	4757.17	0.000

$\bar{X}_i$		41485.53	
$\bar{Y}_i$		-14.10	
$\sum_{i=1}^n (X_i - \bar{X}_i)^2$		7498.00	(2)
$\sum_{i=1}^n (X_i - \bar{X}_i) \cdot (Y_i - \bar{Y}_i)$		2.692	(1)
m (SLOPE)	(1)/(2)	0.0004	
Rate (mm/year)	m * 365	0.146	

Learning Legacy Document

## 7. SUMMARY OF THE DATA

Area 14 covers over 2.7 km of tunnel alignment. Therefore, for the sake of clarity, the data recorded from monitoring of the instruments listed in Section 4 will be presented in this report in seven sub-areas:

Sub-area 1: Pudding Mill Lane. Portal site and R Lea banks

Sub-area 2: Ham and Wick work site area, A12, Baldock St & Wrexham Rd.

Sub-area 3: Ridgdale Rd to Bow Church Station.

Sub-area 4: Between Bow Church Station to Bow Common Lane.

Sub-area 5: Between Bow Common Lane to Grand Union Canal (Regent's Canal).

Sub-area 6: Between Grand Union Canal (Regent's Canal) to Whitehorse Road.

Sub-area 7: Between Whitehorse Road to Stepney Green.

The table below lists the EB and WB tunnel chainages relevant to each sub-area.

EASTBOUND			WESTBOUND		
	RING	Chainage		RING	Chainage
Subarea 1	0	83450	Subarea 1	0	83450
	36	83400		36	83390
Subarea 2	37	83400	Subarea 2	37	83390
	112	83270		87	83300
Subarea 3	113	83270	Subarea 3	88	83300
	369	82850		407	82695
Subarea 4	377	82850	Subarea 4	425	82695
	917	81970		920	81990
Subarea 5	912	81970	Subarea 5	916	81990
	1285	81360		1304	81390
Subarea 6	1284	81360	Subarea 6	1302	81390
	1542	80930		1593	80930
Subarea 7	1541	80930	Subarea 7	1591	80930
	1691	80680		1751	80700

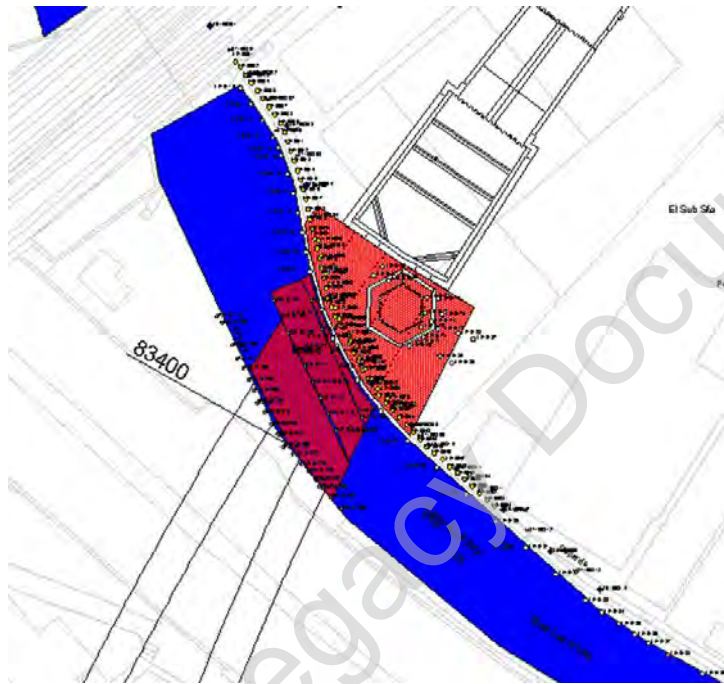
The methodology explained in section 6 for calculating the socket settlement rate is also applied for the levelling points and rod extensometers.

Note: For the following data plots #N/A refers to instances where readings were not taken for that sensor (e.g. damaged sensor, no access, etc.)

### SUB-AREA 1

The instrumentation is located around Pudding Mill lane area, as shown in the figure below, and comprises the following:

- 114 Levelling points
- 13 Tape extensometer points
- 57 3D Prisms and Retro Targets



**Note:**

The following levelling points included in this report were monitored by DSJV but installed by others :

C305-LP15001- C305-LP 15054

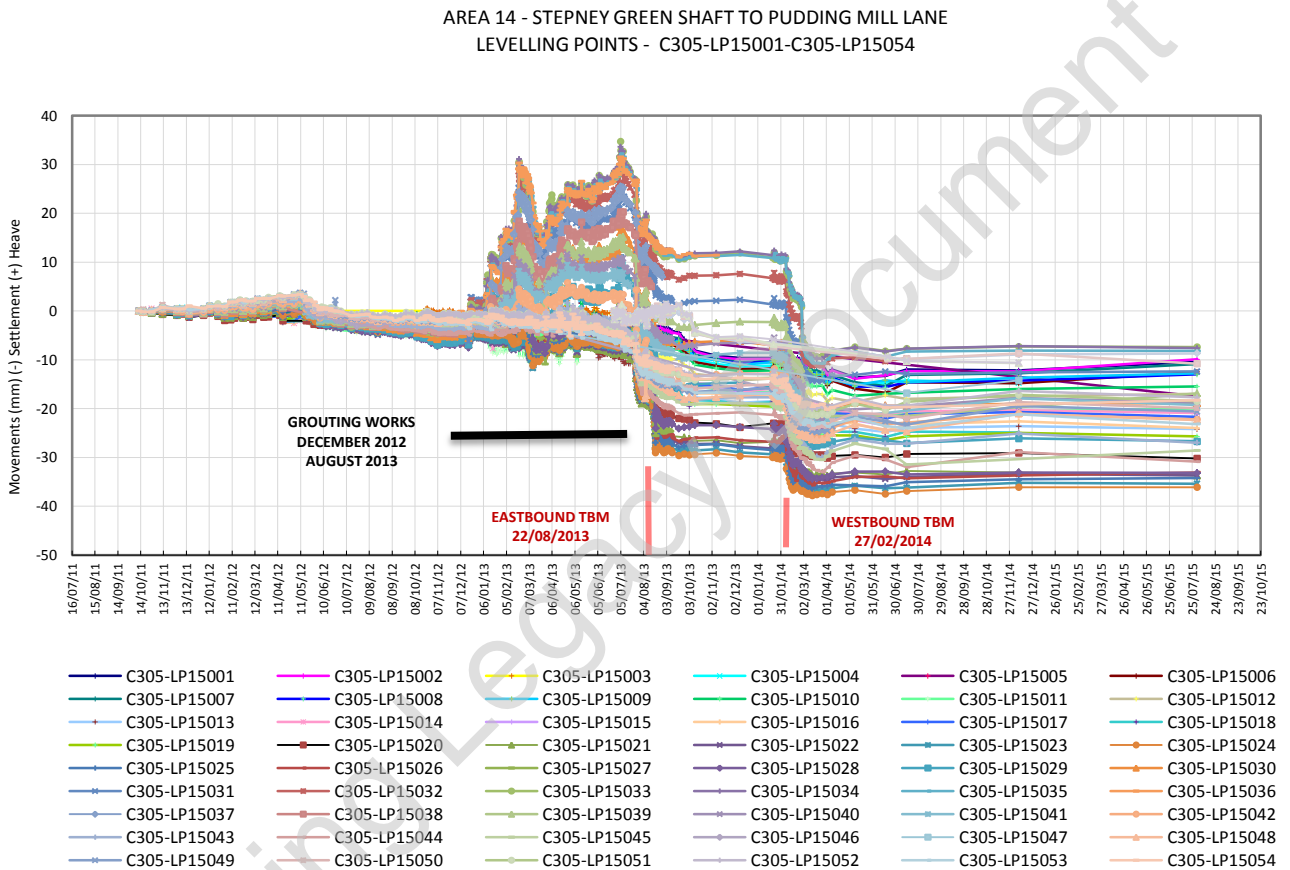
C305-LP15110- C305-LP 15139

**LEVELLING POINTS**

**C305-LP15001 – C305-LP15054**

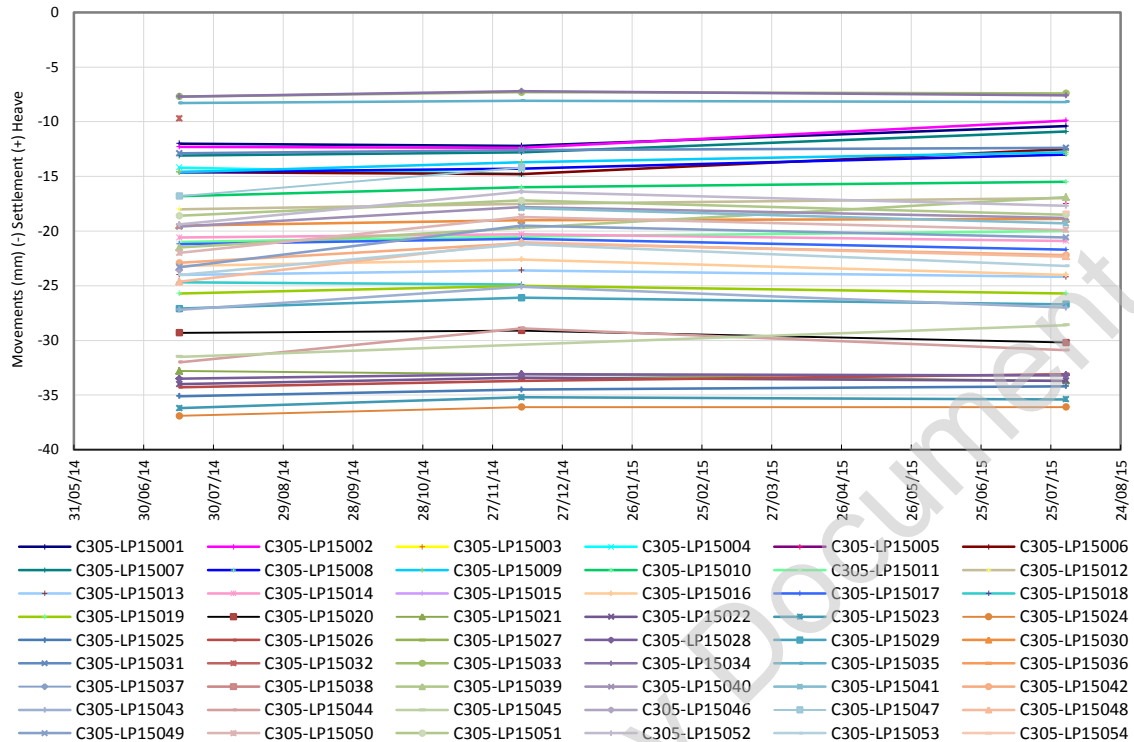
The graph presented below shows the readings from the levelling points from this array. A maximum settlement of -29.5mm is recorded after the Eastbound TBM transit and a total maximum settlement of -37.8 mm after the Westbound TBM transit.

A maximum heave of 33 mm was recorded during the grouting works before TBM’s transit.



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP15001-C305-LP15054



The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)			mm/year
	15/07/2014	09/12/2014	31/07/2015	
C305-LP15001	-12.00	-12.20	-10.40	1.650
C305-LP15002	-12.30	-12.40	-9.90	2.446
C305-LP15003	#N/A	#N/A	#N/A	#N/A
C305-LP15004	-14.20	-14.80	#N/A	-1.490
C305-LP15005	#N/A	#N/A	-17.50	#N/A
C305-LP15006	-14.60	-14.80	-12.50	2.156
C305-LP15007	-13.10	-12.80	-10.90	2.186
C305-LP15008	-14.60	-14.30	-13.00	1.578
C305-LP15009	-14.60	-13.70	-12.80	1.694
C305-LP15010	-16.80	-16.00	-15.50	1.202
C305-LP15011	-21.00	-20.50	-20.00	0.941
C305-LP15012	-18.00	-17.50	-17.00	0.941
C305-LP15013	-24.00	-23.60	-24.20	-0.260
C305-LP15014	-20.60	-20.30	-20.90	-0.347
C305-LP15015	#N/A	#N/A	#N/A	#N/A
C305-LP15016	-23.20	-22.60	-24.00	-0.897
C305-LP15017	-21.20	-20.70	-21.70	-0.578
C305-LP15018	-24.70	-24.90	#N/A	#N/A
C305-LP15019	-25.70	-25.00	-25.70	-0.100
C305-LP15020	-29.30	-29.10	-30.20	-0.940
C305-LP15021	-32.80	-33.10	-33.70	-0.869
C305-LP15022	-34.00	-33.40	-33.70	0.218
C305-LP15023	-36.20	-35.20	-35.40	0.667
C305-LP15024	-36.90	-36.10	-36.10	0.696
C305-LP15025	-35.10	-34.50	-34.20	0.826
C305-LP15026	-34.30	-33.70	-33.10	1.130
C305-LP15027	#N/A	#N/A	#N/A	#N/A
C305-LP15028	-33.50	-33.10	-33.20	0.247
C305-LP15029	-27.10	-26.10	-26.70	0.262

	Registered movement (mm)			mm/year
	15/07/2014	09/12/2014	31/07/2015	
C305-LP15030	-19.50	-19.00	-18.90	0.536
C305-LP15031	-12.90	-12.60	-12.40	0.464
C305-LP15032	-9.70	#N/A	#N/A	#N/A
C305-LP15033	-7.70	-7.30	-7.40	0.247
C305-LP15034	-7.70	-7.20	-7.60	0.030
C305-LP15035	-8.30	-8.10	-8.20	0.073
C305-LP15036	#N/A	#N/A	#N/A	#N/A
C305-LP15037	#N/A	#N/A	#N/A	#N/A
C305-LP15038	#N/A	#N/A	#N/A	#N/A
C305-LP15039	-21.50	#N/A	-16.90	#N/A
C305-LP15040	-19.60	-17.80	-18.80	0.552
C305-LP15041	#N/A	-17.90	-19.30	#N/A
C305-LP15042	-22.90	-21.10	-22.20	0.451
C305-LP15043	-27.20	-25.10	-27.00	-0.099
C305-LP15044	-32.00	-28.90	-30.90	0.670
C305-LP15045	-31.50	#N/A	-28.60	#N/A
C305-LP15046	-23.60	#N/A	#N/A	#N/A
C305-LP15047	-16.80	-14.20	#N/A	#N/A
C305-LP15048	-24.64	-21.04	-22.34	1.814
C305-LP15049	-23.30	-19.50	-20.60	2.190
C305-LP15050	-22.00	-18.70	-19.90	1.654
C305-LP15051	-18.60	-17.20	-18.50	-0.099
C305-LP15052	-19.40	-16.40	-17.70	1.292
C305-LP15053	-24.00	-21.20	-23.20	0.409
C305-LP15054	#N/A	#N/A	-18.30	#N/A
	Rate less than -2.5 mm/year		<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year		<b>% less 3 mm/ year</b>	100%

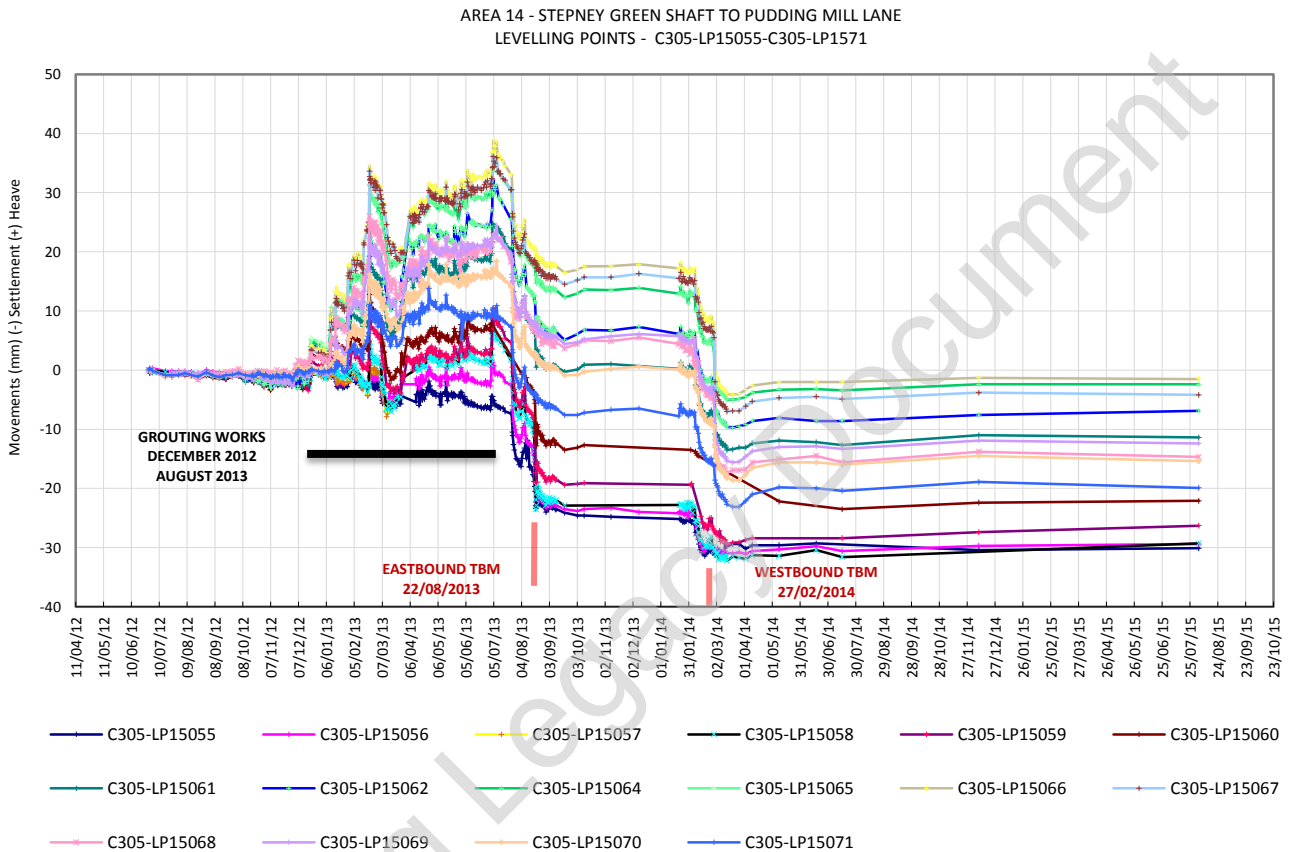
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.



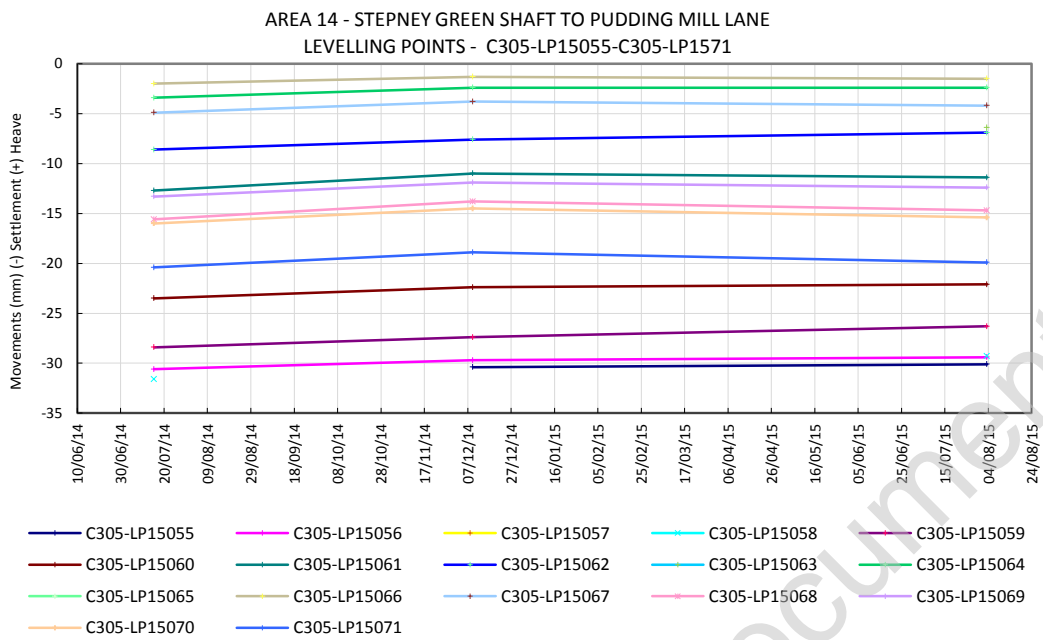
**C305-LP15055 – C305-LP15071**

The graph presented below shows the readings from the levelling points from this array. A maximum settlement of -24.8 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -32 mm after the Westbound TBM transit.

A maximum heave of 39 mm was recorded after grouting works before TBM's transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

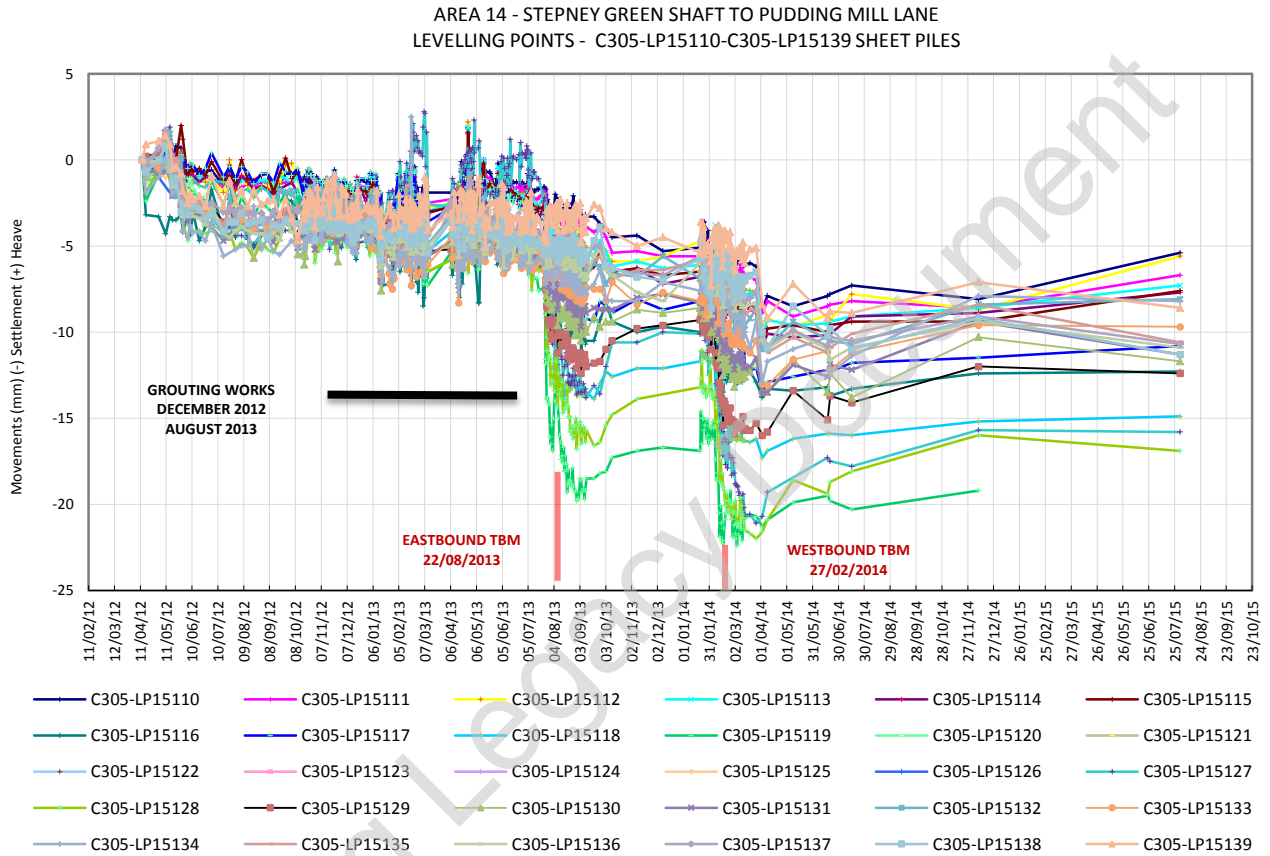
	Registered movement (mm)			mm/year
	15/07/2014	09/12/2014	03/08/2015	
C305-LP15055	#N/A	-30.40	-30.10	0.462
C305-LP15056	-30.60	-29.70	-29.40	1.076
C305-LP15057	#N/A	#N/A	#N/A	#N/A
C305-LP15058	-31.60	#N/A	-29.30	2.186
C305-LP15059	-28.40	-27.40	-26.30	1.967
C305-LP15060	-23.50	-22.40	-22.10	1.248
C305-LP15061	-12.70	-11.00	-11.40	1.060
C305-LP15062	-8.60	-7.60	-6.90	1.565
C305-LP15063	#N/A	#N/A	-6.40	#N/A
C305-LP15064	-3.40	-2.40	-2.40	0.861
C305-LP15065	#N/A	#N/A	#N/A	#N/A
C305-LP15066	-2.00	-1.30	-1.50	0.401
C305-LP15067	-4.90	-3.80	-4.20	0.544
C305-LP15068	-15.60	-13.80	-14.70	0.643
C305-LP15069	-13.30	-11.90	-12.40	0.702
C305-LP15070	-16.00	-14.50	-15.40	0.385
C305-LP15071	-20.40	-18.90	-19.90	0.284
	Rate less than -2.5 mm/year		<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year		<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

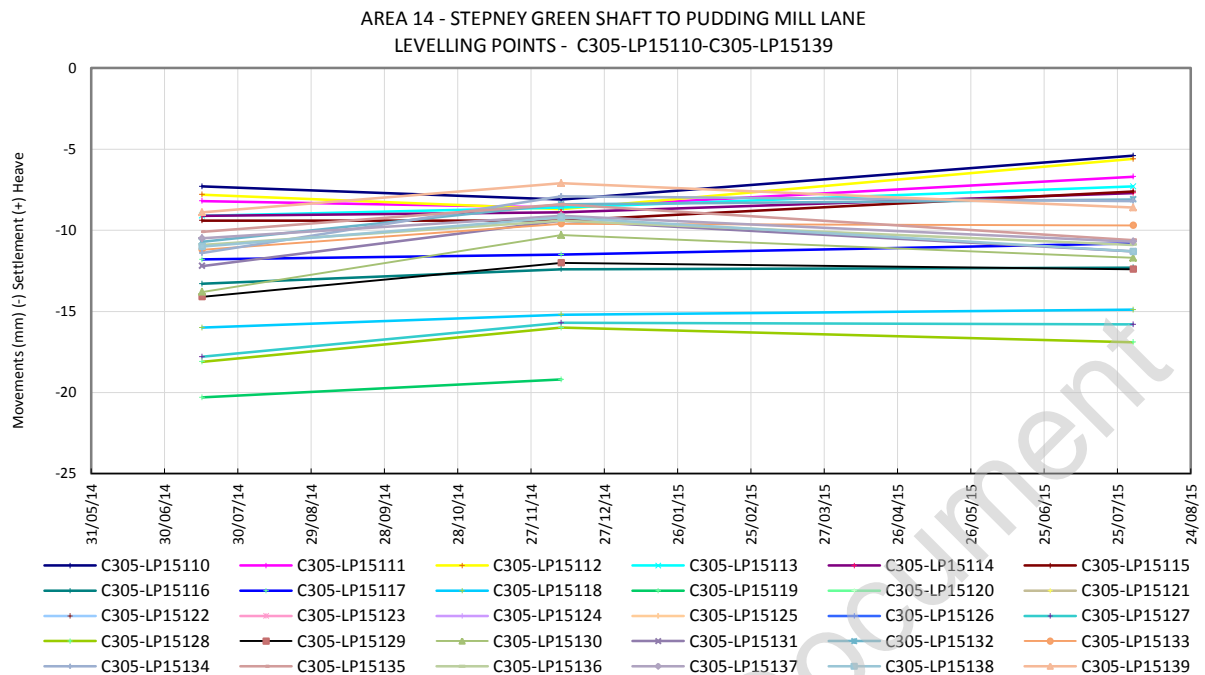
**C305-LP15110 – C305-LP15139**

The graph presented below shows the readings from the levelling points from this array. A maximum settlement of -19.7 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -22.4 mm after the Westbound TBM transit.

A maximum heave of 2.8 mm was recorded after grouting works before TBM's transit.



The next plot shows the trend line adjustment for the levelling points in this array.



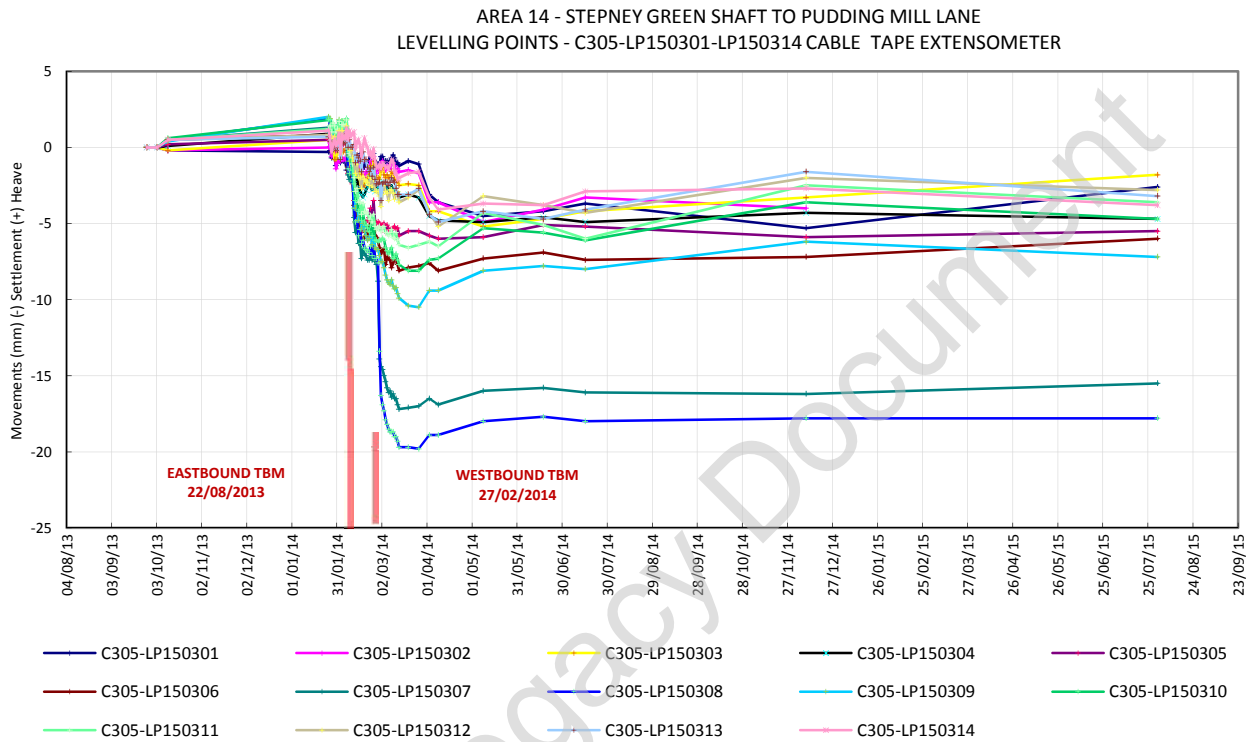
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)			mm/year
	15/07/2014	09/12/2014	31/07/2015	
C305-LP15110	-7.30	-8.10	-5.40	2.040
C305-LP15111	-8.20	-8.60	-6.70	1.577
C305-LP15112	-7.80	-8.70	-5.60	2.358
C305-LP15113	-9.10	-8.60	-7.30	1.752
C305-LP15114	-9.10	-8.90	-7.70	1.390
C305-LP15115	-9.40	-9.40	-7.60	1.824
C305-LP15116	-13.30	-12.40	-12.30	0.884
C305-LP15117	-11.80	-11.50	-10.80	0.970
C305-LP15118	-16.00	-15.20	-14.90	1.000
C305-LP15119	-20.30	-19.20	#N/A	#N/A
C305-LP15120	#N/A	#N/A	#N/A	#N/A
C305-LP15121	#N/A	#N/A	#N/A	#N/A
C305-LP15122	#N/A	#N/A	#N/A	#N/A
C305-LP15123	#N/A	#N/A	#N/A	#N/A
C305-LP15124	#N/A	#N/A	#N/A	#N/A
C305-LP15125	#N/A	#N/A	#N/A	#N/A
C305-LP15126	#N/A	#N/A	#N/A	#N/A
C305-LP15127	-17.80	-15.70	-15.80	1.725
C305-LP15128	-18.10	-16.00	-16.90	0.915
C305-LP15129	-14.10	-12.00	-12.40	1.421
C305-LP15130	-13.80	-10.30	-11.70	1.626
C305-LP15131	-12.20	-9.40	-11.30	0.510
C305-LP15132	-10.70	-8.40	-8.10	2.304
C305-LP15133	-11.20	-9.60	-9.70	1.290
C305-LP15134	-11.40	-7.90	-8.20	2.740
C305-LP15135	-10.10	-8.40	-10.60	-0.750
C305-LP15136	-10.90	-9.40	-10.90	-0.215
C305-LP15137	-10.50	-9.10	-10.70	-0.403
C305-LP15138	-11.00	-9.20	-11.30	-0.562
C305-LP15139	-8.90	-7.10	-8.60	0.046
Rate less than -2.5 mm/year			% less 2 mm/ year	100%
Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

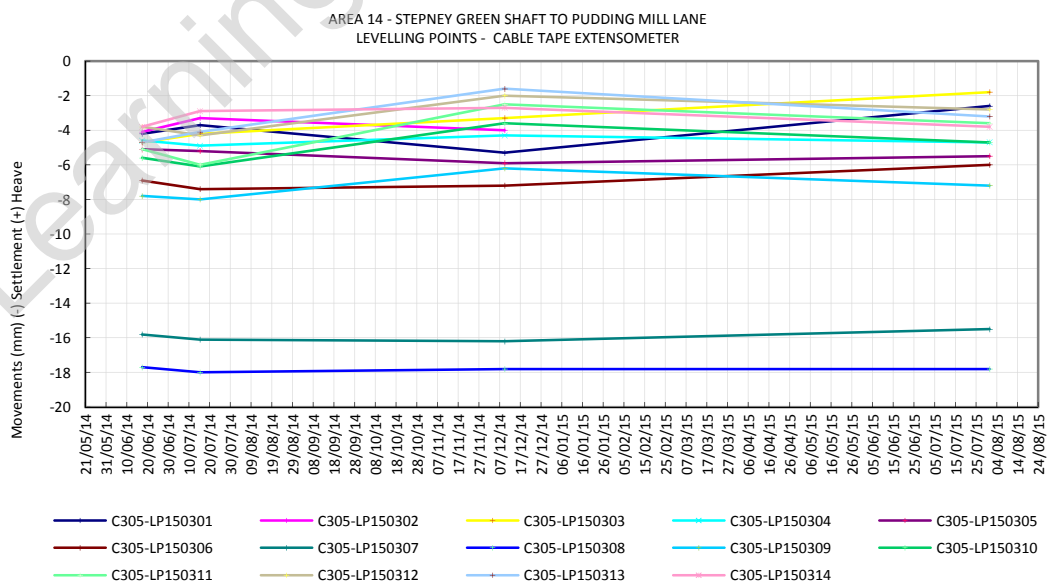
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP150301 – C305-LP150314**

The graph presented below shows the readings from the levelling points from this array. These points were used to control the vertical movements at the 400 kV cable joint bay. A maximum settlement of -7 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -19.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	17/06/2014	15/07/2014	09/12/2014	31/07/2015	
C305-LP150301	-4.20	-3.70	-5.30	-2.60	1.122
C305-LP150302	-4.10	-3.30	-4.00		-0.434
C305-LP150303	-4.70	-4.20	-3.30	-1.80	2.469
C305-LP150304	-4.60	-4.90	-4.30	-4.70	0.064
C305-LP150305	-5.10	-5.20	-5.90	-5.50	-0.373
C305-LP150306	-6.90	-7.40	-7.20	-6.00	0.995
C305-LP150307	-15.80	-16.10	-16.20	-15.50	0.367
C305-LP150308	-17.70	-18.00	-17.80	-17.80	0.034
C305-LP150309	-7.80	-8.00	-6.20	-7.20	0.743
C305-LP150310	-5.60	-6.10	-3.60	-4.70	1.170
C305-LP150311	-5.10	-6.00	-2.50	-3.60	1.923
C305-LP150312	-3.80	-4.30	-2.00	-2.80	1.244
C305-LP150313	-4.70	-4.10	-1.60	-3.20	1.310
C305-LP150314	-3.80	-2.90	-2.70	-3.80	-0.307
	<b>Rate less than -2.5 mm/year</b>		<b>% less 2 mm/ year</b>		100%
	<b>Rate greater than -3.5 mm/year</b>		<b>% less 3 mm/ year</b>		100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.



TAPE EXTENSOMETER

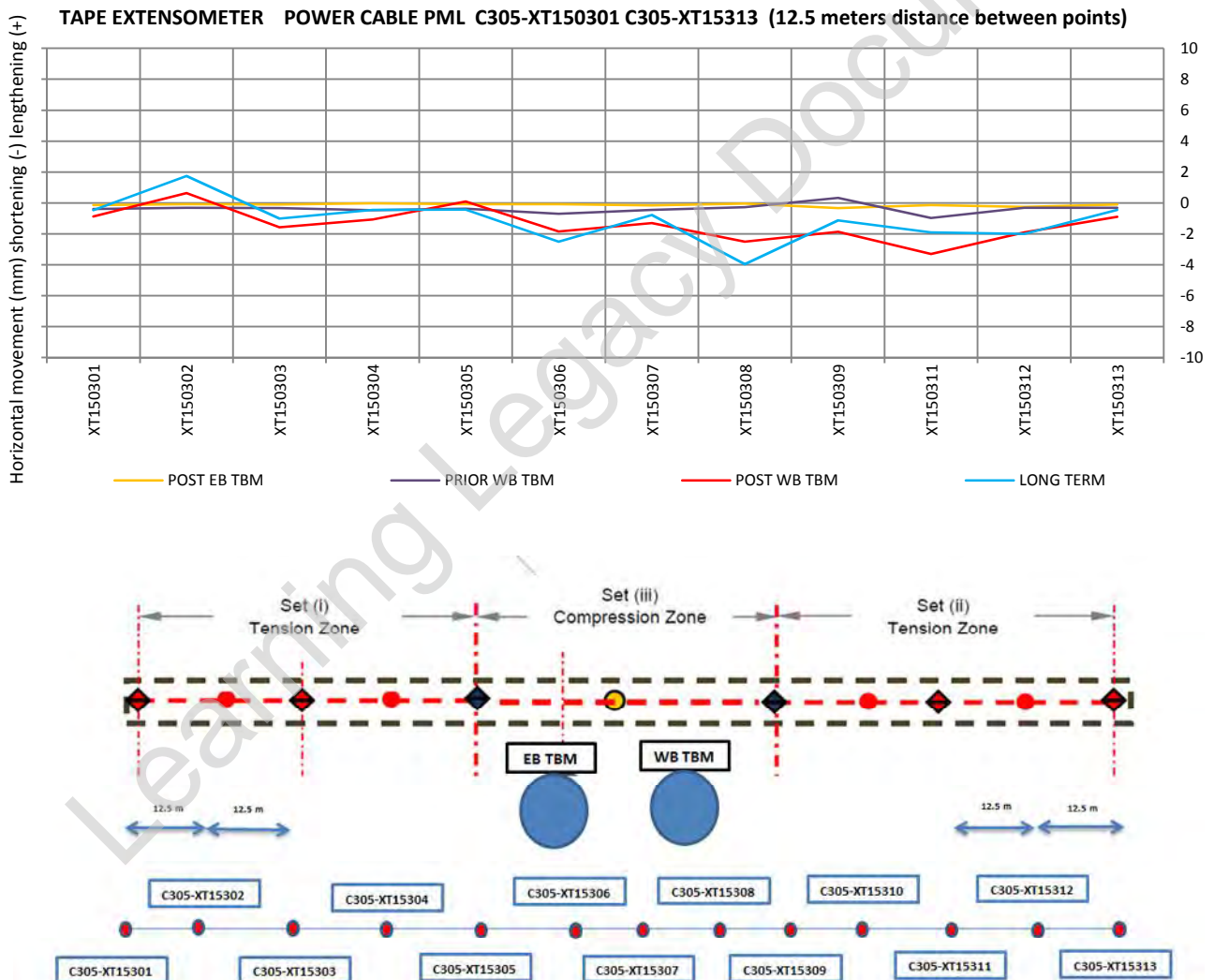
**C305-XT150301 – C305-XT150313**

The Levelling points between C305-LP150301-C305-LP150314 were also used as an anchor points for tape extensometer instrument (C305-XT150301 – C305-XT150313), to measure the horizontal movement on the 400 kV cable running under the towpath perpendicular to the running tunnels at chainage 83450.

The graph presented below shows the readings for the tape extensometers: C305-XT150301 – C305-XT150313. Maximum horizontal movements of +2 mm and -4 mm were recorded after the Eastbound and Westbound TBM's transit.

There are 12.5 meters distant between anchors (approx.) see sketch below.

Measurement sign convention used shortening (-) lengthening (+)



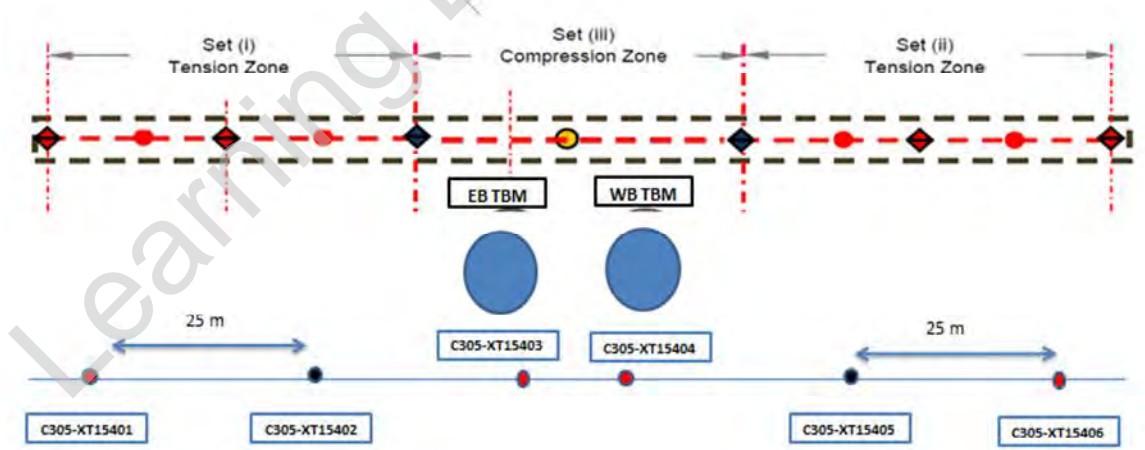
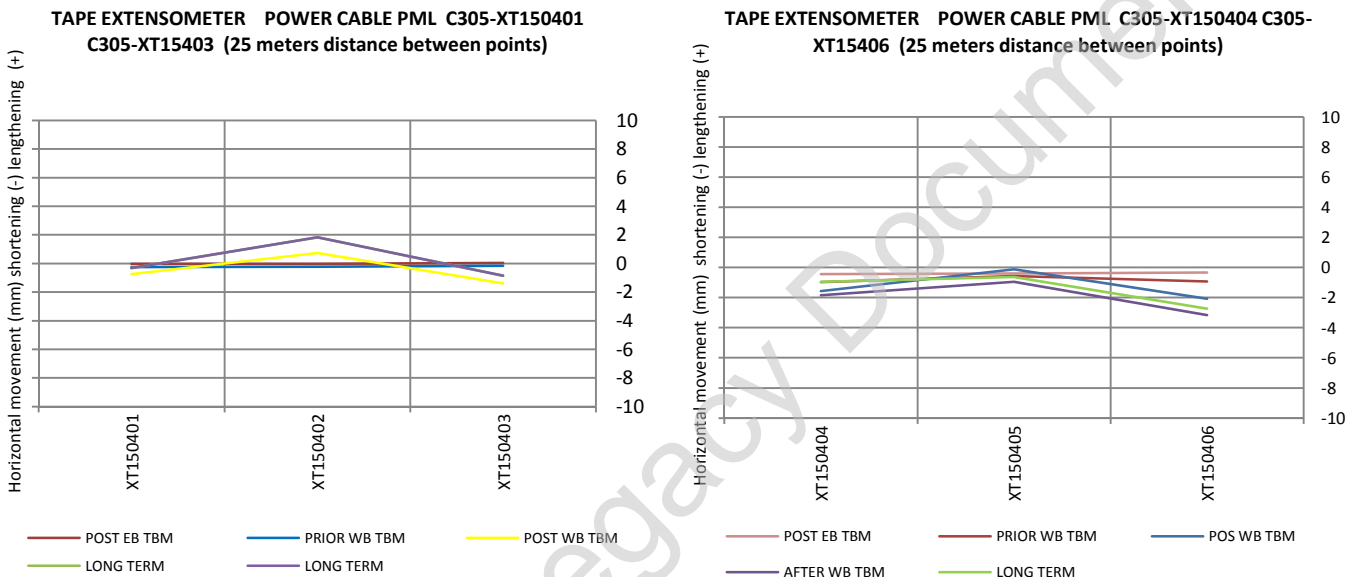
**C305-XT150401 – C305-XT150406**

Horizontal movements 400 kV cable running under the towpath have been monitored using C305-LP150301- C305-LP150314 as an anchor points establishing approximately 25 meters distance between them.

The graphs presented below shows the readings for the tape extensometers: C305-XT150401 – C305-XT150406. Maximum horizontal movements of +2 mm and -3.5 mm were recorded after the Eastbound and Westbound TBM's transit.

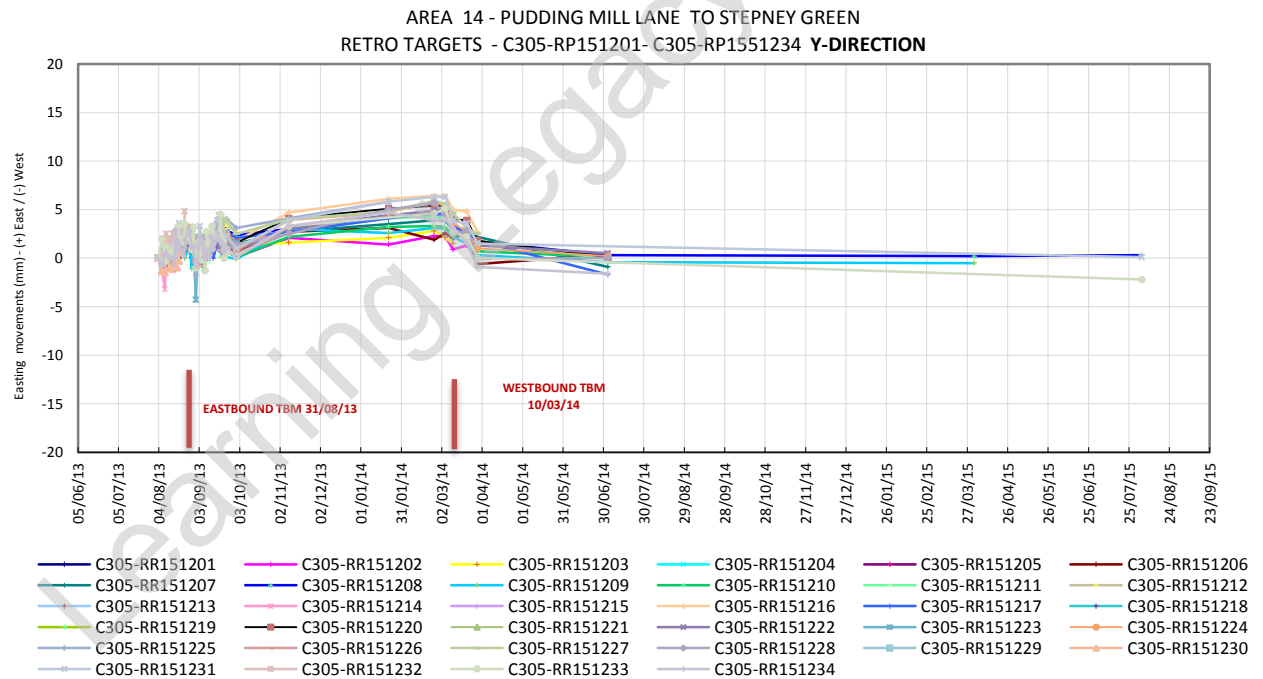
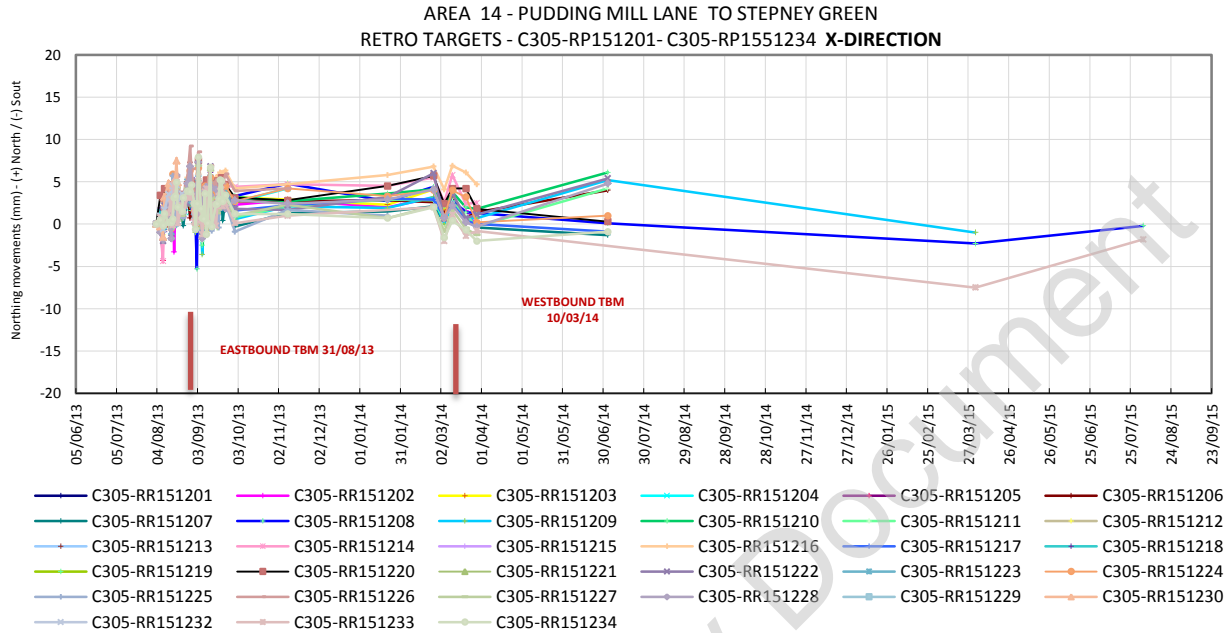
There are 25 meters distant between anchors (approx.) see sketch below.

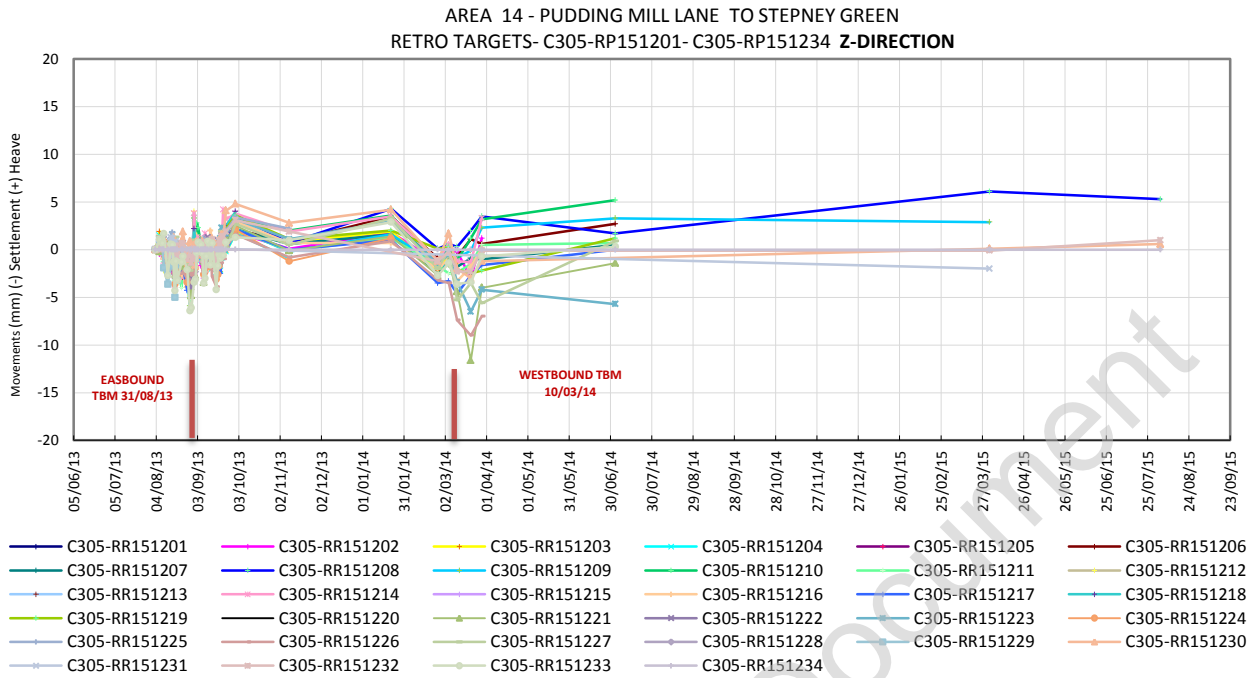
Measurement sign convention used shortening (-) lengthening (+)



3D PRISMS AND RETRO TARGETS

C305-RR151201 – C305-RR151234 TARGETS CANAL





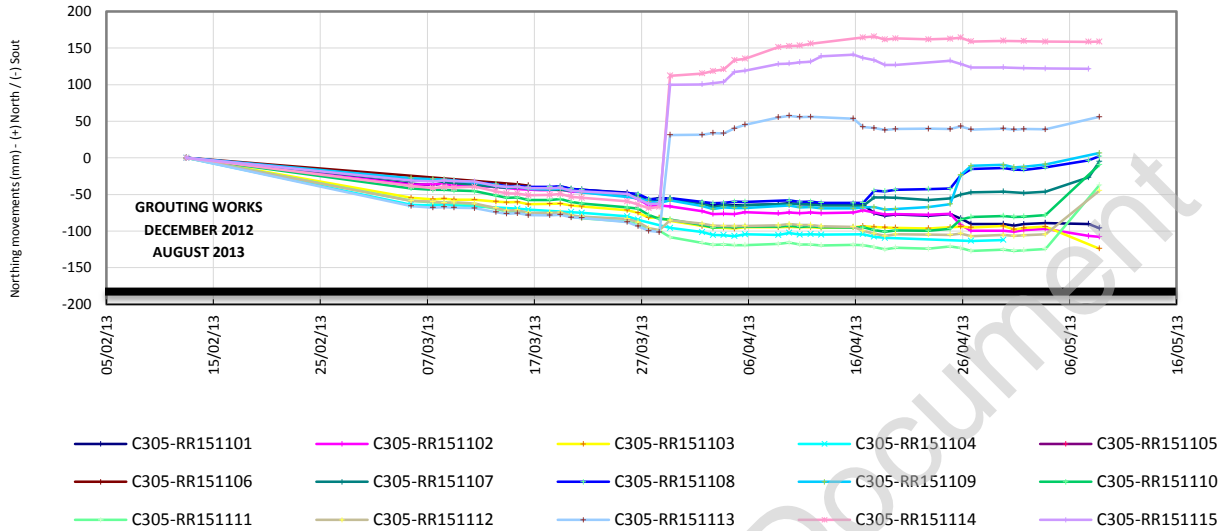
The X Axis shows a maximum movement of 6.9 mm after the Westbound TBM transit.

The Y Axis shows a maximum movement of -1.6 mm after the Westbound TBM transit.

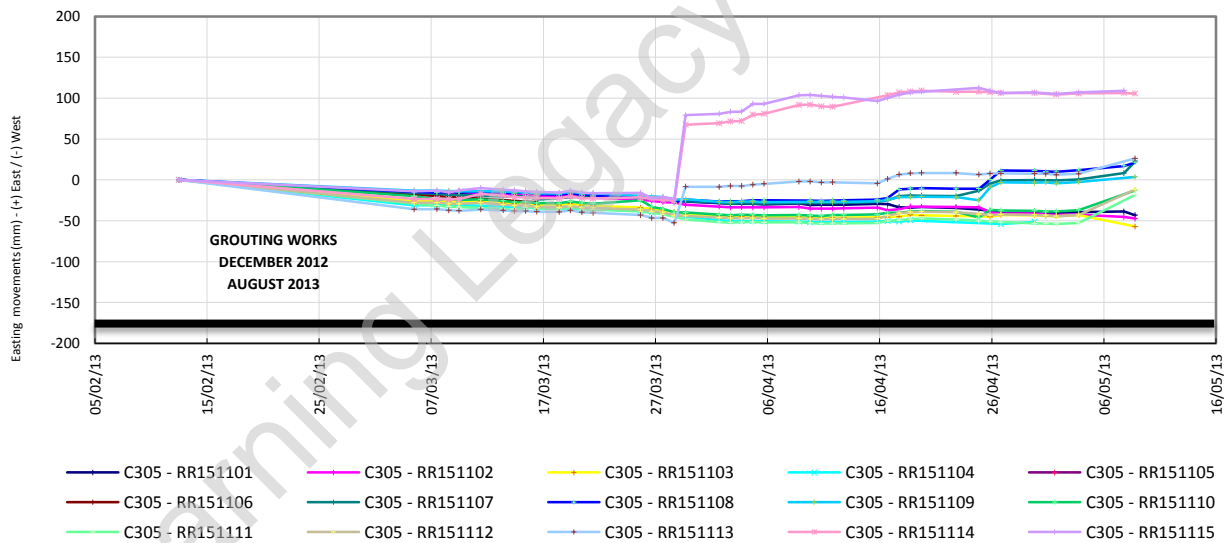
The Z Axis shows a maximum settlement of -11.6 mm after the Westbound TBM transit.

**C305-RR151101 – C305-RR151115 COFFERDAM TARGETS**

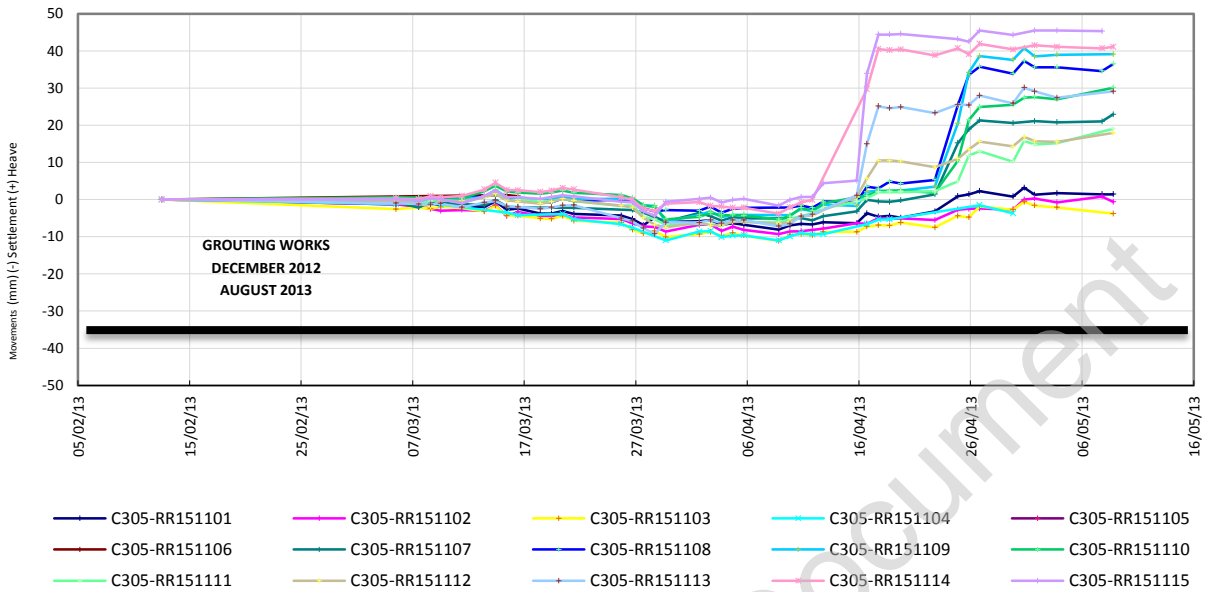
AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN  
 RETRO TARGETS - C305-RR151101- C305-RR151115 X-DIRECTION



AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN  
 RETRO TARGETS - C305-RR151101- C305-RR151115 Y-DIRECTION



AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN  
 RETRO TARGETS - C305-RP151101- C305-RP151115 Z-DIRECTION



In X Axis the maximum movement observed was 165.9mm after grouting works.

In Y Axis the maximum movement observed was 112.6 mm after grouting works.

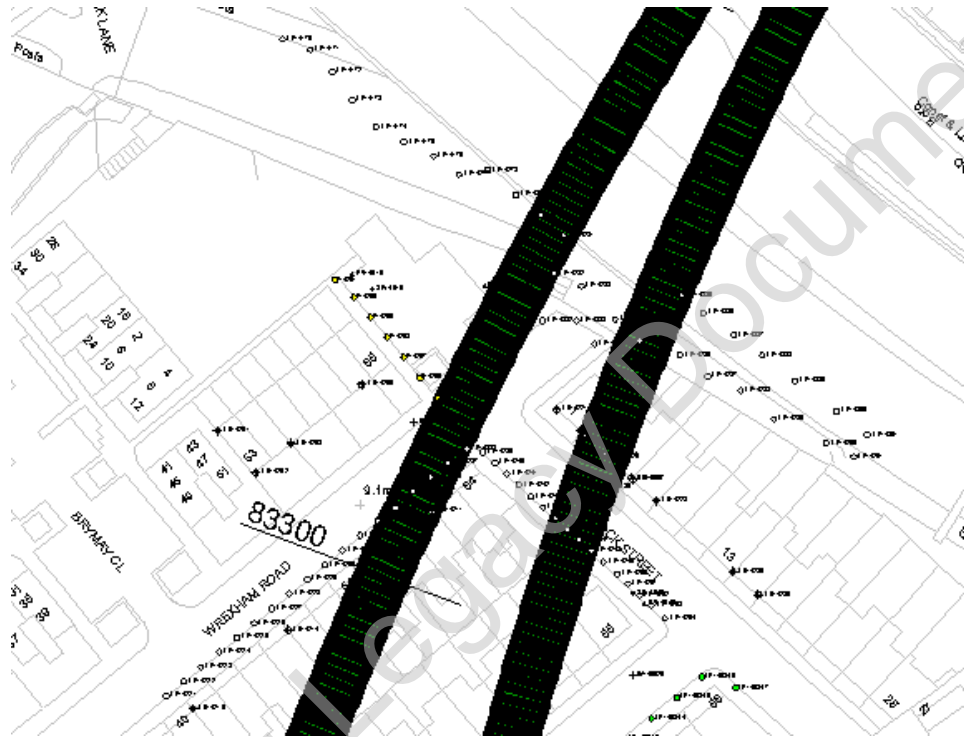
In Z Axis a maximum heave of 45.5 mm, was recorded after grouting works.



## SUB-AREA 2

The instrumentation is located around Ham and Wick area, as shown in the figure below, and comprises the following:

- 96 Levelling points
- 36 Sockets



Note:

The following points were affected by Ham & Wick Site Works.

- C305-LP14255 – C305-LP14261
- C305-LP15055 – C305-LP15071
- C305-LB14201 – C305-LP14236

### LEVELLING POINTS

This levelling section (Transect 14A) was damaged during site works on several occasions and new levelling points were reinstalled using a different number scheme.

The following table shows the number scheme with the dates for the installation, the baseline and the last reading prior to being damaged.

NUMBER SCHEME TRANSECT 14A			
INSTALLATION DATE	BASELINE	LAST READING (DAMAGED)	ID
22/05/2012	22/05/2012	28/09/2012	C305-LP14070 to C305-LP14076
22/05/2012	22/05/2012	18/03/2013	C305-LP14077 to C305-LP14088
20/11/2012	04/09/2013	04/09/2013	C305-LP14177 to C305-LP14179
20/11/2012	04/09/2013	11/04/2014	C305-LP14170 to C305-LP14171
20/11/2012	23/11/2013	11/04/2014	C305-LP14172 to C305-LP14176
04/09/2013	04/09/2013	14/04/2014	C305-LP14277 to C305-LP14291
08/04/2014	08/04/2014	12/07/2014	C305-LP14382 to C305-LP14391

The series C305-LP14277 to C305-LP14291 was installed prior to the Eastbound TBM crossing.

The movements registered in Transect 14A are summarised in the following four graphs shown below:

Transect 14A. The monitoring trigger levels and both TBMs crossing are shown in this plot.

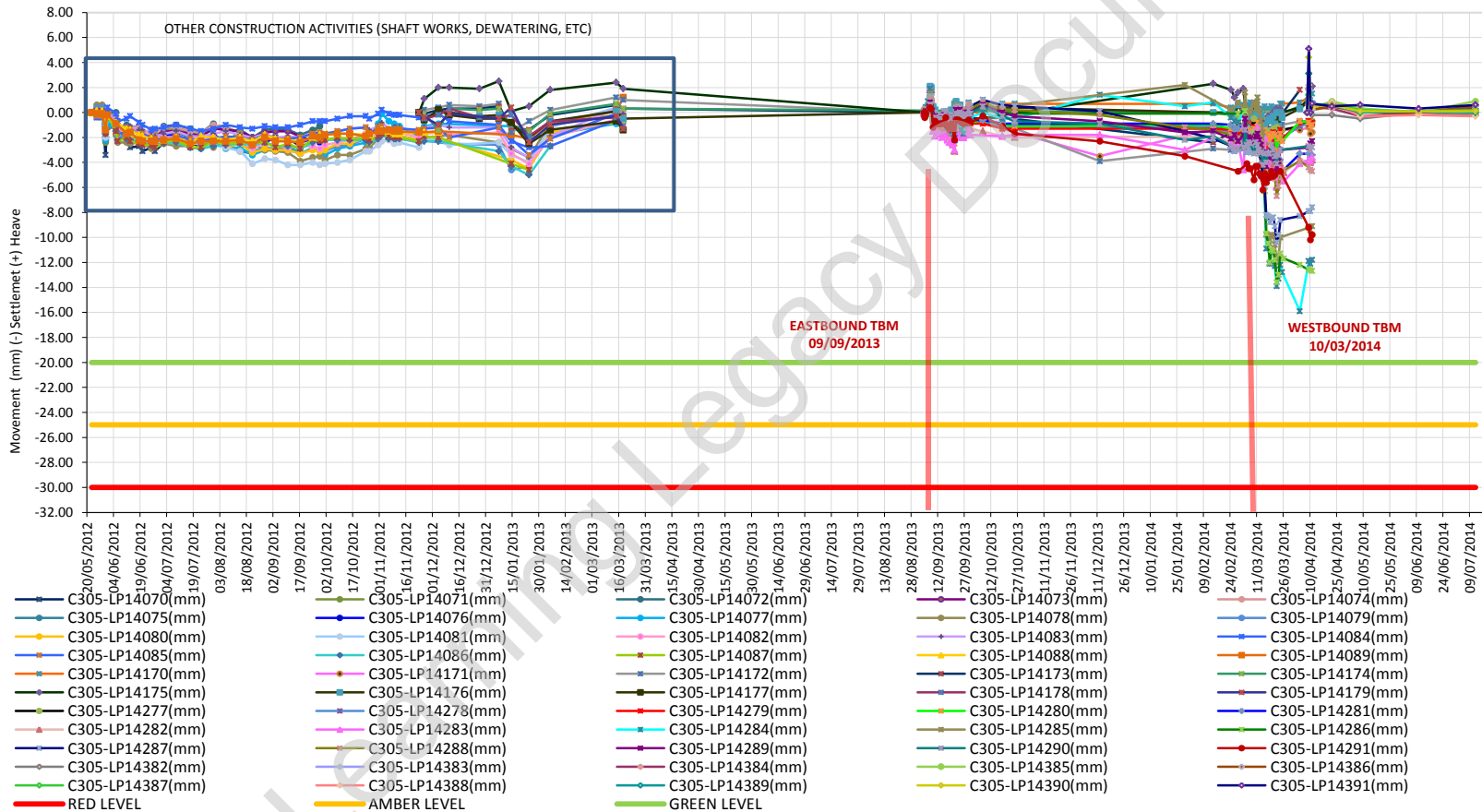
Transect 14A. Dates when the various levelling point arrays were installed and damaged are shown. No offsets have been applied for the new levelling points installed.

Eastbound TBM crossing.

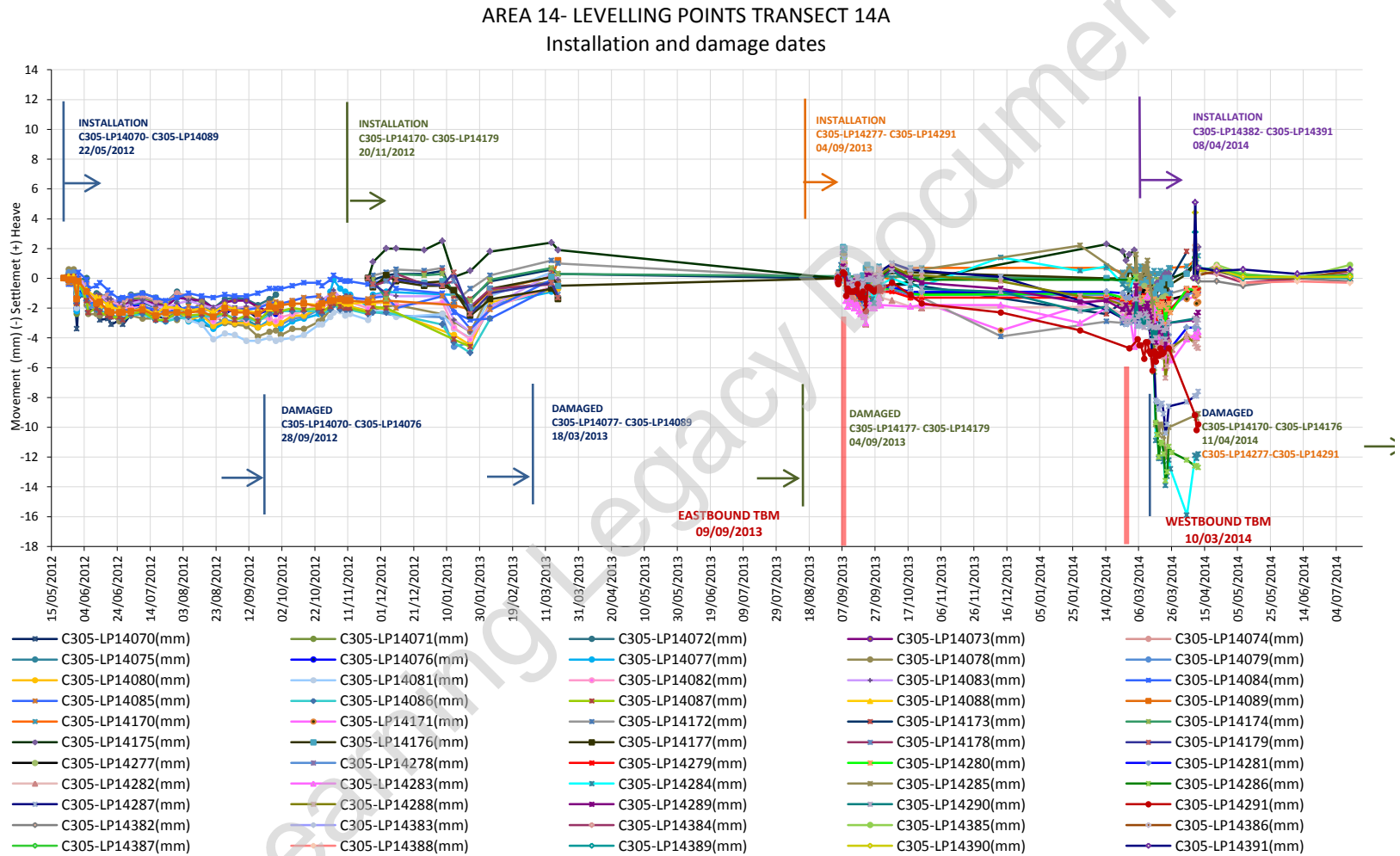
Westbound TBM crossing.

From May 2012, when the first levelling points were installed, to March 2013 (prior to the TBMs transit), a number of ground movements are evident in the graph below. These movements may be explained due to the various site construction activities ongoing during this period (eg: shaft works, dewatering, etc). A settlement of -4 mm was observed until October 2012, followed by a heave of +2mm in November 2012, and further settlement of -2mm was evident in January 2013. In March 2013 the ground movements are seen to range between 2mm and -1 mm.

AREA 14- LEVELLING POINTS TRANSECT 14

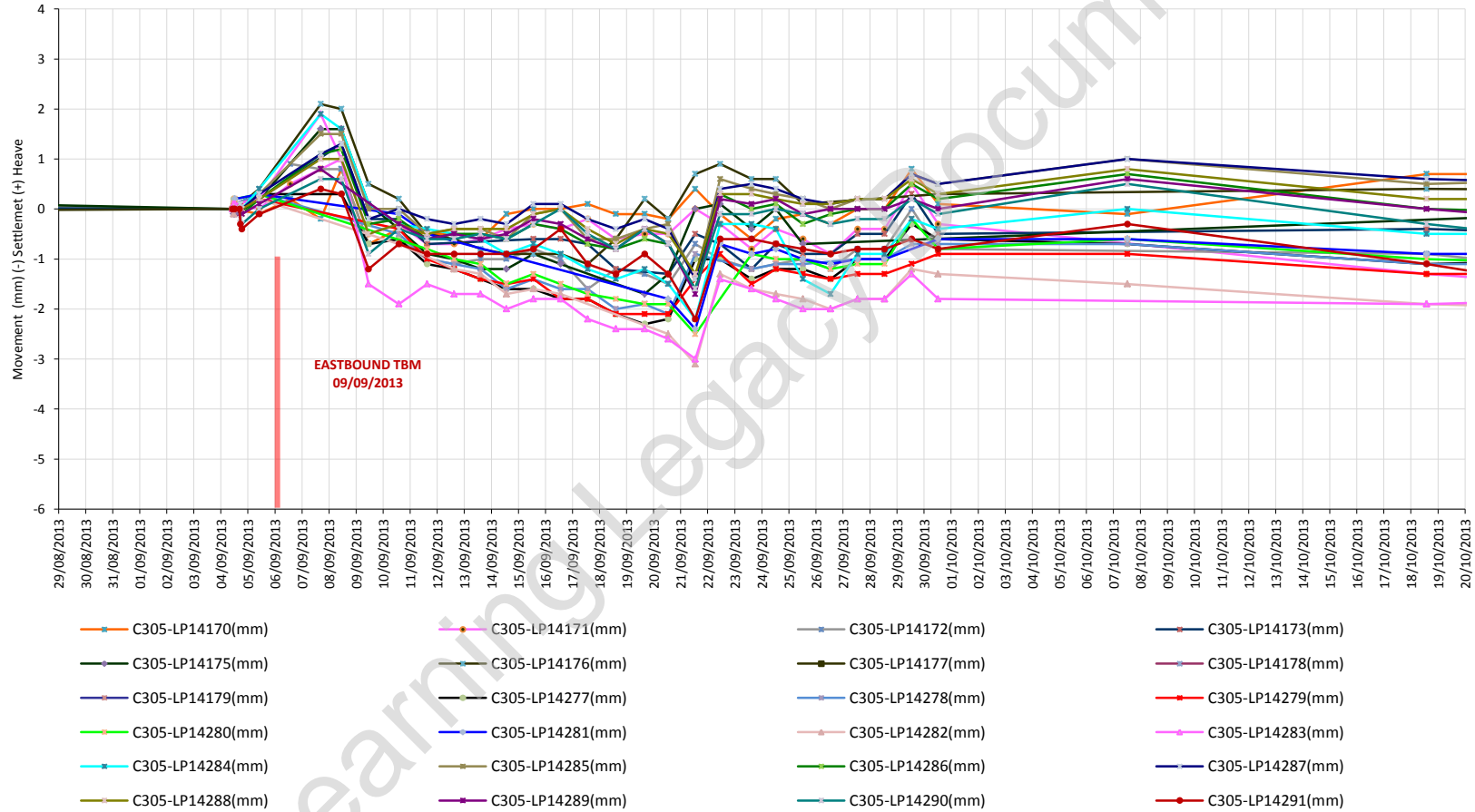


The following plot shows the different dates when the levelling points were installed and damaged.



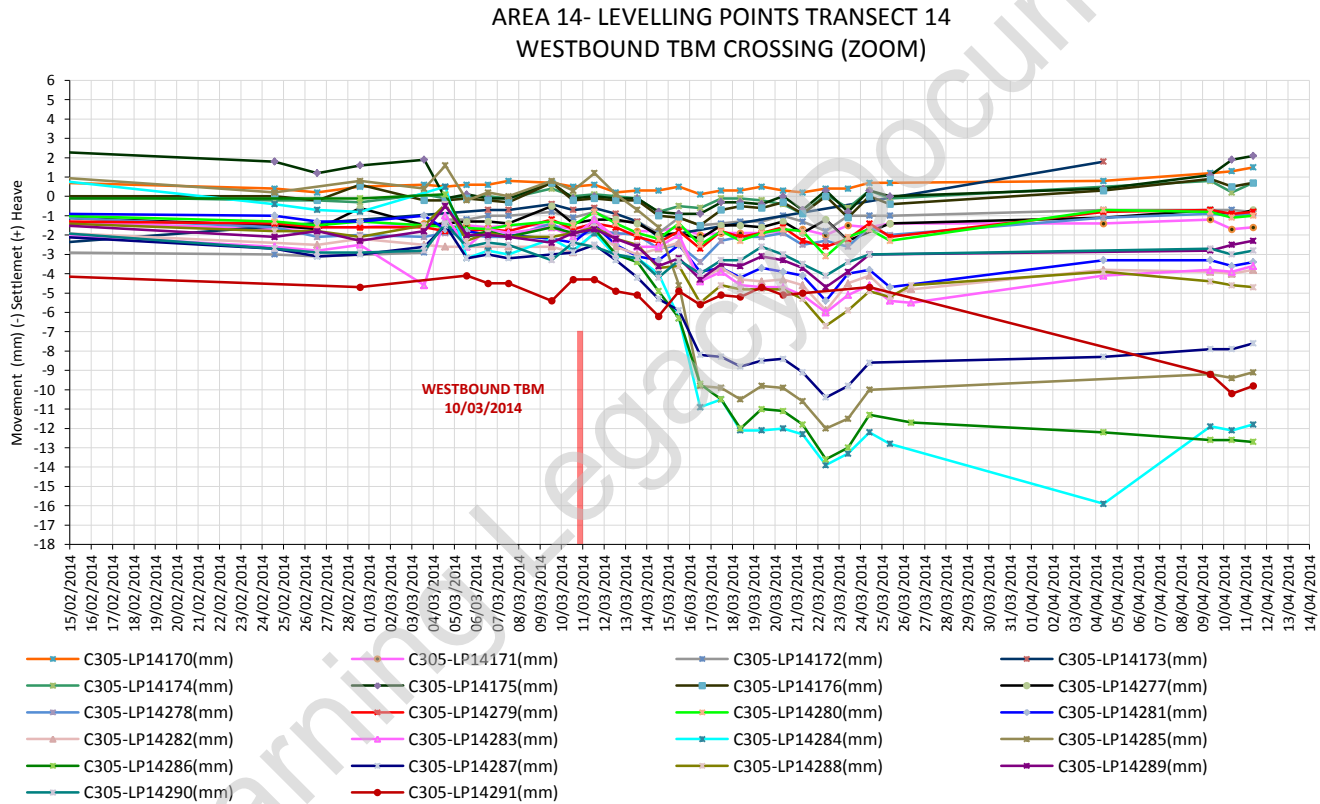
The graph below shows the settlement plot for the Eastbound TBM transit. There was an initial heave of +2 mm followed by a settlement of -3 mm after the Eastbound TBM crossing.

AREA 14- LEVELLING POINTS TRANSECT 14  
 EASTBOUND TBM CROSSING (ZOOM)

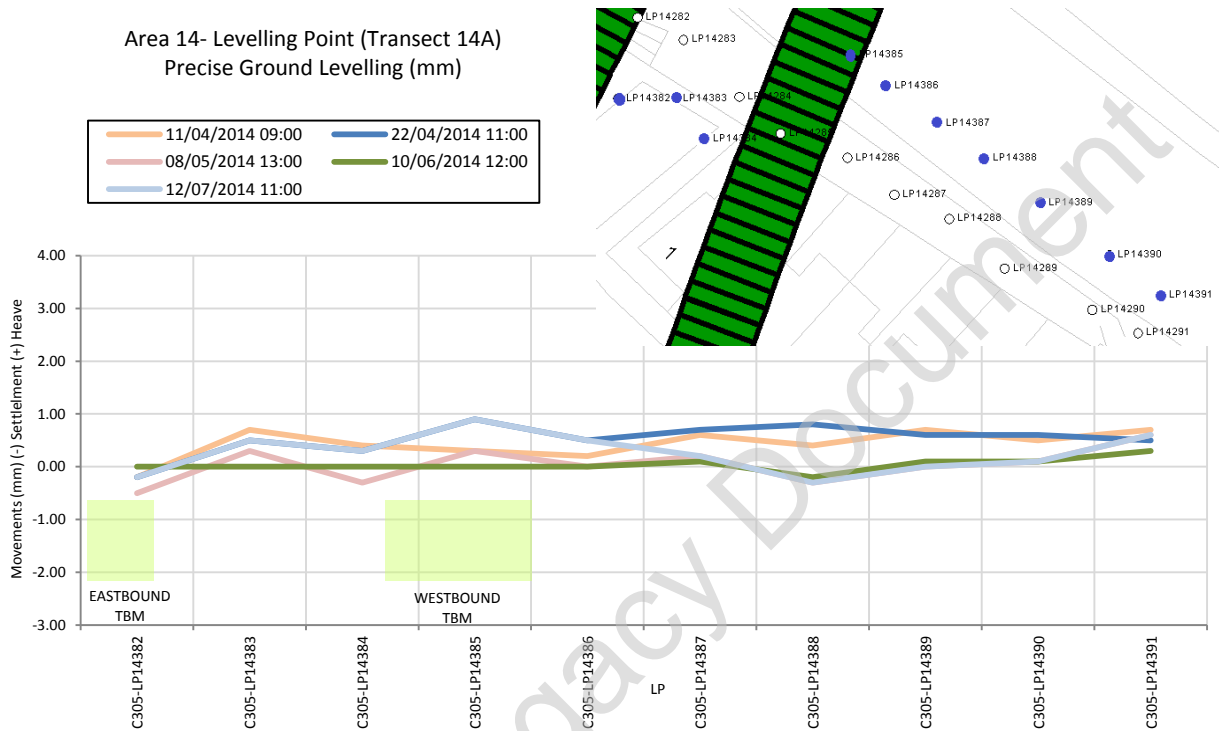


A maximum settlement of -13.9 mm can be observed in the following graph for the following levelling points: C305-LP14170 to C305-LP14176 and C305-LP14277 to C305-LP14291 after the Westbound TBM crossing.

NOTE: C305-LP14284 -15.9 mm datum from 04/04/14 is a spike.



The next graph shows the location of the levelling points array: C305-LP14382 to C305-LP14391, for the eastbound and westbound TBM transit. The last five readings, taken April 2014 to July 2014, are included. These readings, ie: measurements between 1 and -1 mm, were used to calculate the predicted annual settlement rate.

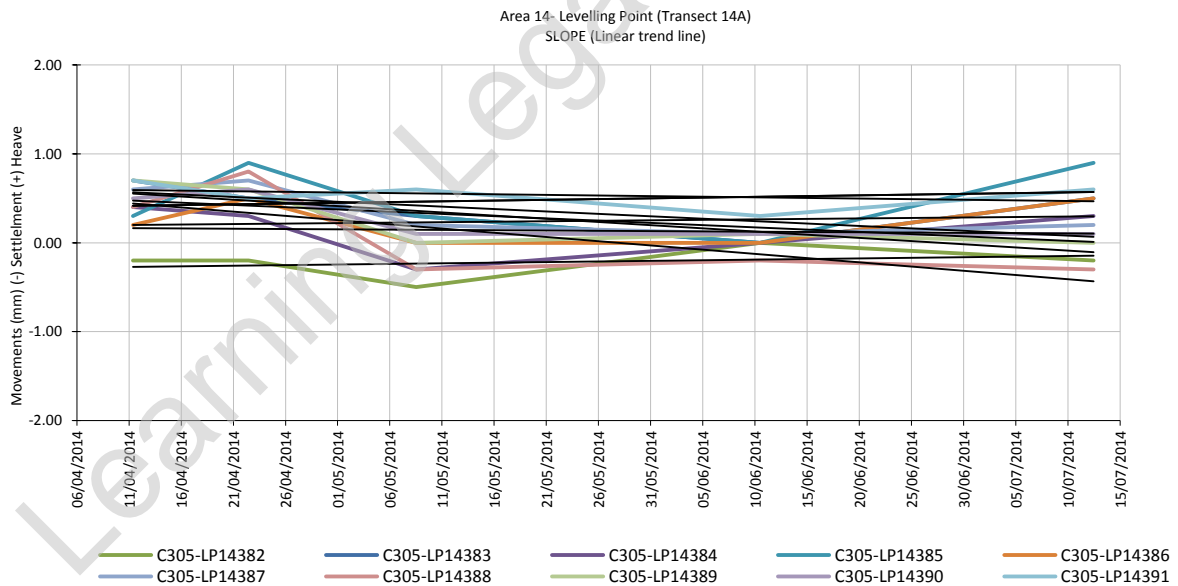


The calculation process for the predicted annual settlement rate over a one-year period is shown in the table below.

	Recorded Movement (mm)					Slope (Linear trend line)	Predicted Movement (mm)	Rate mm/Year	Average rate (mm)
	11/04/2014	22/04/2014	08/05/2014	10/06/2014	12/07/2014		21/08/2015		
C305-LP14382	-0.20	-0.20	-0.50	0.00	-0.20	0.0013	0.27	0.47	-0.85
C305-LP14383	0.70	0.50	0.30	0.00	0.50	0.0017	1.12	0.62	
C305-LP14384	0.40	0.30	-0.30	0.00	0.30	-0.0007	0.04	-0.26	
C305-LP14385	0.30	0.90	0.30	0.00	0.90	0.0017	1.52	0.62	
C305-LP14386	0.20	0.50	0.00	0.00	0.50	0.0010	0.86	0.37	
C305-LP14387	0.60	0.70	0.20	0.10	0.20	-0.0054	-1.77	-1.97	
C305-LP14388	0.40	0.80	-0.30	-0.20	-0.30	-0.0095	-3.77	-3.47	
C305-LP14389	0.70	0.60	0.00	0.10	0.00	-0.0071	-2.59	-2.59	
C305-LP14390	0.50	0.60	0.10	0.10	0.10	-0.0050	-1.73	-1.83	
C305-LP14391	0.70	0.50	0.60	0.30	0.60	-0.0014	0.09	-0.51	

There are two levelling points with a rate higher than 2 mm, but the average rate for this Transect is a settlement of -0.85 mm, less than the 2 mm/year in the specification.

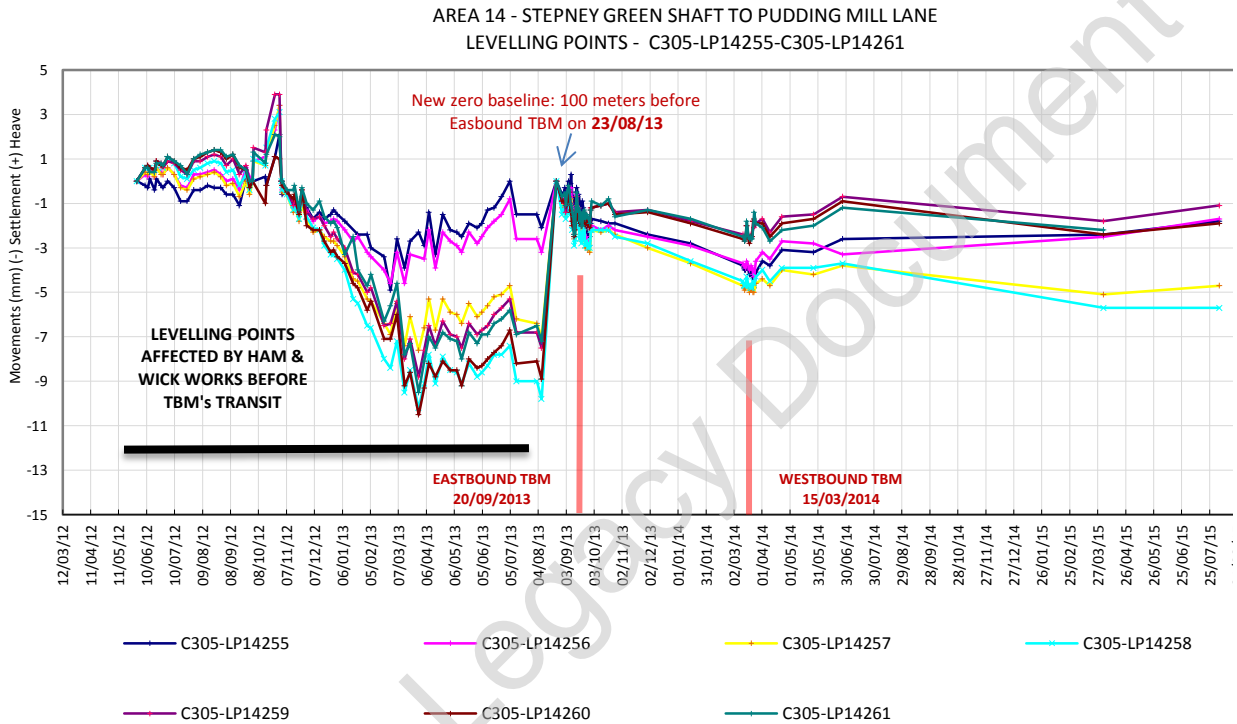
The next plot shows the Excel trend line adjustment for every levelling point.



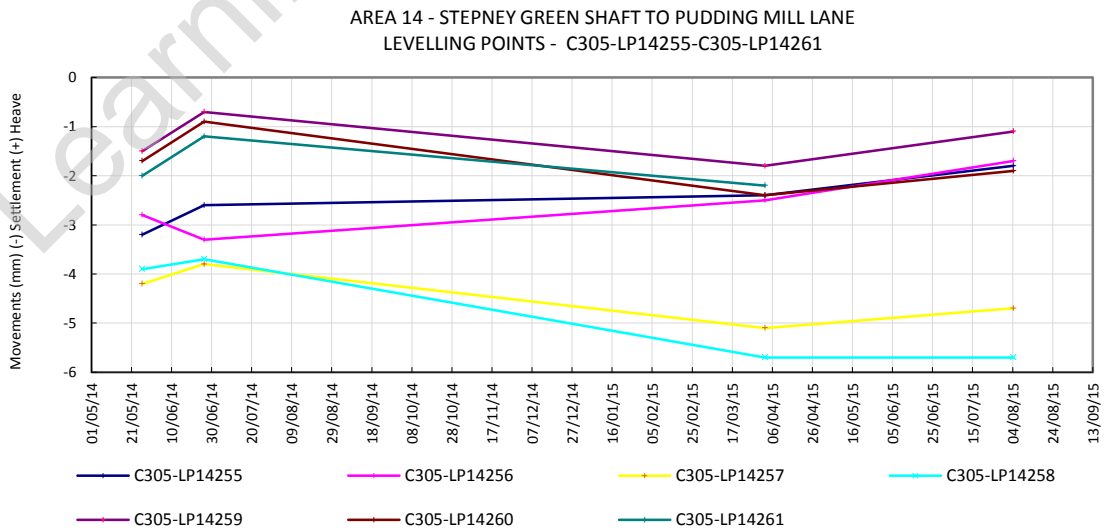


**C305-LP14255 – C305-LP14261**

The graph presented below shows the readings from the levelling points from this array. A maximum settlement of -10mm was recorded before the transit of the TBM's, it is considered this is likely due to Ham and Wick site works. A maximum settlement of -3mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	26/05/2014	26/06/2014	02/04/2015	04/08/2015	
C305-LP14255	-3.20	-2.60	-2.40	-1.80	0.893
C305-LP14256	-2.80	-3.30	-2.50	-1.70	1.024
C305-LP14257	-4.20	-3.80	-5.10	-4.70	-0.780
C305-LP14258	-3.90	-3.70	-5.70	-5.70	-1.815
C305-LP14259	-1.50	-0.70	-1.80	-1.10	-0.186
C305-LP14260	-1.70	-0.90	-2.40	-1.90	-0.699
C305-LP14261	-2.00	-1.20	-2.20	#N/A	-0.658
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

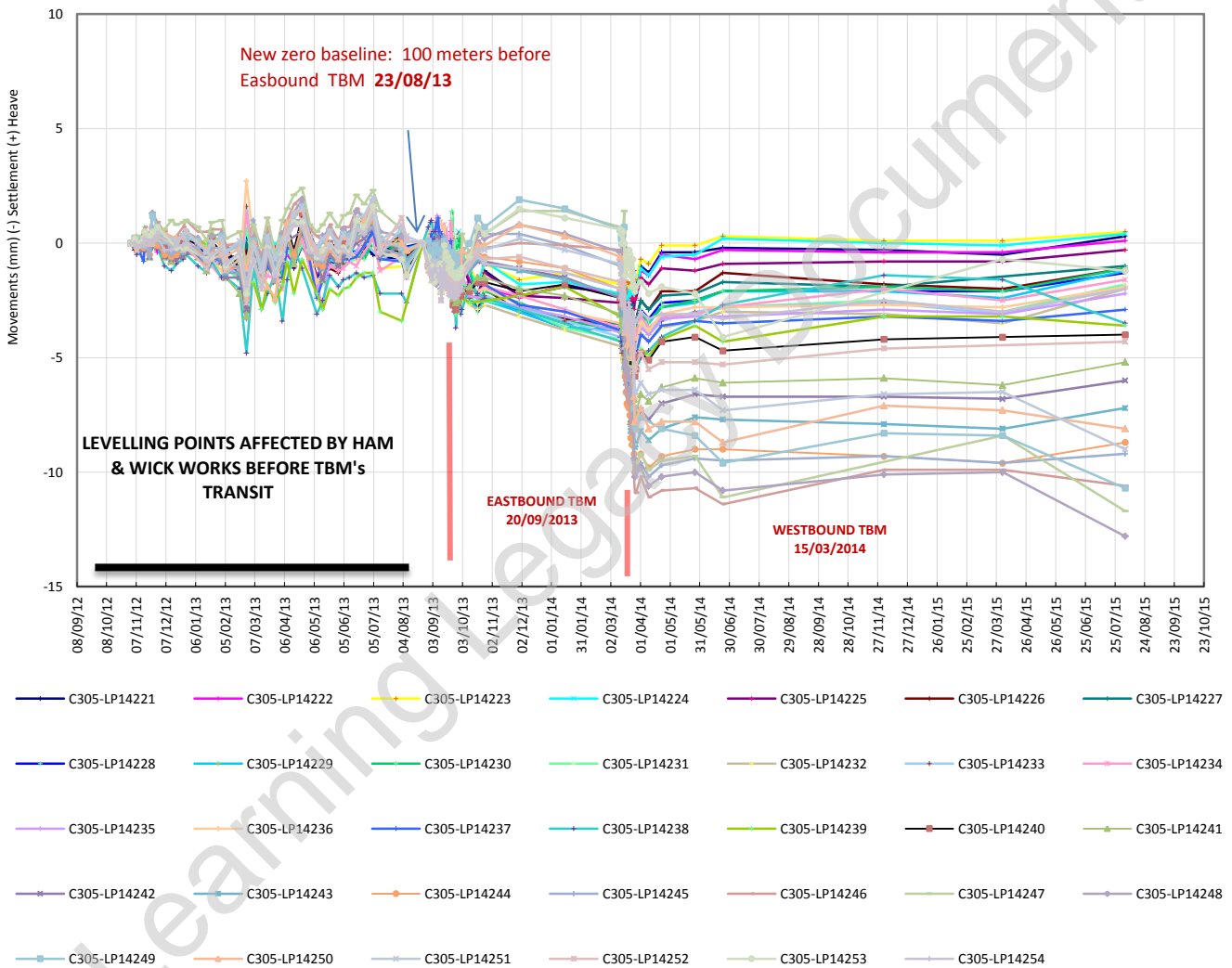
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

Learning Legacy Document

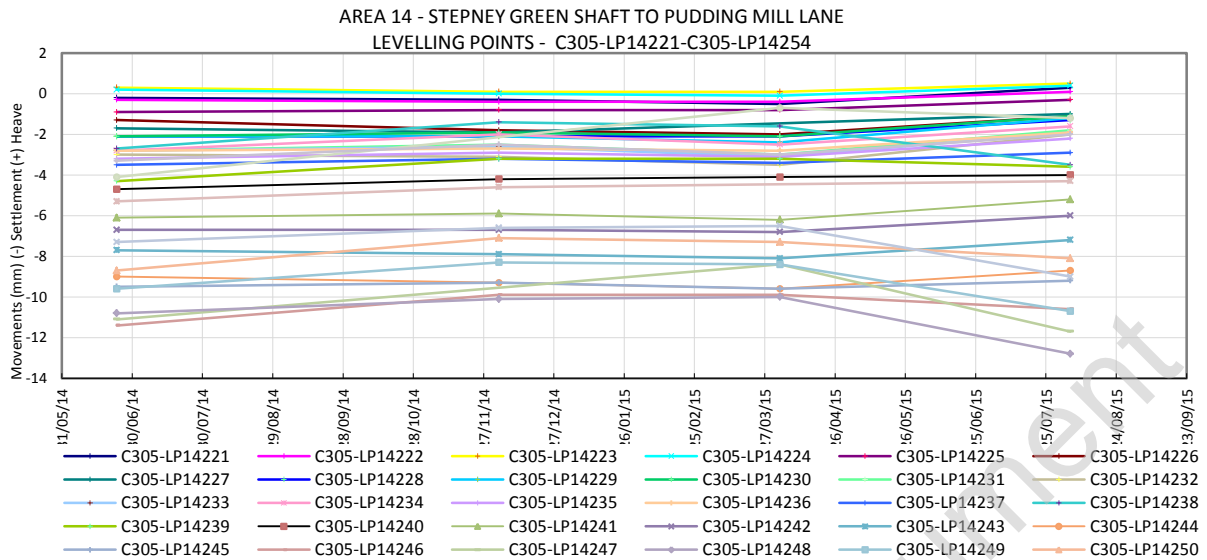
**C305-LP14221 – C305-LP14254**

The graph presented below shows the readings from the levelling points from this array. A maximum settlement of -5 mm was recorded before TBM's crossing due Ham and Wick site works. A maximum settlement of -2.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -12.8 mm after the westbound TBM transit.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP14221-C305-LP14254 SECTION B



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

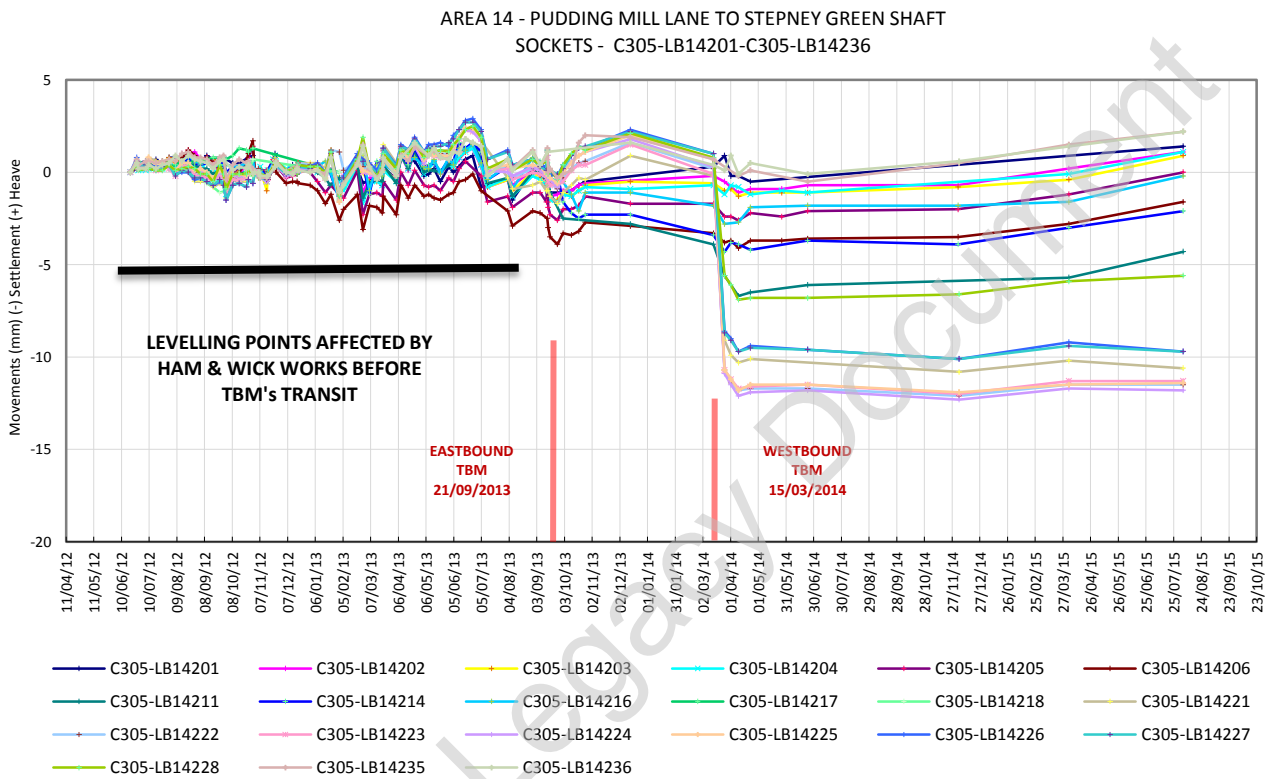
	Registered movement (mm)				mm/year
	23/06/2014	03/12/2014	02/04/2015	04/08/2015	
C305-LP14221	-0.20	-0.30	-0.50	0.30	0.327
C305-LP14222	-0.30	-0.40	-0.40	0.10	0.305
C305-LP14223	0.30	0.10	0.10	0.50	0.141
C305-LP14224	0.20	0.00	-0.10	0.40	0.112
C305-LP14225	-0.90	-0.80	-0.80	-0.30	0.477
C305-LP14226	-1.30	-1.80	-2.00	-1.10	0.061
C305-LP14227	-1.70	-1.90	#N/A	-1.00	0.684
C305-LP14228	-2.10	-2.10	-2.10	-1.30	0.626
C305-LP14229	-2.10	-2.10	-2.40	-1.20	0.619
C305-LP14230	-2.10	-1.90	-2.10	-1.10	0.742
C305-LP14231	-2.80	-2.50	-3.00	-1.80	0.665
C305-LP14232	-3.00	-3.10	-3.50	-2.00	0.661
C305-LP14233	-2.80	-2.60	-3.10	-1.90	0.579
C305-LP14234	-2.80	-2.00	-2.50	-1.60	0.861
C305-LP14235	-3.20	-2.90	-3.10	-2.20	0.749
C305-LP14236	-2.80	-2.70	-2.80	-1.90	0.684
C305-LP14237	-3.50	-3.20	-3.40	-2.90	0.437
C305-LP14238	-2.70	-1.40	-1.60	-3.50	-0.579
C305-LP14239	-4.30	-3.20	-3.20	-3.60	0.634
C305-LP14240	-4.70	-4.20	-4.10	-4.00	0.615
C305-LP14241	-6.10	-5.90	-6.20	-5.20	0.635
C305-LP14242	-6.70	-6.70	-6.80	-6.00	0.519
C305-LP14243	-7.70	-7.90	-8.10	-7.20	0.319
C305-LP14244	-9.00	-9.30	-9.60	-8.70	0.126
C305-LP14245	-9.50	-9.30	-9.60	-9.20	0.166
C305-LP14246	-11.40	-9.90	-9.90	-10.60	0.744
C305-LP14247	-11.10	#N/A	-8.40	-11.70	0.155
C305-LP14248	-10.80	-10.10	-10.00	-12.80	-1.481
C305-LP14249	-9.60	-8.30	-8.40	-10.70	-0.786
C305-LP14250	-8.70	-7.10	-7.30	-8.10	0.539
C305-LP14251	-7.30	-6.60	-6.50	-9.00	-1.246
C305-LP14252	-5.30	-4.60	#N/A	-4.30	0.862
C305-LP14253	-4.10	#N/A	-0.70	-1.20	2.908
C305-LP14254	-3.30	-2.50	-3.00	-2.00	0.939
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

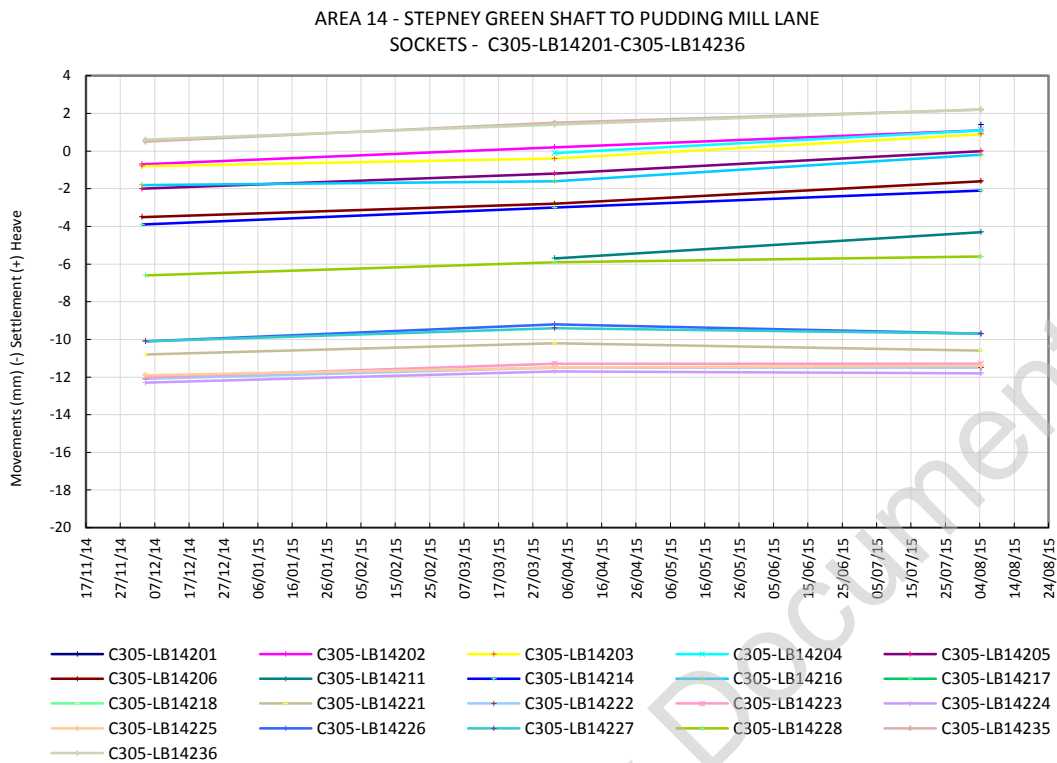
**SOCKETS**

**C305-LB14201 – C305-LP14236**

The graph presented below shows the socket readings for this array. A maximum settlement of -3mm was recorded before TBM's crossing due Ham and Wick site works. A maximum settlement of -3.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -12 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

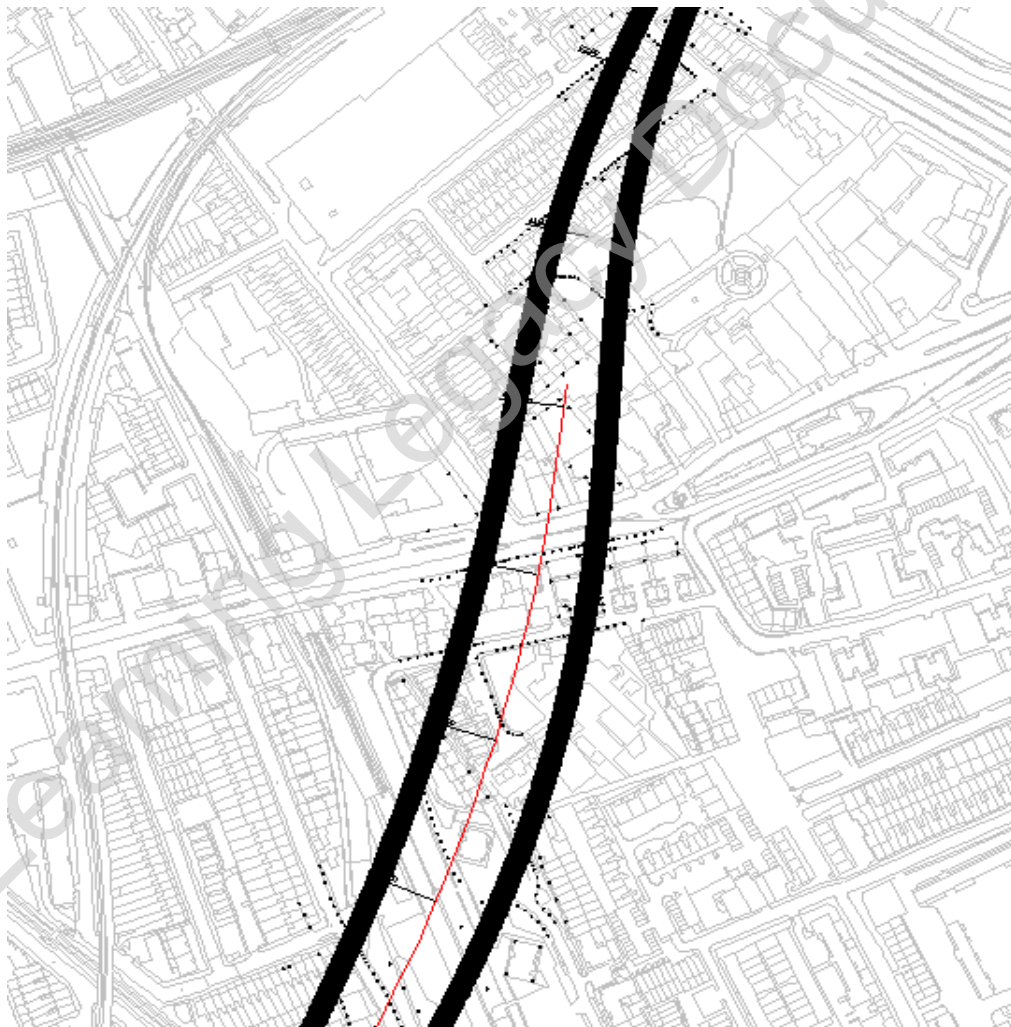
	Registered movement (mm)				mm/year
	03/12/2014	04/12/2014	02/04/2015	04/08/2015	
C305-LB14201	#N/A	#N/A	#N/A	1.40	#N/A
C305-LB14202	-0.70	#N/A	0.20	1.10	2.692
C305-LB14203	-0.80	#N/A	-0.40	0.90	2.550
C305-LB14204	#N/A	#N/A	-0.10	1.10	#N/A
C305-LB14205	-2.00	#N/A	-1.20	0.00	2.995
C305-LB14206	-3.50	#N/A	-2.80	-1.60	2.846
C305-LB14211	#N/A	#N/A	-5.70	-4.30	#N/A
C305-LB14214	-3.90	#N/A	-3.00	-2.10	2.692
C305-LB14216	-1.80	#N/A	-1.60	-0.20	2.403
C305-LB14217	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LB14218	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LB14221	#N/A	-10.80	-10.20	-10.60	0.290
C305-LB14222	#N/A	-12.10	-11.50	-11.50	0.895
C305-LB14223	#N/A	-12.00	-11.30	-11.30	1.044
C305-LB14224	#N/A	-12.30	-11.70	-11.80	0.744
C305-LB14225	#N/A	-11.90	-11.50	-11.40	0.748
C305-LB14226	#N/A	-10.10	-9.20	-9.70	0.586
C305-LB14227	#N/A	-10.10	-9.40	-9.70	0.590
C305-LB14228	#N/A	-6.60	-5.90	-5.60	1.498
C305-LB14235	#N/A	0.50	1.50	2.20	2.550
C305-LB14236	#N/A	0.60	1.40	2.20	2.403
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

### SUB-AREA 3

The instrumentation is located between Ham and Wick area and Bow Church Station, as shown in the figure below, and comprises the following:

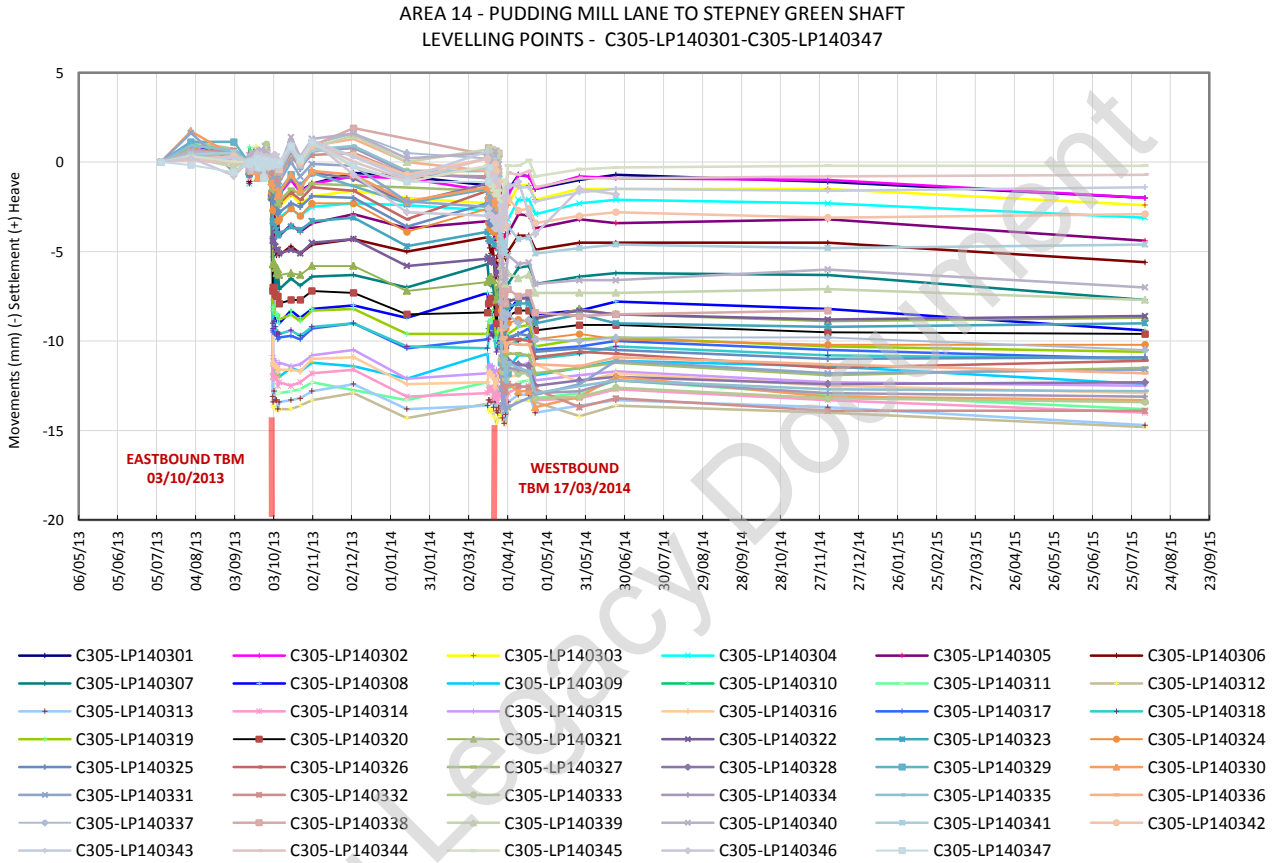
- 221 Levelling points
- 83 Sockets
- 6 3D prisms and Retro Targets
- 3 Rod Extensometers
- 3 Piezometers
- 3 Inclinerometers



**LEVELLING POINTS**

**C305-LP140301 – C305-LP140347**

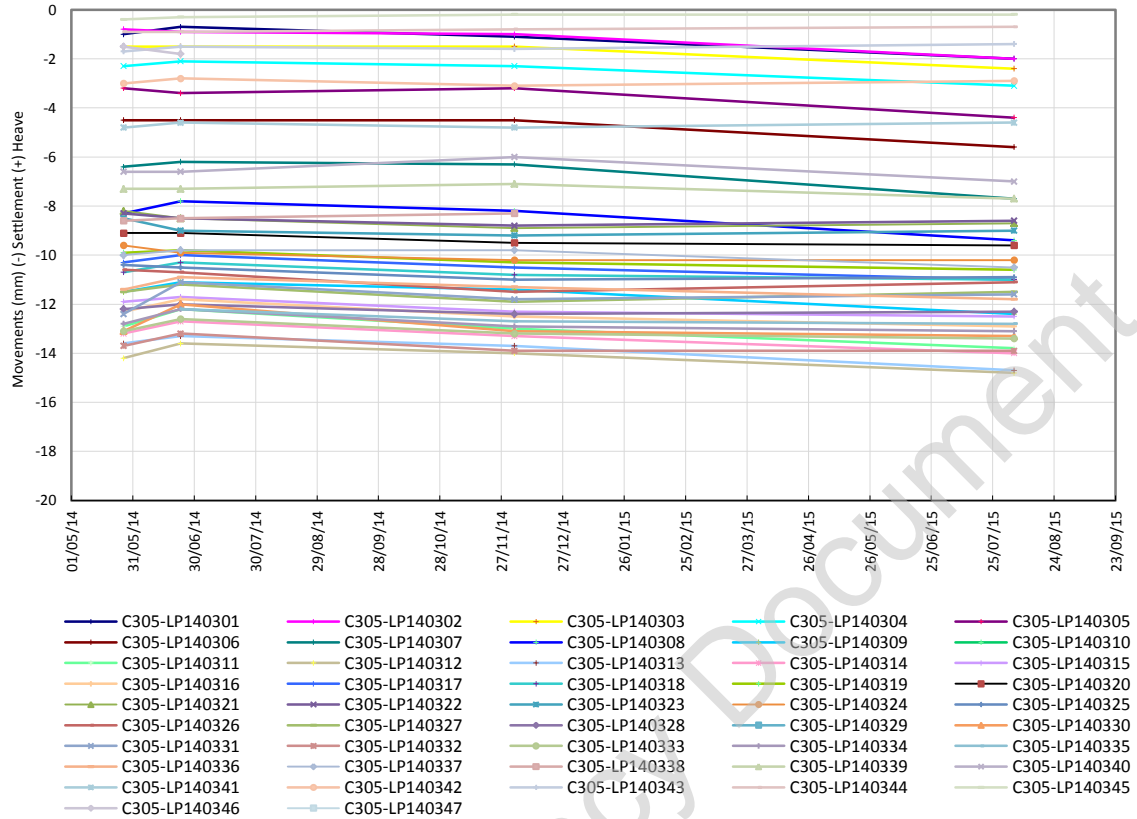
The graph presented below shows the levelling point readings from this array. A maximum settlement of -13mm was recorded after the Eastbound TBM transit and a total maximum settlement of -14.7mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN SHAFT  
 LEVELLING POINTS - C305-LP140301-C305-LP140347



The table below lists the annual settlement rate for the levelling points in this array.

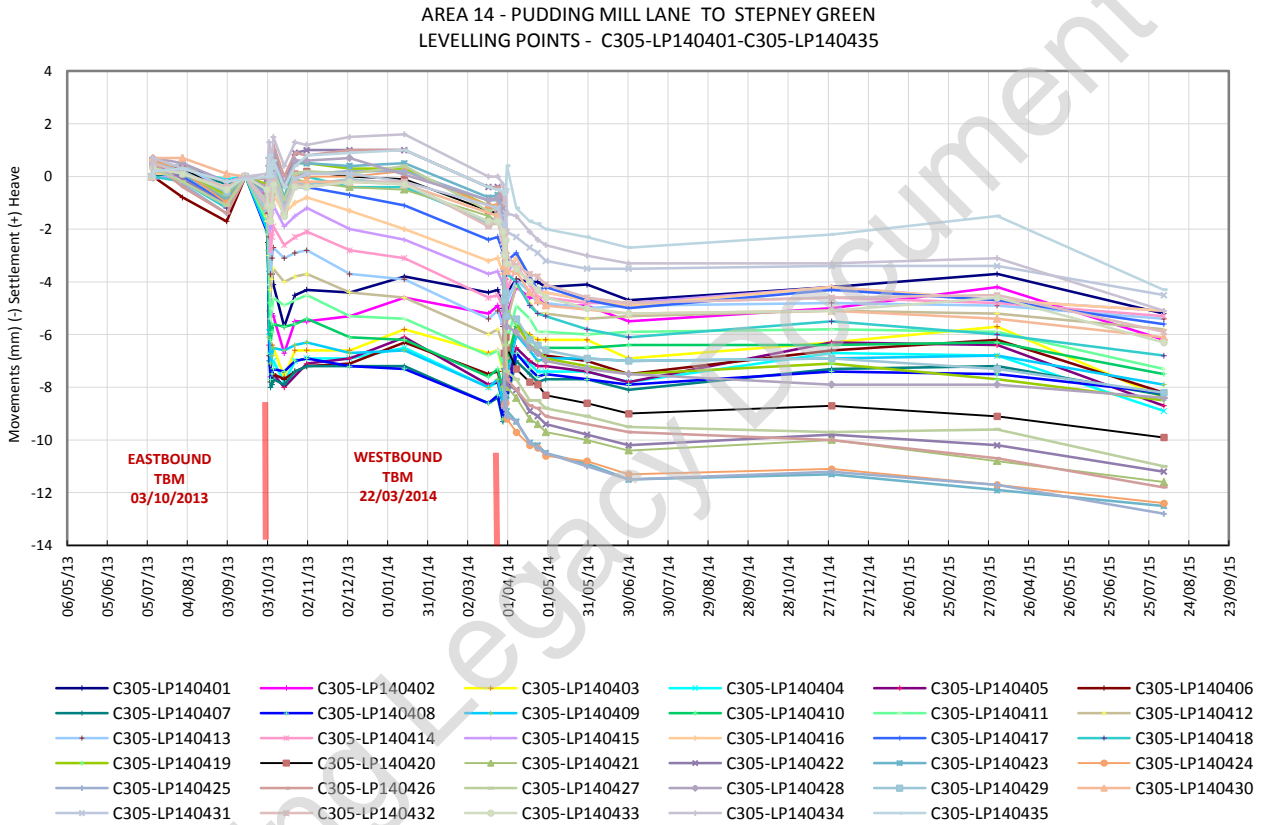
	Registered movement (mm)				mm/year
	26/05/2014	23/06/2014	03/12/2014	04/08/2015	
C305-LP140301	-1.00	-0.70	-1.10	-2.00	-0.961
C305-LP140302	-0.80	-0.90	-1.00	-2.00	-0.970
C305-LP140303	-1.50	-1.50	-1.50	-2.40	-0.746
C305-LP140304	-2.30	-2.10	-2.30	-3.10	-0.746
C305-LP140305	-3.20	-3.40	-3.20	-4.40	-0.912
C305-LP140306	-4.50	-4.50	-4.50	-5.60	-0.912
C305-LP140307	-6.40	-6.20	-6.30	-7.70	-1.152
C305-LP140308	-8.30	-7.80	-8.20	-9.40	-1.110
C305-LP140309	-11.50	-11.10	-11.40	-12.40	-0.903
C305-LP140310	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP140311	-12.90	-12.20	-13.00	-13.80	-1.044
C305-LP140312	-14.20	-13.60	-14.00	-14.80	-0.729
C305-LP140313	-13.60	-13.30	-13.70	-14.70	-1.044
C305-LP140314	-13.20	-12.70	-13.30	-14.00	-0.878
C305-LP140315	-11.90	-11.70	-12.30	-12.50	-0.614
C305-LP140316	-12.30	-11.80	-12.50	-12.90	-0.721
C305-LP140317	-10.30	-10.00	-10.50	-11.00	-0.721
C305-LP140318	-10.70	-10.30	-10.80	-11.00	-0.423
C305-LP140319	-9.90	-9.80	-10.30	-10.60	-0.655
C305-LP140320	-9.10	-9.10	-9.50	-9.60	-0.448
C305-LP140321	-8.20	-8.50	-8.90	-8.70	-0.349
C305-LP140322	-8.30	-8.50	-8.80	-8.60	-0.208
C305-LP140323	-8.50	-9.00	-9.20	-9.00	-0.266
C305-LP140324	-9.60	-9.90	-10.20	-10.20	-0.424

	Registered movement (mm)				mm/year
	26/05/2014	23/06/2014	03/12/2014	04/08/2015	
C305-LP140325	-10.40	-10.50	-11.00	-10.90	-0.423
C305-LP140326	-10.60	-10.70	-11.50	-11.10	-0.449
C305-LP140327	-11.50	-11.20	-11.90	-11.50	-0.158
C305-LP140328	-12.20	-12.00	-12.40	-12.30	-0.182
C305-LP140329	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP140330	-13.10	-12.00	-13.10	-13.30	-0.621
C305-LP140331	-12.40	-11.10	-11.80	-11.60	0.176
C305-LP140332	-13.70	-13.20	-13.90	-13.90	-0.389
C305-LP140333	-13.10	-12.60	-13.20	-13.40	-0.464
C305-LP140334	-12.80	-12.20	-12.90	-13.10	-0.505
C305-LP140335	#N/A	-12.20	-12.70	-12.80	-0.508
C305-LP140336	-11.40	-10.90	-11.30	-11.80	-0.530
C305-LP140337	-10.00	-9.80	-9.80	-10.50	-0.480
C305-LP140338	-8.60	-8.50	-8.30	#N/A	0.530
C305-LP140339	-7.30	-7.30	-7.10	-7.70	-0.315
C305-LP140340	-6.60	-6.60	-6.00	-7.00	-0.281
C305-LP140341	-4.80	-4.60	-4.80	-4.60	0.083
C305-LP140342	-3.00	-2.80	-3.10	-2.90	-0.008
C305-LP140343	-1.70	-1.50	-1.60	-1.40	0.174
C305-LP140344	-0.90	-0.90	-0.80	-0.70	0.174
C305-LP140345	-0.40	-0.30	-0.20	-0.20	0.141
C305-LP140346	-1.50	-1.80	#N/A	#N/A	#N/A
C305-LP140347	#N/A	#N/A	#N/A	#N/A	#N/A
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

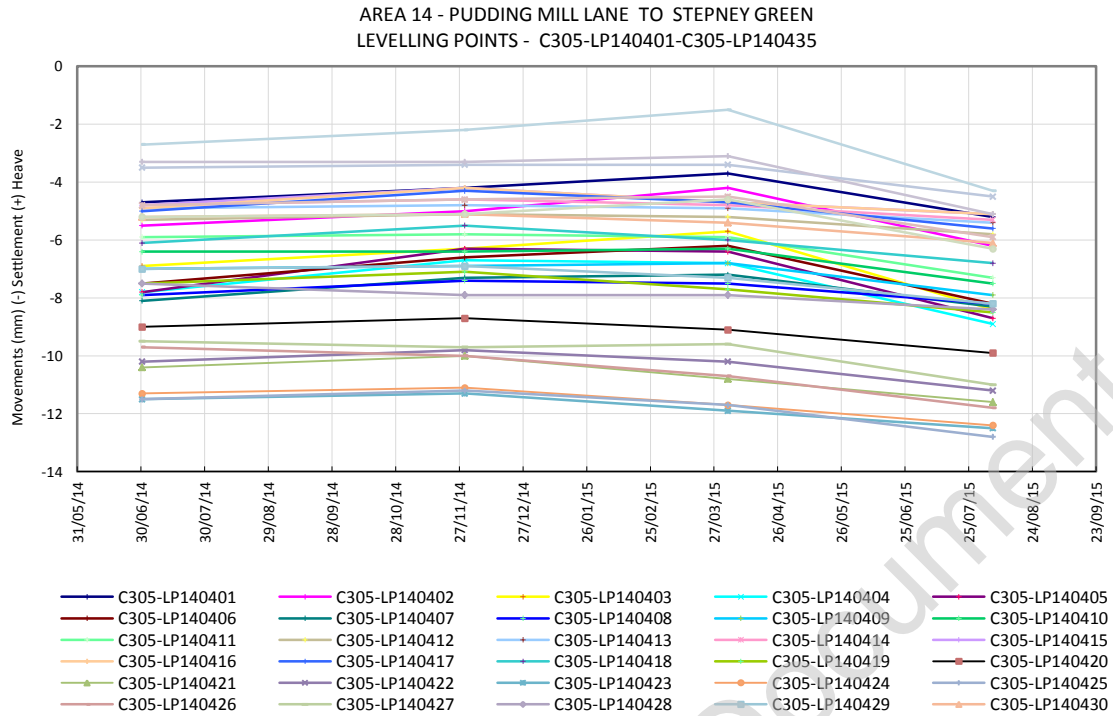
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP140401 – C305-LP140435**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -7.7 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -12.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

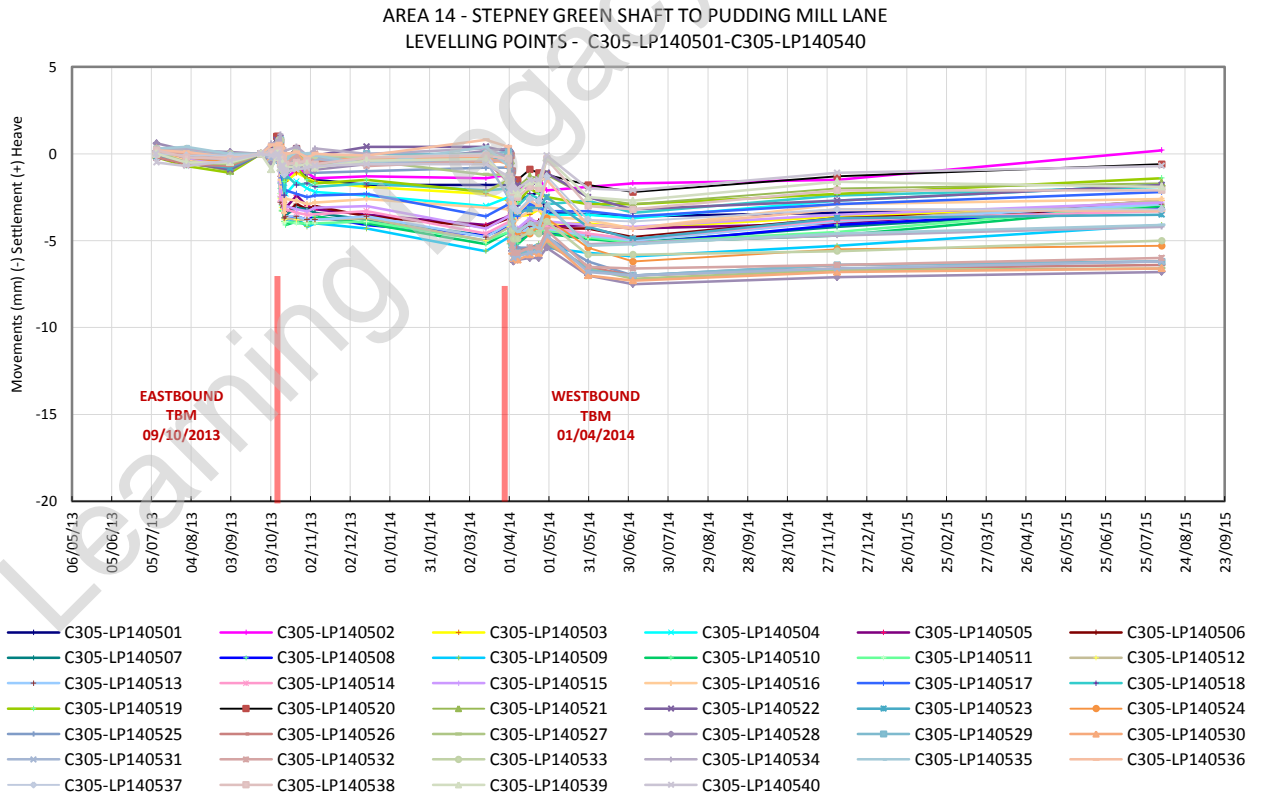
	Registered movement (mm)				mm/year
	30/06/2014	29/11/2014	02/04/2015	05/08/2015	
C305-LP140401	-4.70	-4.20	-3.70	-5.20	-0.230
C305-LP140402	-5.50	-5.00	-4.20	-6.20	-0.305
C305-LP140403	-6.90	-6.30	-5.70	-8.40	-0.997
C305-LP140404	-7.80	-6.70	-6.80	-8.90	-0.848
C305-LP140405	-7.80	-6.30	-6.40	-8.70	-0.665
C305-LP140406	-7.50	-6.60	-6.20	-8.20	-0.396
C305-LP140407	-8.10	-7.30	-7.20	-8.30	-0.087
C305-LP140408	-7.90	-7.40	-7.50	-8.20	-0.241
C305-LP140409	-7.00	-6.90	-6.80	-7.90	-0.687
C305-LP140410	-6.40	-6.40	-6.30	-7.50	-0.853
C305-LP140411	-5.90	-5.80	-5.90	-7.30	-1.144
C305-LP140412	-5.30	-5.10	-5.20	-5.80	-0.418
C305-LP140413	-4.90	-4.80	-4.90	-5.40	-0.423
C305-LP140414	-4.80	-4.60	-4.80	-5.30	-0.446
C305-LP140415	-4.80	-4.20	-4.70	-5.10	-0.349
C305-LP140416	-4.90	-4.20	-4.70	-5.10	-0.263
C305-LP140417	-5.00	-4.30	-4.70	-5.60	-0.555
C305-LP140418	-6.10	-5.50	-6.00	-6.80	-0.669
C305-LP140419	-7.50	-7.10	-7.70	-8.50	-0.949
C305-LP140420	-9.00	-8.70	-9.10	-9.90	-0.818
C305-LP140421	-10.40	-10.00	-10.80	-11.60	-1.167
C305-LP140422	-10.20	-9.80	-10.20	-11.20	-0.892
C305-LP140423	-11.50	-11.30	-11.90	-12.50	-0.961
C305-LP140424	-11.30	-11.10	-11.70	-12.40	-1.041
C305-LP140425	-11.50	-11.20	-11.70	-12.80	-1.167
C305-LP140426	-9.70	-10.00	-10.70	-11.80	-1.899
C305-LP140427	-9.50	-9.70	-9.60	-11.00	-1.184

	Registered movement (mm)				mm/year
	30/06/2014	29/11/2014	02/04/2015	05/08/2015	
C305-LP140428	-7.50	-7.90	-7.90	-8.40	-0.744
C305-LP140429	-7.00	-6.90	-7.30	-8.20	-1.070
C305-LP140430	-5.20	-5.10	-5.40	-6.10	-0.801
C305-LP140431	-3.50	-3.40	-3.40	-4.50	-0.795
C305-LP140432	-4.80	-4.60	-4.50	-5.90	-0.841
C305-LP140433	-5.20	-5.10	-4.60	-6.30	-0.733
C305-LP140434	-3.30	-3.30	-3.10	-5.10	-1.385
C305-LP140435	-2.70	-2.20	-1.50	-4.30	-1.054
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

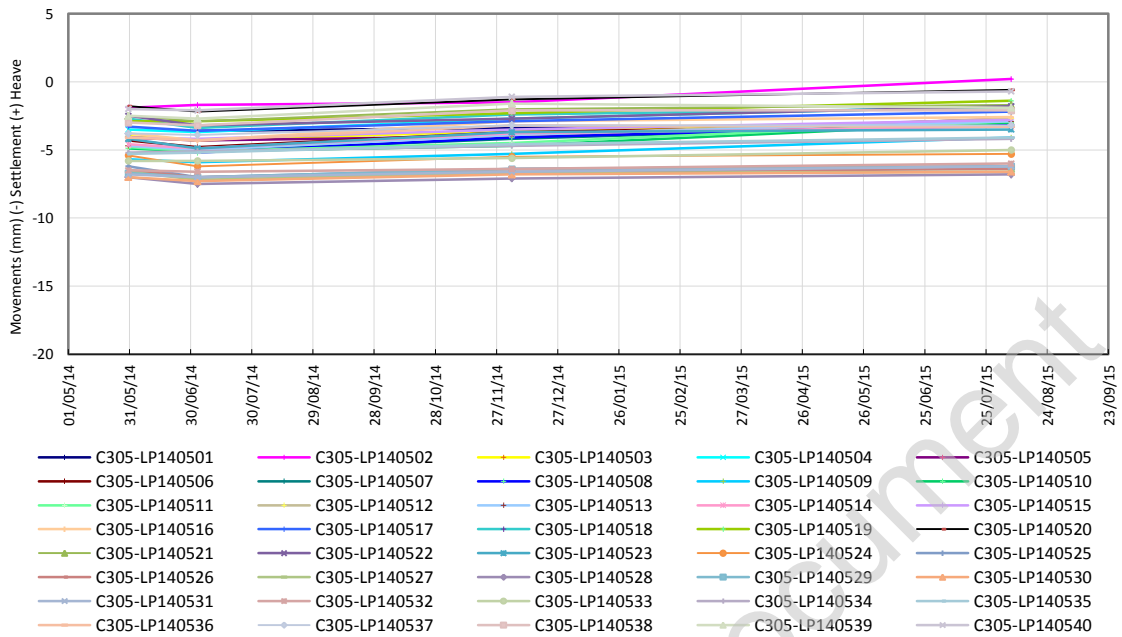
**C305-LP140501 – C305-LP140540**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -3.4 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP140501-C305-LP140540



The table below lists the annual settlement rate for the levelling points in this array.

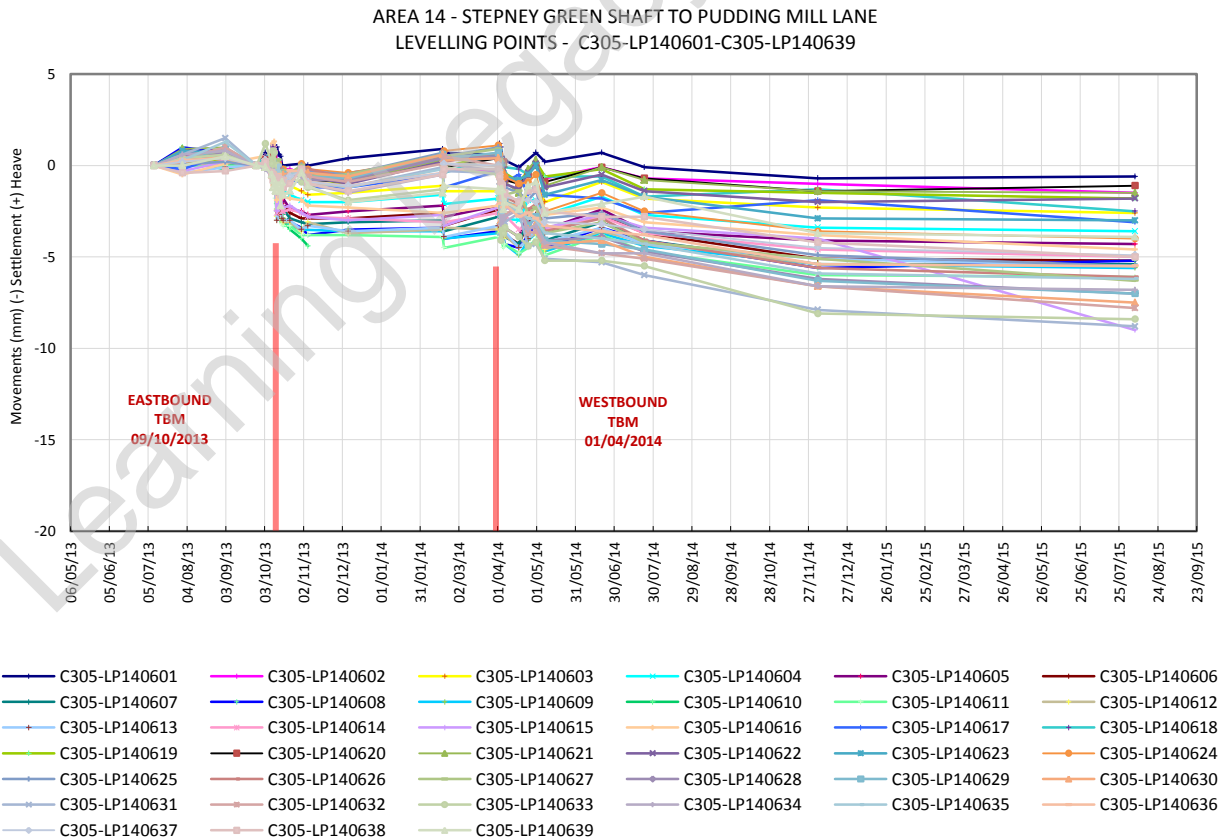
	Registered movement (mm)				mm/year
	30/05/2014	03/07/2014	04/12/2014	06/08/2015	
C305-LP140501	#N/A	-3.60	-3.40	-3.20	0.360
C305-LP140502	-1.90	-1.70	-1.50	0.20	1.718
C305-LP140503	-4.00	-4.30	-3.60	-3.00	0.994
C305-LP140504	-3.50	-3.70	-2.70	-1.80	1.573
C305-LP140505	-4.10	-4.30	-4.00	-2.70	1.268
C305-LP140506	-4.30	-4.80	-3.70	-3.10	1.259
C305-LP140507	-4.70	-5.10	-4.20	-3.10	1.548
C305-LP140508	-4.70	-5.20	-4.10	-3.10	1.596
C305-LP140509	-5.70	-5.90	-5.30	-4.10	1.459
C305-LP140510	-4.90	-5.10	-4.70	-3.00	1.696
C305-LP140511	-4.80	-5.10	-4.50	-2.90	1.744
C305-LP140512	-4.70	-4.90	-3.90	-2.70	1.826
C305-LP140513	-4.70	-5.00	-3.90	-2.90	1.698
C305-LP140514	-4.60	-4.90	-3.80	-3.30	1.277
C305-LP140515	-4.10	-4.20	-3.50	-2.80	1.181
C305-LP140516	-3.80	-4.30	-2.90	-2.60	1.282
C305-LP140517	-3.30	-3.60	-2.90	-2.20	1.078
C305-LP140518	-2.70	-3.40	-2.40	-1.90	0.981
C305-LP140519	-2.90	-2.90	-2.30	-1.40	1.309
C305-LP140520	-1.80	-2.20	-1.30	-0.60	1.211
C305-LP140521	-2.50	-2.90	-2.00	-1.70	0.874
C305-LP140522	-2.50	-3.20	-2.70	-1.80	0.858
C305-LP140523	-4.20	-4.90	-3.70	-3.50	0.912
C305-LP140524	-5.40	-6.20	-5.50	-5.30	0.401
C305-LP140525	-6.20	-7.00	-6.40	-6.20	0.310
C305-LP140526	-6.50	-7.00	-6.60	-6.40	0.280
C305-LP140527	-6.60	-7.20	-6.70	-6.60	0.236
C305-LP140528	-7.00	-7.50	-7.10	-6.80	0.364
C305-LP140529	-6.70	-7.00	-6.40	-6.20	0.566
C305-LP140530	-7.00	-7.30	-6.80	-6.60	0.474

	Registered movement (mm)				mm/year
	30/05/2014	03/07/2014	04/12/2014	06/08/2015	
C305-LP140531	-6.80	-7.00	-6.60	-6.20	0.602
C305-LP140532	-6.50	-6.60	-6.40	-6.00	0.469
C305-LP140533	-5.80	-5.80	-5.60	-5.00	0.689
C305-LP140534	-5.20	-5.10	-4.70	-4.20	0.839
C305-LP140535	-5.30	-5.20	-4.60	-4.10	1.023
C305-LP140536	-4.10	-4.30	-3.20	-3.30	0.823
C305-LP140537	-3.80	-3.90	-3.20	-3.20	0.591
C305-LP140538	-3.00	-3.20	-2.10	-2.10	0.907
C305-LP140539	-2.50	-2.70	-1.60	-1.90	0.655
C305-LP140540	-2.00	-2.10	-1.10	-0.70	1.204
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

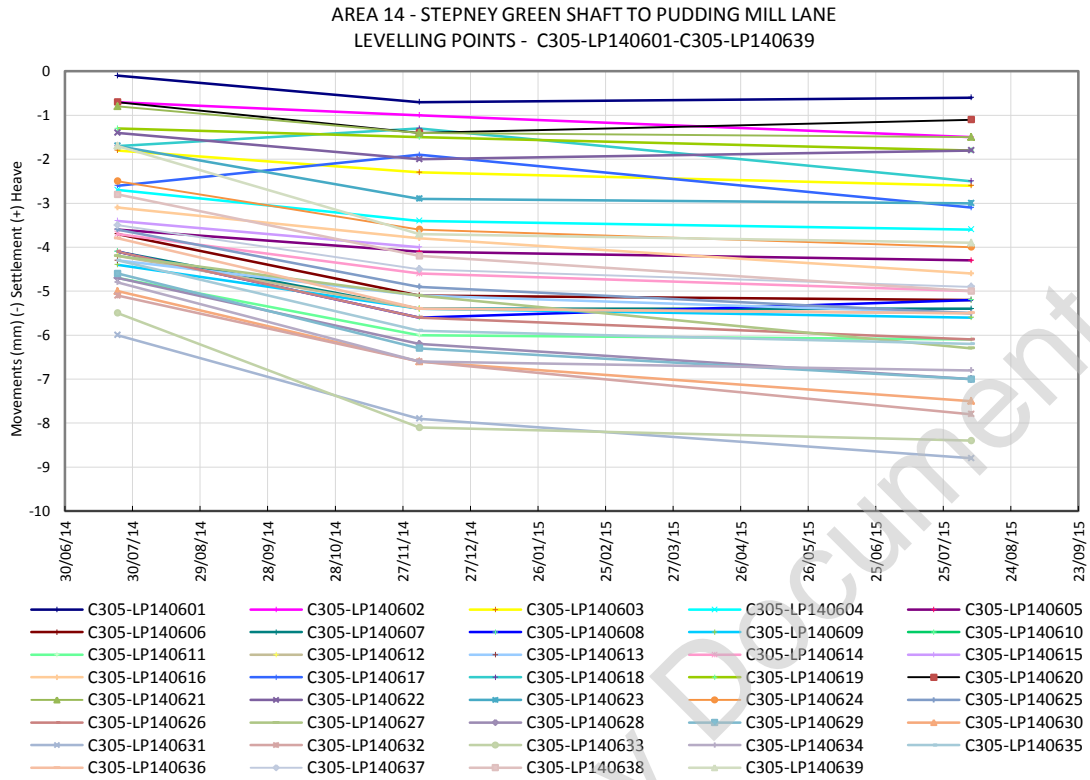
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP140601 – C305-LP140639**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -3.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.4 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)			mm/year
	23/07/2014	04/12/2014	06/08/2015	
C305-LP140601	-0.10	-0.70	-0.60	-0.404
C305-LP140602	-0.70	-1.00	-1.50	-0.767
C305-LP140603	-1.80	-2.30	-2.60	-0.731
C305-LP140604	-2.70	-3.40	-3.60	-0.797
C305-LP140605	-3.60	-4.10	-4.30	-0.628
C305-LP140606	-3.70	-5.10	-5.20	-1.285
C305-LP140607	-4.10	-5.40	-5.40	-1.098
C305-LP140608	-4.10	-5.60	-5.20	-0.856
C305-LP140609	-4.40	-5.40	-5.60	-1.050
C305-LP140610	#N/A	#N/A	#N/A	#N/A
C305-LP140611	-4.70	-6.00	-6.10	-1.201
C305-LP140612	-4.20	-5.40	-5.50	-1.116
C305-LP140613	-4.30	-5.10	-5.50	-1.087
C305-LP140614	-3.70	-4.60	-5.00	-1.171
C305-LP140615	-3.40	-4.00	#N/A	#N/A
C305-LP140616	-3.10	-3.80	-4.60	-1.413
C305-LP140617	-2.60	-1.90	-3.10	-0.642
C305-LP140618	-1.70	-1.30	-2.50	-0.895
C305-LP140619	-1.30	-1.50	-1.80	-0.477
C305-LP140620	-0.70	-1.40	-1.10	-0.283
C305-LP140621	-0.80	-1.40	-1.50	-0.610
C305-LP140622	-1.40	-2.00	-1.80	-0.301
C305-LP140623	-1.70	-2.90	-3.00	-1.116
C305-LP140624	-2.50	-3.60	-4.00	-1.340
C305-LP140625	-3.60	-4.90	-5.50	-1.715
C305-LP140626	-4.10	-5.60	-6.10	-1.781
C305-LP140627	-4.20	-5.10	-6.30	-1.993
C305-LP140628	-4.70	-6.20	-7.00	-2.089
C305-LP140629	-4.60	-6.30	-7.00	-2.155
C305-LP140630	-5.00	-6.60	-7.50	-2.276
C305-LP140631	-6.00	-7.90	-8.80	-2.530

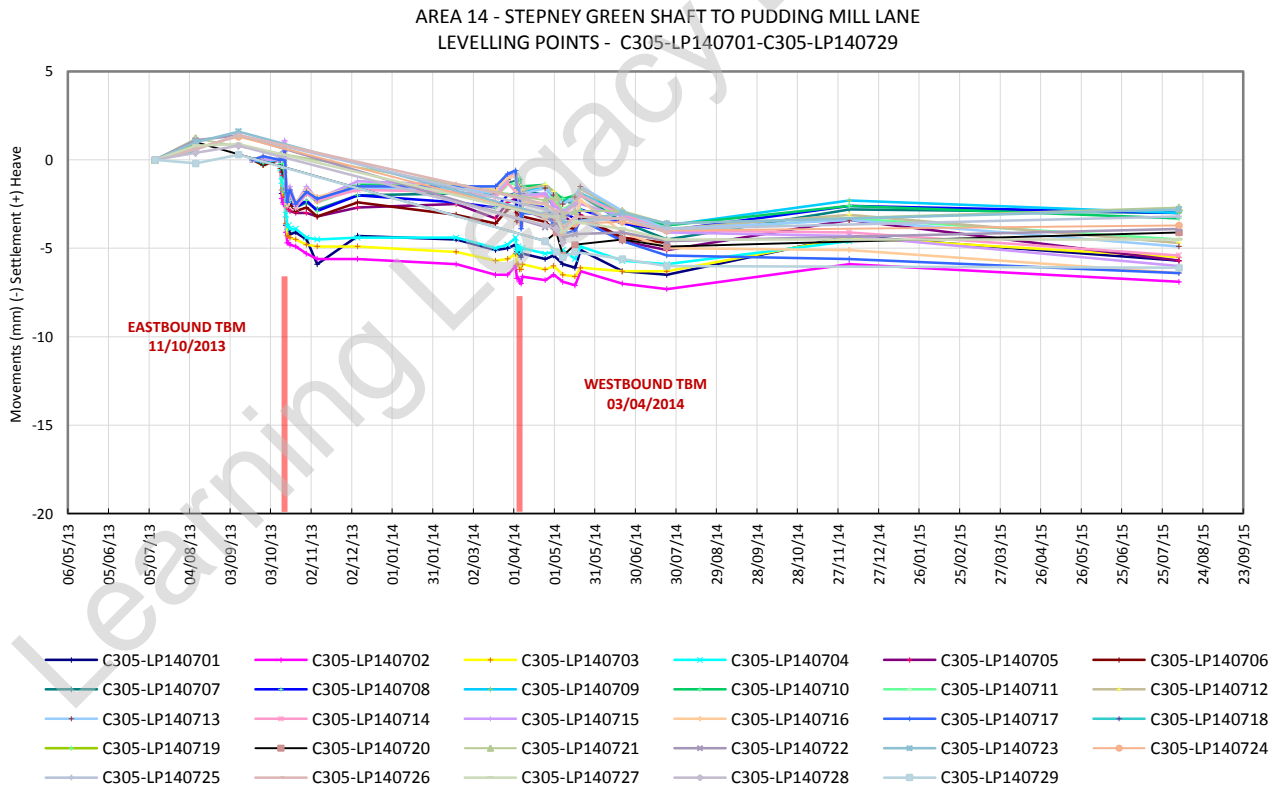


	Registered movement (mm)			mm/year
	23/07/2014	04/12/2014	06/08/2015	
C305-LP140632	-5.10	-6.60	-7.80	-2.500
C305-LP140633	-5.50	-8.10	-8.40	-2.504
C305-LP140634	-4.80	-6.60	-6.80	-1.726
C305-LP140635	-4.30	-5.90	-6.20	-1.660
C305-LP140636	-3.80	-5.40	-5.50	-1.454
C305-LP140637	-3.50	-4.50	-4.90	-1.256
C305-LP140638	-2.80	-4.20	-5.00	-2.004
C305-LP140639	-1.70	-3.70	-3.90	-1.895
	Rate less than -2.5 mm/year		% less 2 mm/ year	95%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 95%.

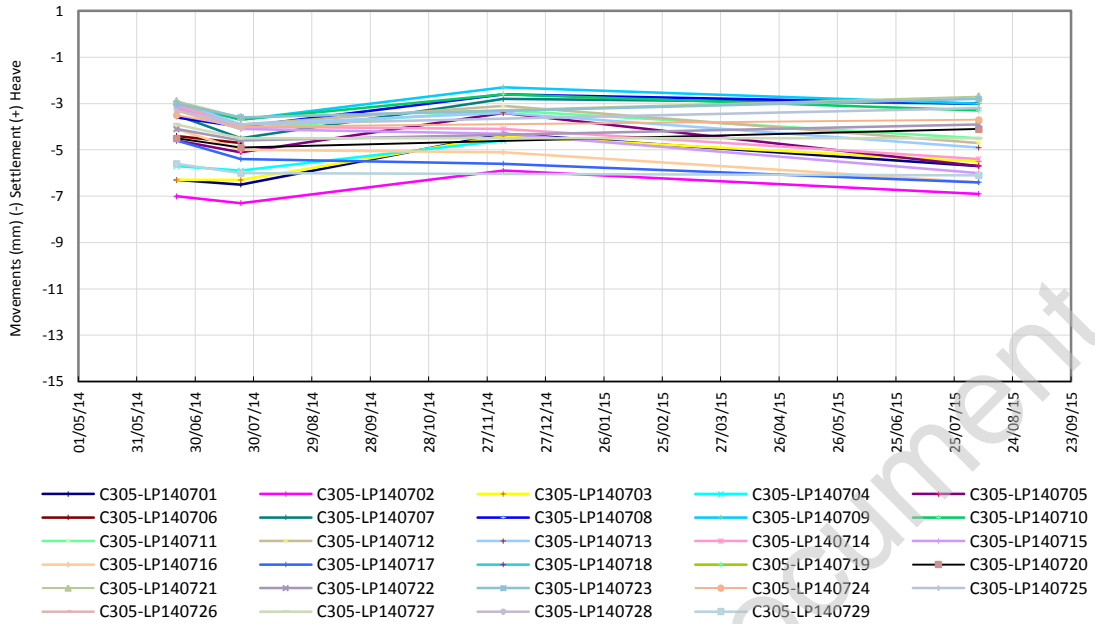
**C305-LP140701 – C305-LP140729**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -5.3 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.3 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP140701-C305-LP140729



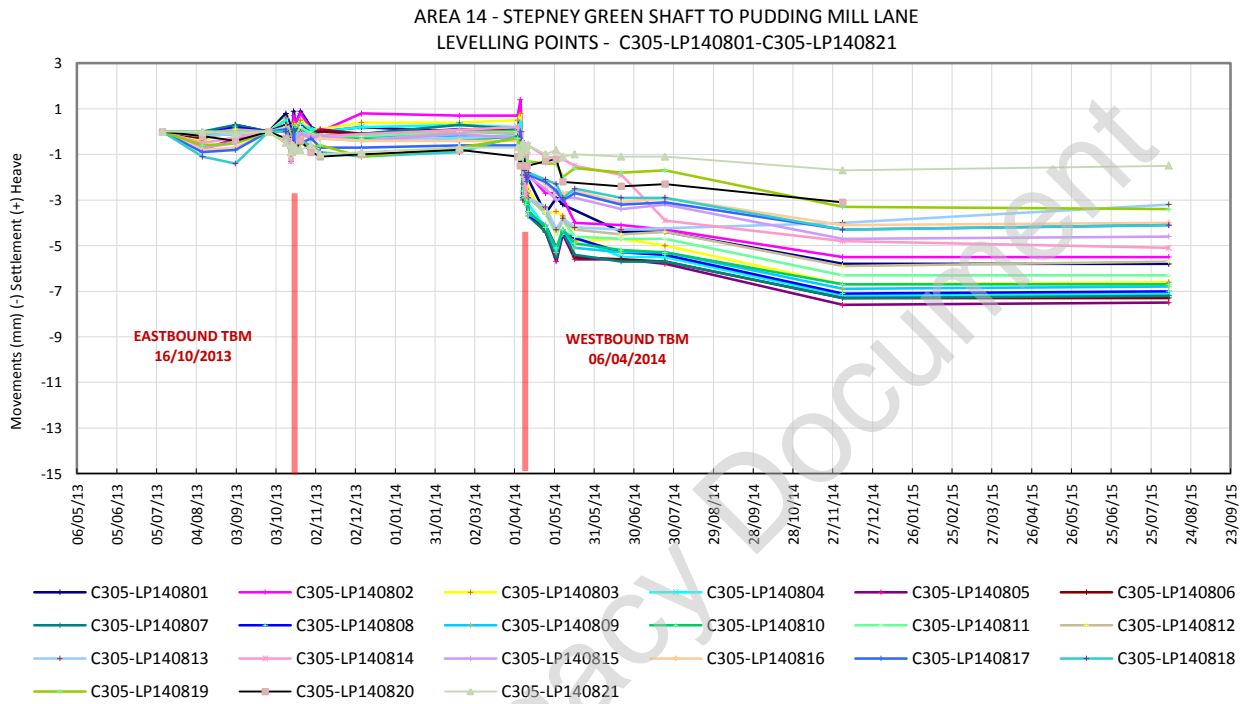
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	20/06/2014	23/07/2014	05/12/2014	06/08/2015	
C305-LP140701	-6.30	-6.50	-4.30	-5.70	0.725
C305-LP140702	-7.00	-7.30	-5.90	-6.90	0.271
C305-LP140703	-6.30	-6.30	-4.40	-5.50	0.816
C305-LP140704	-5.70	-5.90	-4.60	#N/A	2.716
C305-LP140705	-4.60	-5.10	-3.40	-5.70	-0.718
C305-LP140706	-4.40	-4.70	#N/A	#N/A	#N/A
C305-LP140707	-3.50	-4.50	-2.80	-3.00	0.902
C305-LP140708	-3.60	-4.00	-2.60	-3.00	0.757
C305-LP140709	-3.00	-3.70	-2.30	-3.00	0.328
C305-LP140710	-3.00	-3.70	-2.60	-3.30	0.043
C305-LP140711	-3.20	-4.10	-3.30	-4.50	-0.797
C305-LP140712	-3.00	-3.90	-3.10	-4.70	-1.156
C305-LP140713	-2.90	-3.90	-3.40	-4.90	-1.405
C305-LP140714	-3.10	-4.00	-4.10	-5.40	-1.741
C305-LP140715	-3.20	-4.10	-4.30	-6.00	-2.196
C305-LP140716	-4.10	-5.00	-5.10	-6.40	-1.741
C305-LP140717	-4.60	-5.40	-5.60	-6.40	-1.334
C305-LP140718	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP140719	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP140720	-4.50	-4.90	#N/A	-4.10	0.528
C305-LP140721	-2.90	-3.60	#N/A	-2.70	0.465
C305-LP140722	-4.10	-4.60	#N/A	-3.90	0.384
C305-LP140723	-3.00	-3.60	#N/A	-2.80	0.424
C305-LP140724	-3.50	-4.00	#N/A	-3.70	0.017
C305-LP140725	-3.30	-3.90	#N/A	-3.20	0.333
C305-LP140726	-3.30	-4.10	#N/A	#N/A	#N/A
C305-LP140727	-3.90	-4.50	#N/A	-4.50	-0.310
C305-LP140728	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP140729	-5.60	-6.00	#N/A	-6.10	-0.298
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

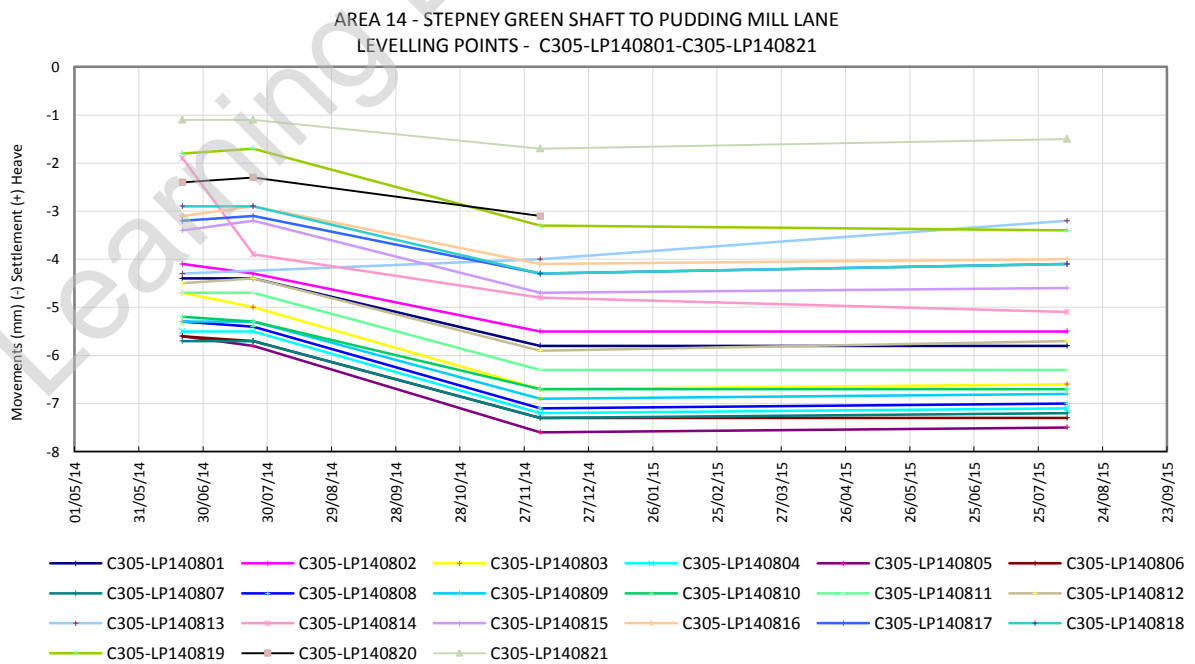
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP140801 – C305-LP140821**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7.3 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



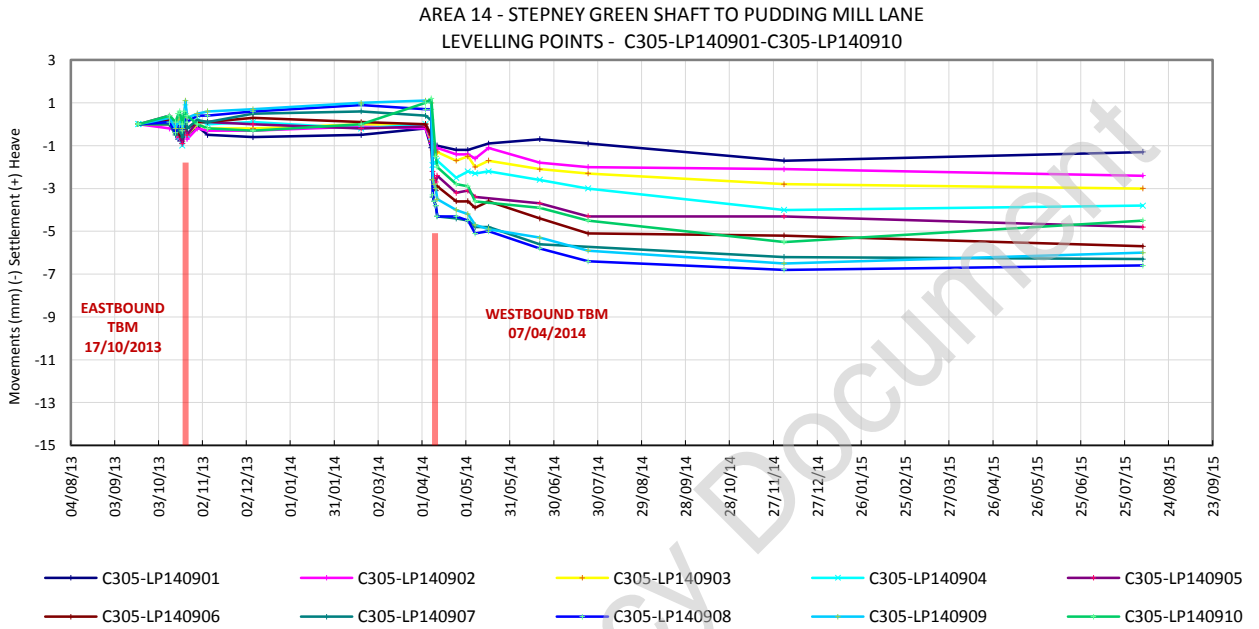
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	20/06/2014	23/07/2014	04/12/2014	07/08/2015	
C305-LP140801	-4.40	-4.40	-5.80	-5.80	-1.324
C305-LP140802	-4.10	-4.30	-5.50	-5.50	-1.240
C305-LP140803	-4.70	-5.00	-6.70	-6.60	-1.676
C305-LP140804	-5.50	-5.50	-7.20	-7.10	-1.517
C305-LP140805	-5.60	-5.80	-7.60	-7.50	-1.718
C305-LP140806	-5.60	-5.70	-7.30	-7.30	-1.566
C305-LP140807	-5.70	-5.70	-7.30	-7.20	-1.423
C305-LP140808	-5.30	-5.40	-7.10	-7.00	-1.570
C305-LP140809	-5.30	-5.30	-6.90	-6.80	-1.423
C305-LP140810	-5.20	-5.30	-6.70	-6.70	-1.377
C305-LP140811	-4.70	-4.70	-6.30	-6.30	-1.513
C305-LP140812	-4.50	-4.40	-5.90	-5.70	-1.186
C305-LP140813	-4.30	#N/A	-4.00	-3.20	0.988
C305-LP140814	-1.90	-3.90	-4.80	-5.10	-2.180
C305-LP140815	-3.40	-3.20	-4.70	-4.60	-1.222
C305-LP140816	-3.10	-2.90	-4.10	-4.00	-0.939
C305-LP140817	-3.20	-3.10	-4.30	-4.10	-0.902
C305-LP140818	-2.90	-2.90	-4.30	-4.10	-1.144
C305-LP140819	-1.80	-1.70	-3.30	-3.40	-1.549
C305-LP140820	-2.40	-2.30	-3.10	#N/A	-1.717
C305-LP140821	-1.10	-1.10	-1.70	-1.50	-0.388
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

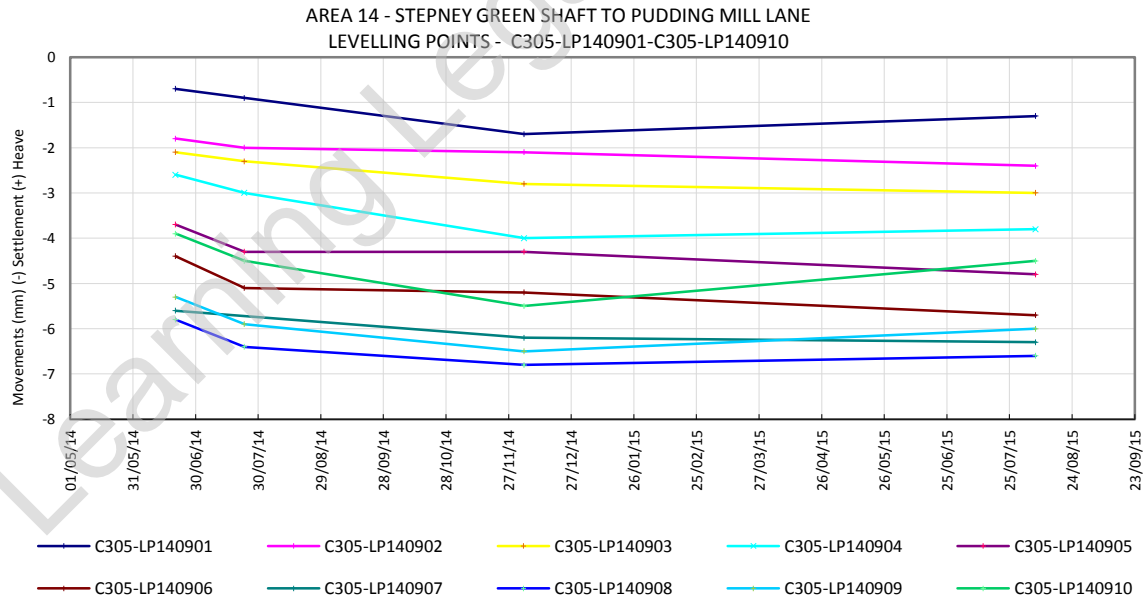
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP140901 – C305-LP140910**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	20/06/2014	23/07/2014	04/12/2014	06/08/2015	
C305-LP140901	-0.70	-0.90	-1.70	-1.30	-0.505
C305-LP140902	-1.80	-2.00	-2.10	-2.40	-0.471
C305-LP140903	-2.10	-2.30	-2.80	-3.00	-0.760
C305-LP140904	-2.60	-3.00	-4.00	-3.80	-0.981
C305-LP140905	-3.70	-4.30	-4.30	-4.80	-0.769
C305-LP140906	-4.40	-5.10	-5.20	-5.70	-0.916
C305-LP140907	-5.60	#N/A	-6.20	-6.30	-0.585
C305-LP140908	-5.80	-6.40	-6.80	-6.60	-0.518
C305-LP140909	-5.30	-5.90	-6.50	-6.00	-0.438
C305-LP140910	-3.90	-4.50	-5.50	-4.50	-0.367
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

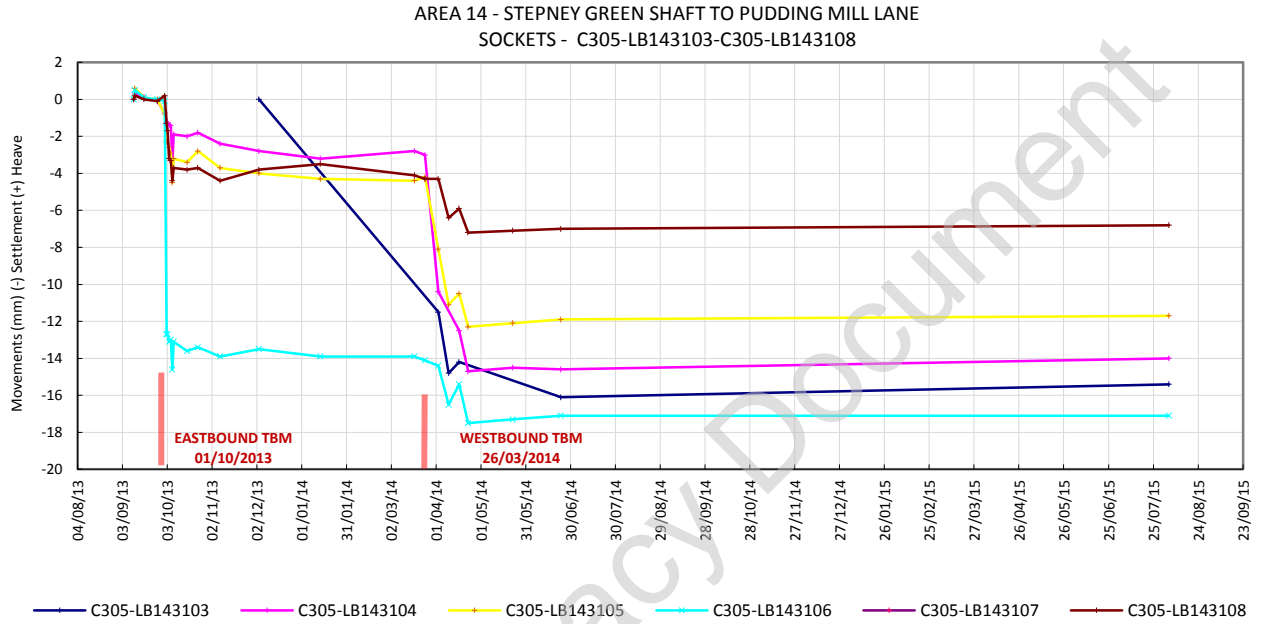
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%

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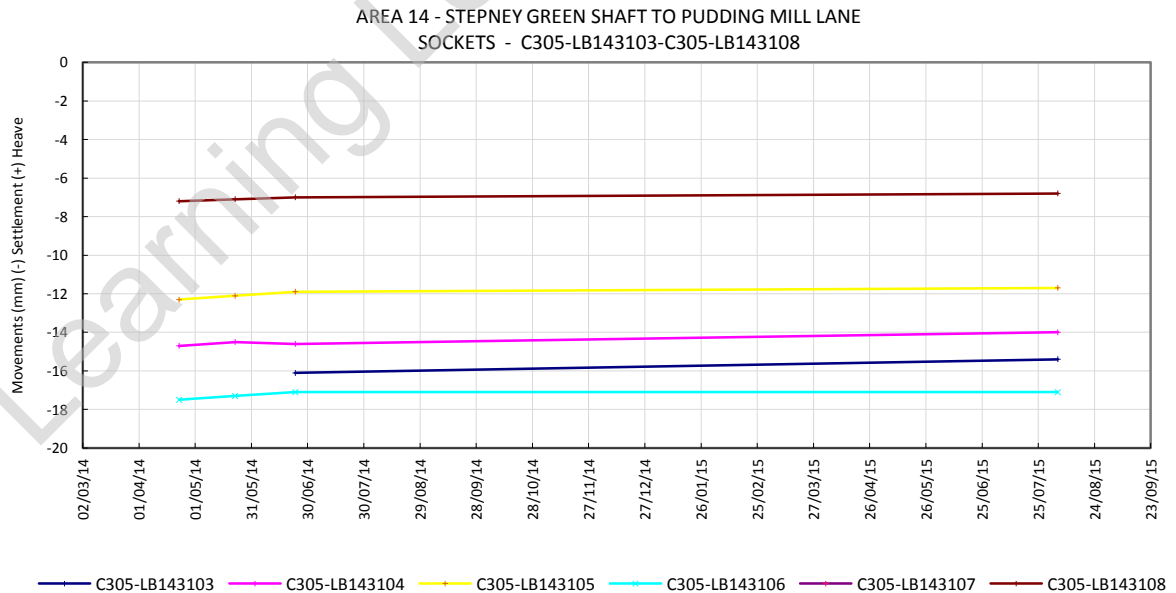
**SOCKETS**

**C305-LB143103 – C305-LB143108**

The graph presented below shows the socket readings from this array. A maximum settlement of -14 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -17 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



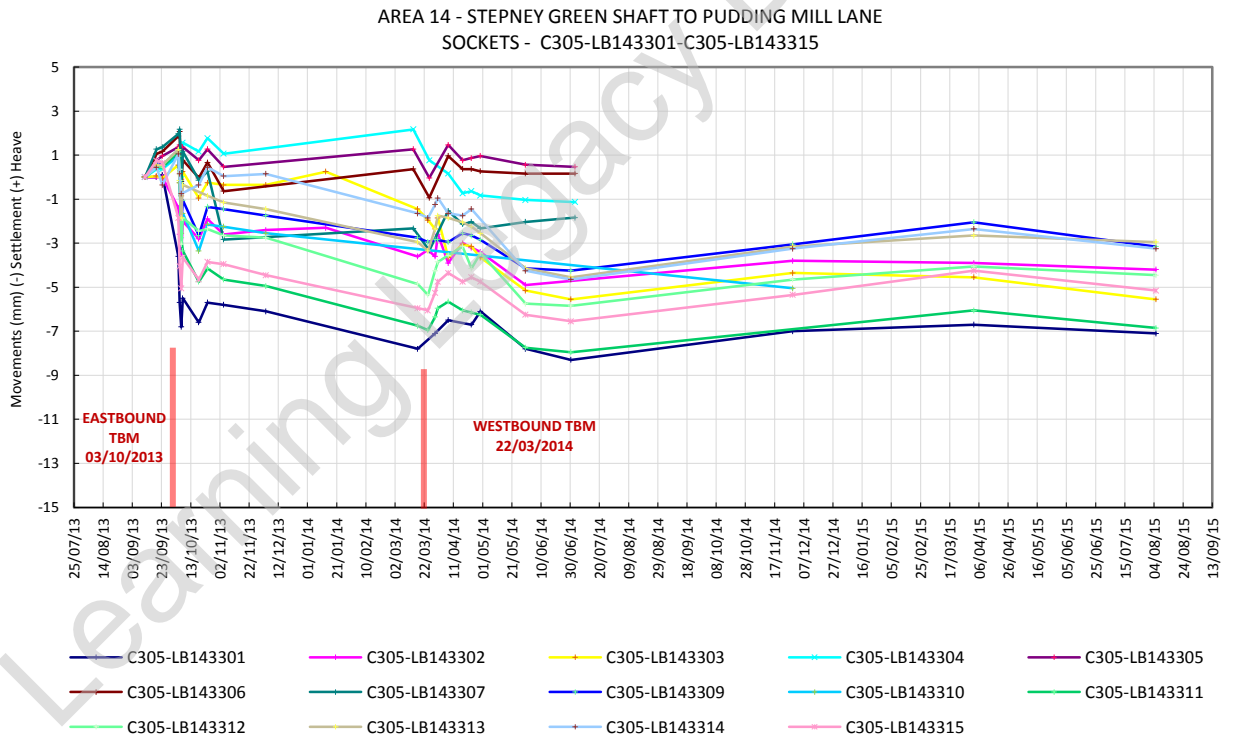
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	22/04/2014 10:30	22/05/2014 10:00	23/06/2014 11:20	04/08/2015 11:22	
C305-LB143103	#N/A	#N/A	-16.10	-15.40	#N/A
C305-LB143104	-14.70	-14.50	-14.60	-14.00	0.500
C305-LB143105	-12.30	-12.10	-11.90	-11.70	0.360
C305-LB143106	-17.50	-17.30	-17.10	-17.10	0.195
C305-LB143107	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LB143108	-7.20	-7.10	-7.00	-6.80	0.262
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

**C305-LB143301 – C305-LB143315**

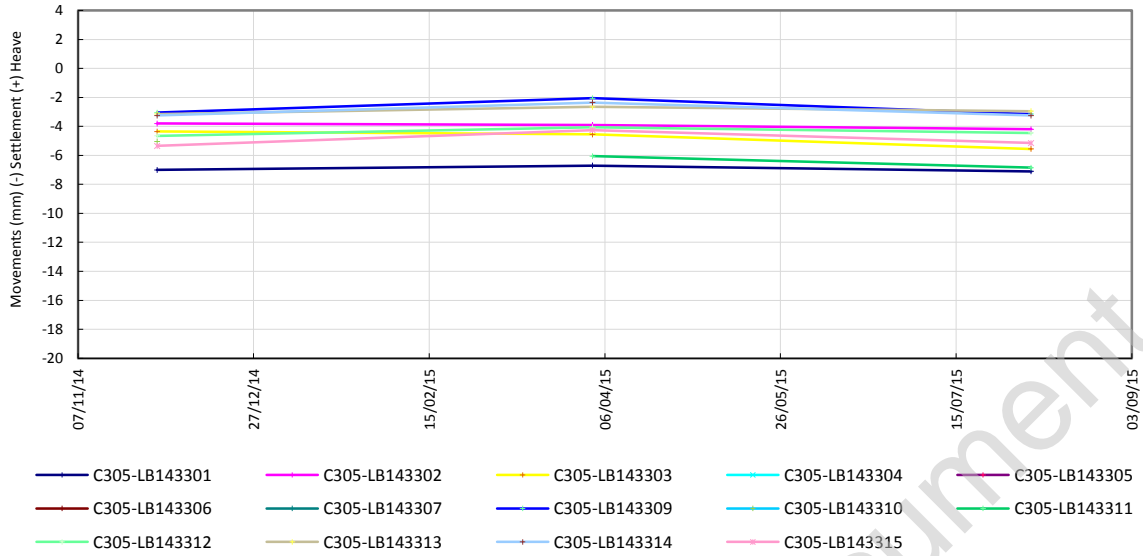
The graph presented below shows the socket readings from this array. A maximum settlement of -6.6 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 SOCKETS- C305-LB143301-C305-LB143315



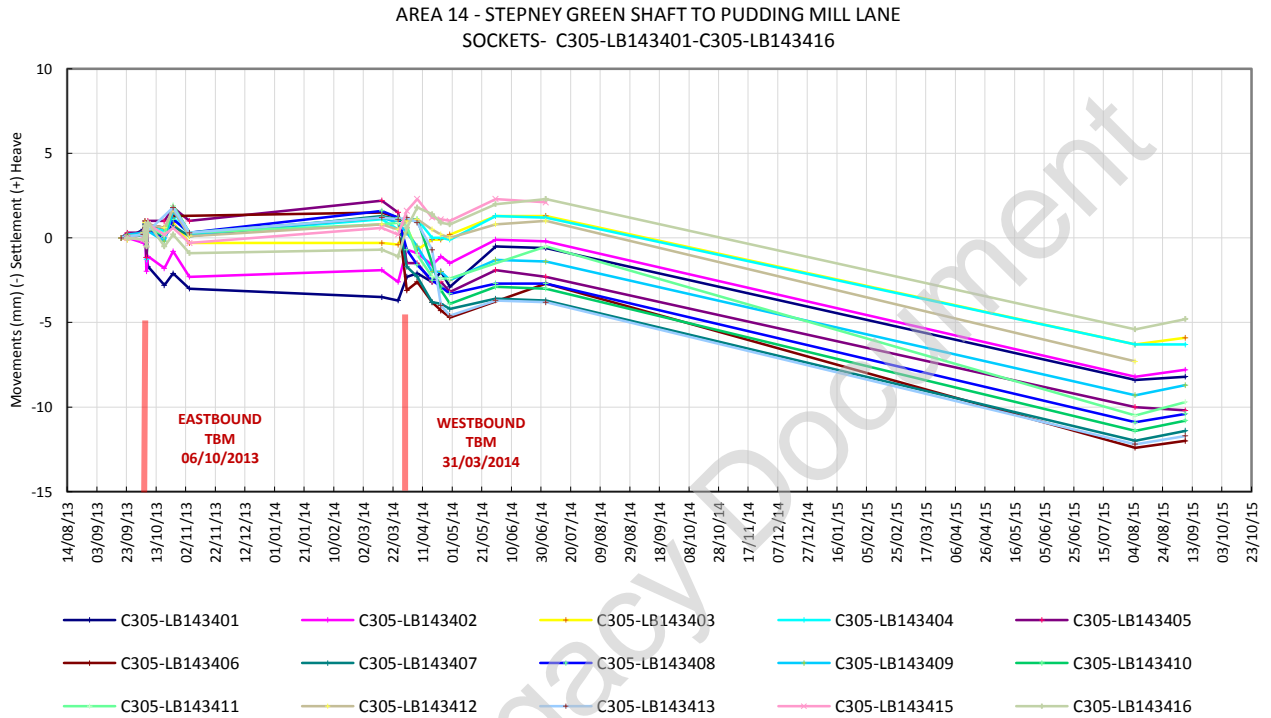
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)			mm/year
	29/11/2014	02/04/2015	05/08/2015	
C305-LB143301	-7.00	-6.70	-7.10	-0.148
C305-LB143302	-3.80	-3.90	-4.20	-0.587
C305-LB143303	-4.35	-4.55	-5.55	-1.761
C305-LB143304	#N/A	#N/A	#N/A	#N/A
C305-LB143305	#N/A	#N/A	#N/A	#N/A
C305-LB143306	#N/A	#N/A	#N/A	#N/A
C305-LB143307	#N/A	#N/A	#N/A	#N/A
C305-LB143309	-3.05	-2.05	-3.15	-0.150
C305-LB143310	-5.05	#N/A	#N/A	#N/A
C305-LB143311	#N/A	-6.05	-6.85	#N/A
C305-LB143312	-4.65	-4.05	-4.45	0.292
C305-LB143313	-3.15	-2.65	-2.95	0.292
C305-LB143314	-3.25	-2.35	-3.25	-0.003
C305-LB143315	-5.35	-4.25	-5.15	0.290
	Rate less than -2.5 mm/year		<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year		<b>% less 3 mm/ year</b>	100%

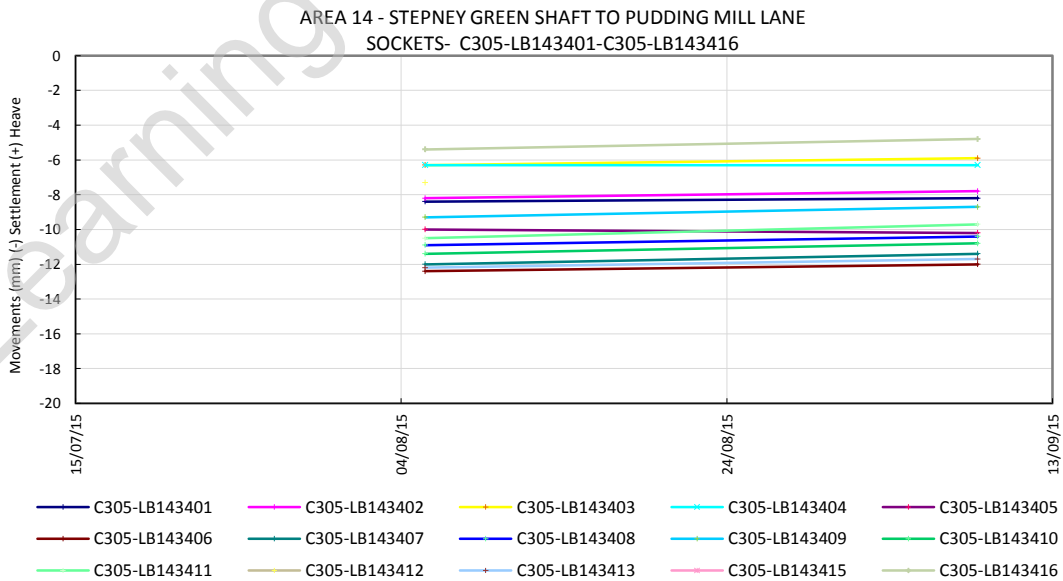
The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

**C305-LB143401 – C305-LB143416**

The graph presented below shows the socket readings from this array. A maximum settlement of -2 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -12 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



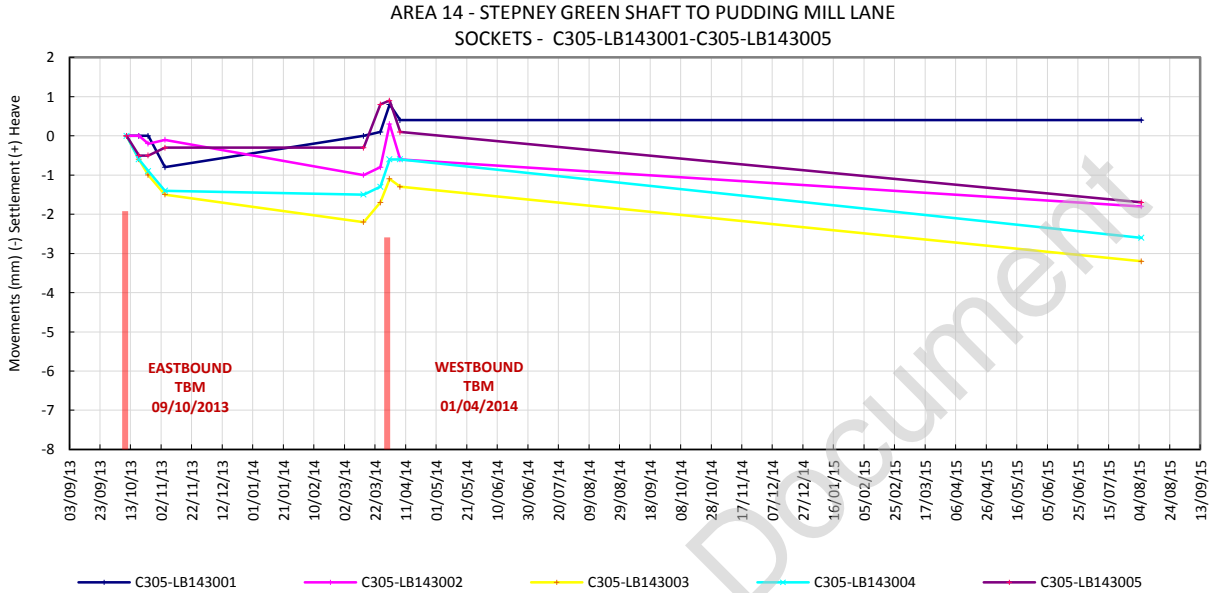
The table below lists the annual settlement rate for the sockets in this array.

			mm/year
	05/08/2015	08/09/2015	
C305-LB143401	-8.40	-8.20	2.151
C305-LB143402	-8.20	-7.80	4.302
C305-LB143403	-6.30	-5.90	4.302
C305-LB143404	-6.30	-6.30	0.000
C305-LB143405	-10.00	-10.20	-2.151
C305-LB143406	-12.40	-12.00	4.302
C305-LB143407	-12.00	-11.40	6.453
C305-LB143408	-10.90	-10.40	5.378
C305-LB143409	-9.30	-8.70	6.453
C305-LB143410	-11.40	-10.80	6.453
C305-LB143411	-10.50	-9.70	8.604
C305-LB143412	-7.30	#N/A	#N/A
C305-LB143413	-12.20	-11.70	5.378
C305-LB143415	#N/A	#N/A	#N/A
C305-LB143416	-5.40	-4.80	6.453
	Rate less than -2.5 mm/year	% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year	% less 3 mm/ year	100%

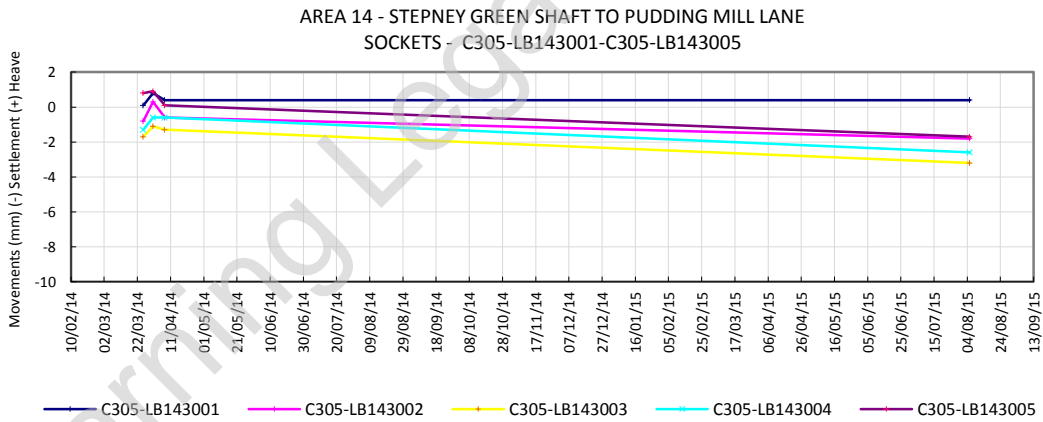
The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

**C305-LB143001 – C305-LB143005**

The graph presented below shows the socket readings from this array. A maximum settlement of -2.2 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -3.2 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



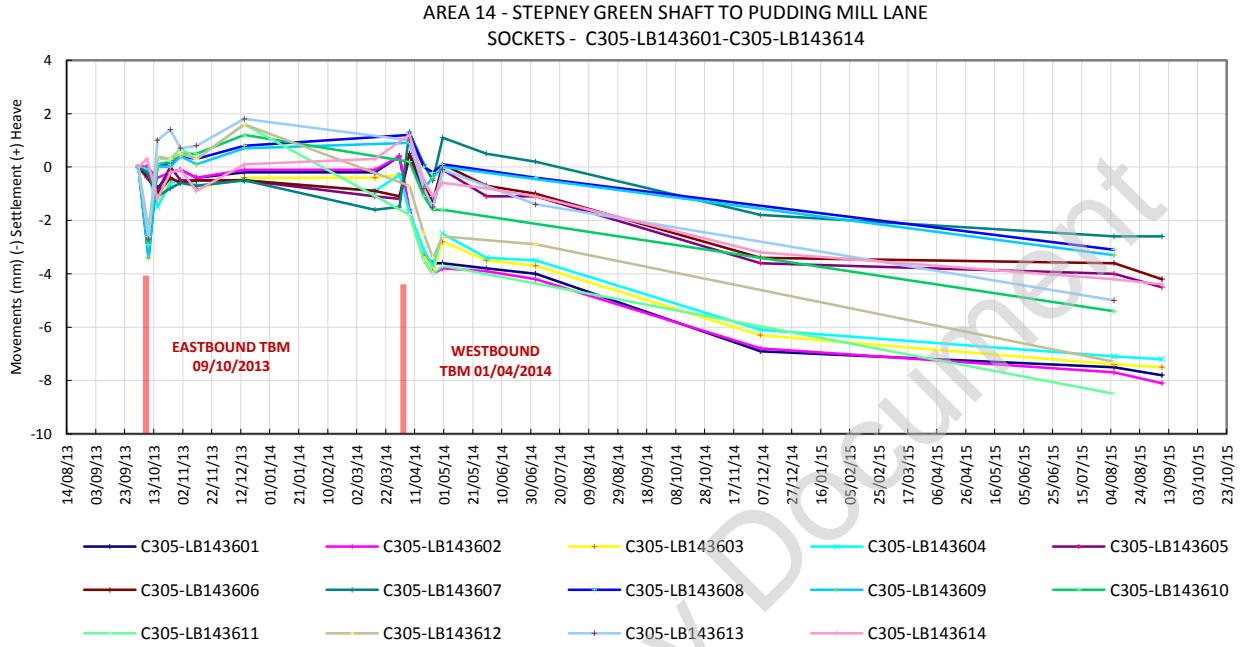
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	25/03/201	31/03/201	07/04/201	05/08/2015	
	4	4	4		
C305-LB143001	0.10	0.80	0.40	0.40	-0.021
C305-LB143002	-0.80	0.30	-0.60	-1.80	-1.062
C305-LB143003	-1.70	-1.10	-1.30	-3.20	-1.355
C305-LB143004	-1.30	-0.60	-0.60	-2.60	-1.302
C305-LB143005	0.80	0.90	0.10	-1.70	-1.716
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

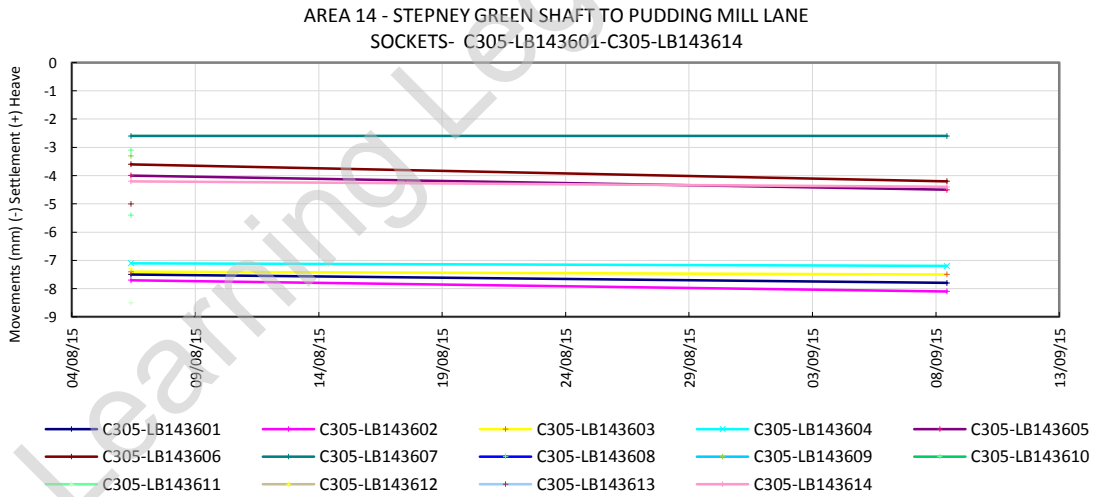
The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

**C305-LB143601 – C305-LB143614**

The graph presented below shows the socket readings from this array. A maximum settlement of -3.3 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.5 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



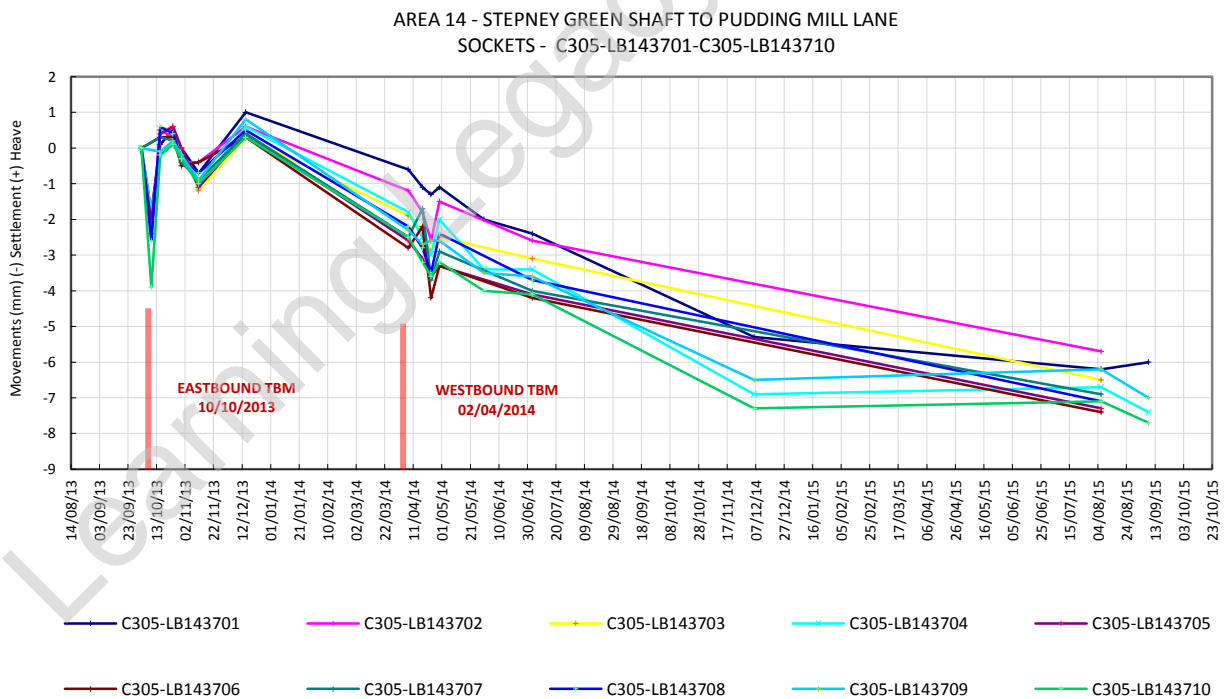
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)		mm/year
	06/08/2015	08/09/2015	
C305-LB143601	-7.50	-7.80	-3.313
C305-LB143602	-7.70	-8.10	-4.417
C305-LB143603	-7.40	-7.50	-1.104
C305-LB143604	-7.10	-7.20	-1.104
C305-LB143605	-4.00	-4.50	-5.521
C305-LB143606	-3.60	-4.20	-6.625
C305-LB143607	-2.60	-2.60	0.000
C305-LB143608	-3.10	#N/A	#N/A
C305-LB143609	-3.30	#N/A	#N/A
C305-LB143610	-5.40	#N/A	#N/A
C305-LB143611	-8.50	#N/A	#N/A
C305-LB143612	-7.30	#N/A	#N/A
C305-LB143613	-5.00	#N/A	#N/A
C305-LB143614	-4.20	-4.40	-2.208
	Rate less than -2.5 mm/year	<b>% less 2 mm/ year</b>	50%
	Rate greater than -3.5 mm/year	<b>% less 3 mm/ year</b>	63%

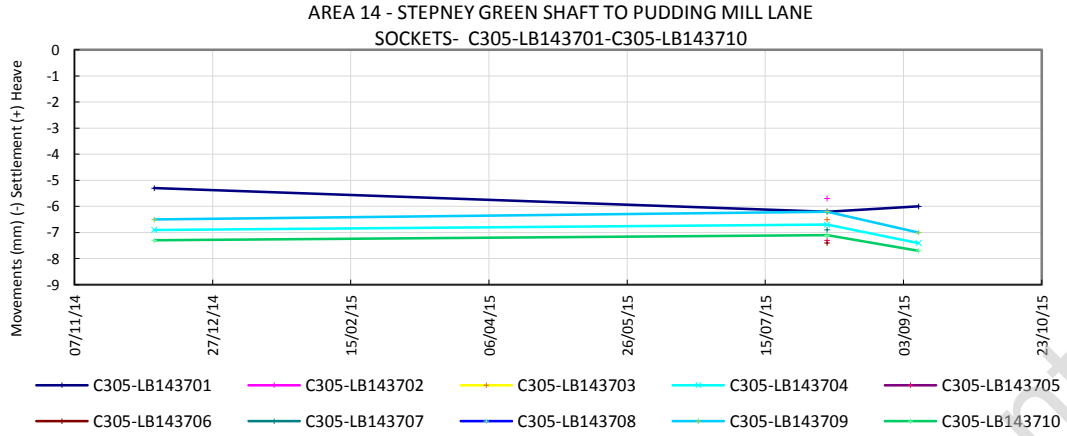
The percentage of the sockets with a settlement rate less than 2 mm/year is 50%.

**C305-LB143701 – C305-LB143710**

The graph presented below shows the socket readings from this array. A maximum settlement of -3.9 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7.7 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



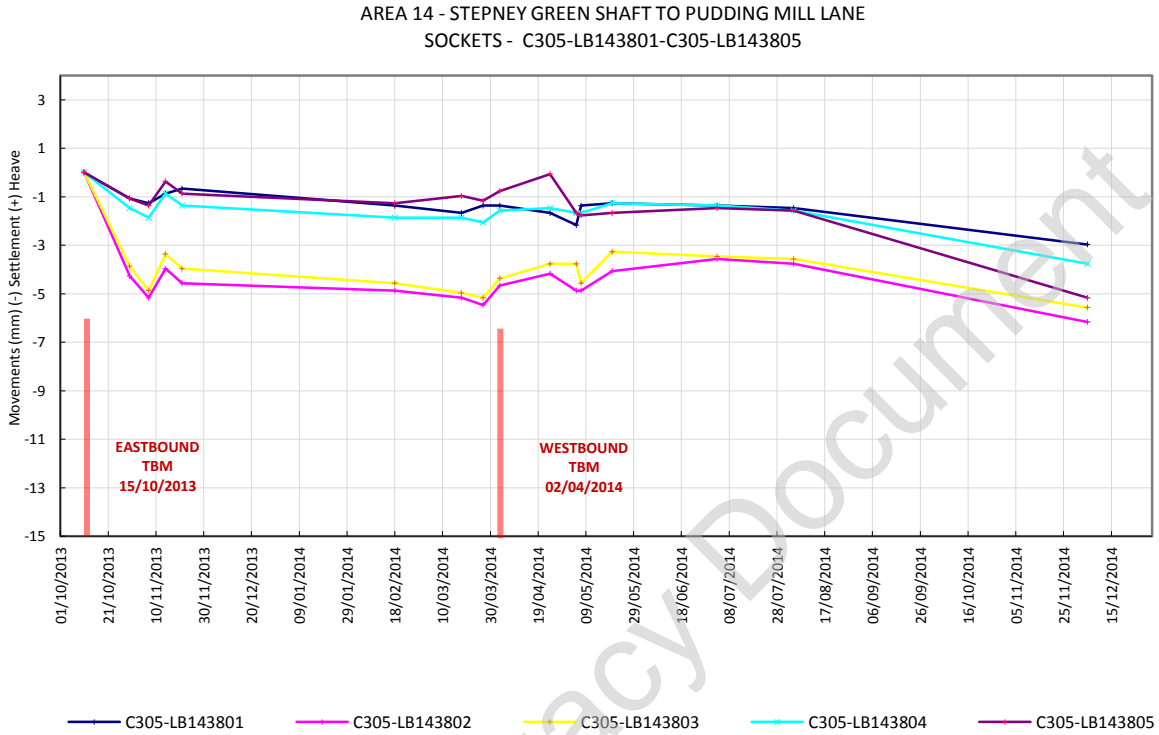
The table below lists the annual settlement rate for the sockets in this array.

				mm/year
	05/12/2014	06/08/2015	08/09/2015	
C305-LB143701	-5.30	-6.20	-6.00	-1.083
C305-LB143702	#N/A	-5.70	#N/A	#N/A
C305-LB143703	#N/A	-6.50	#N/A	#N/A
C305-LB143704	-6.90	-6.70	-7.40	-0.301
C305-LB143705	#N/A	-7.30	#N/A	#N/A
C305-LB143706	#N/A	-7.40	#N/A	#N/A
C305-LB143707	#N/A	-6.90	#N/A	#N/A
C305-LB143708	#N/A	-7.10	#N/A	#N/A
C305-LB143709	-6.50	-6.20	-7.00	-0.245
C305-LB143710	-7.30	-7.10	-7.70	-0.218
			<b>% less 2 mm/ year</b>	100%
			<b>% less 3 mm/ year</b>	100%

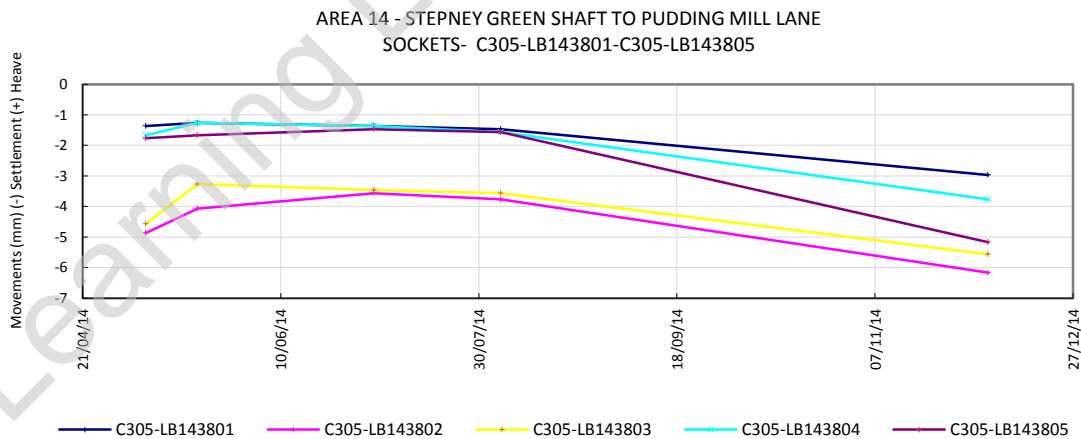
The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

**C305-LB143801 – C305-LB143805**

The graph presented below shows the socket readings from this array. A maximum settlement of -5.1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.2 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



The table below lists the annual settlement rate for the sockets in this array.

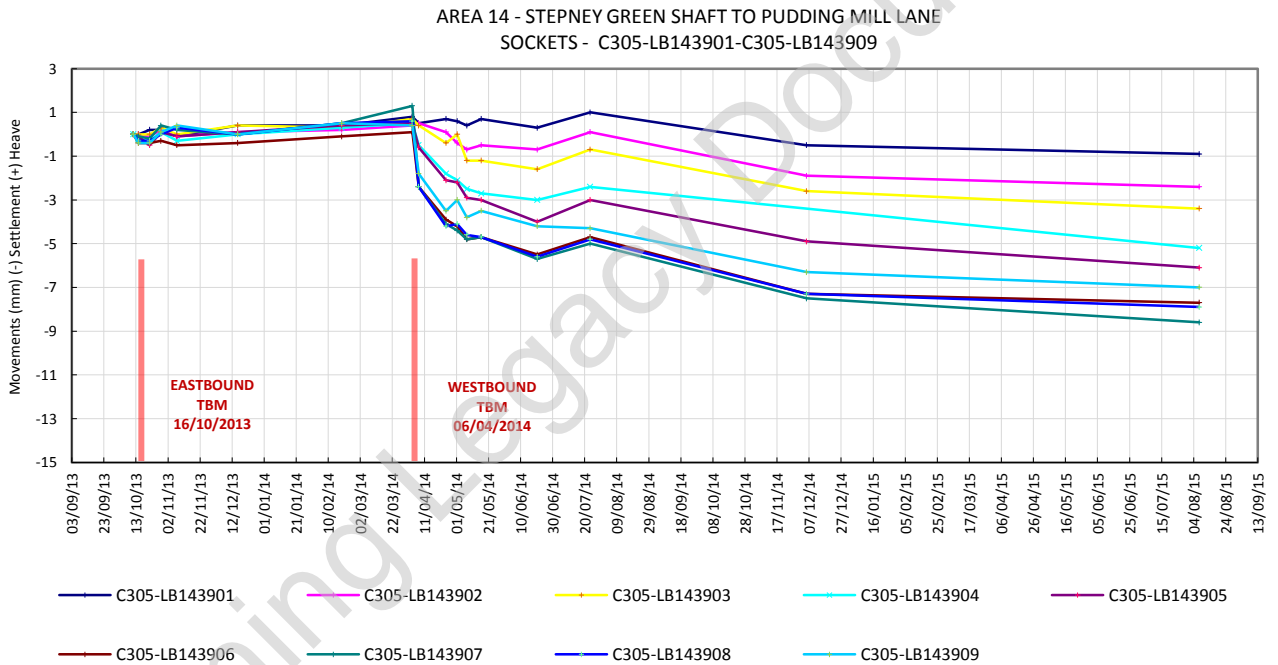


	Registered movement (mm)					mm/year
	07/05/2014	20/05/2014	03/07/2014	04/08/2014	05/12/2014	
C305-LB143801	-1.37	-1.27	-1.37	-1.47	-2.97	-2.885
C305-LB143802	-4.87	-4.07	-3.57	-3.77	-6.17	-2.957
C305-LB143803	-4.57	-3.27	-3.47	-3.57	-5.57	-2.799
C305-LB143804	-1.67	-1.27	-1.37	-1.57	-3.77	-4.016
C305-LB143805	-1.77	-1.67	-1.47	-1.57	-5.17	-6.029
		Rate less than -2.5 mm/year			% less 2 mm/ year	0%
		Rate greater than -3.5 mm/year			% less 3 mm/ year	60%

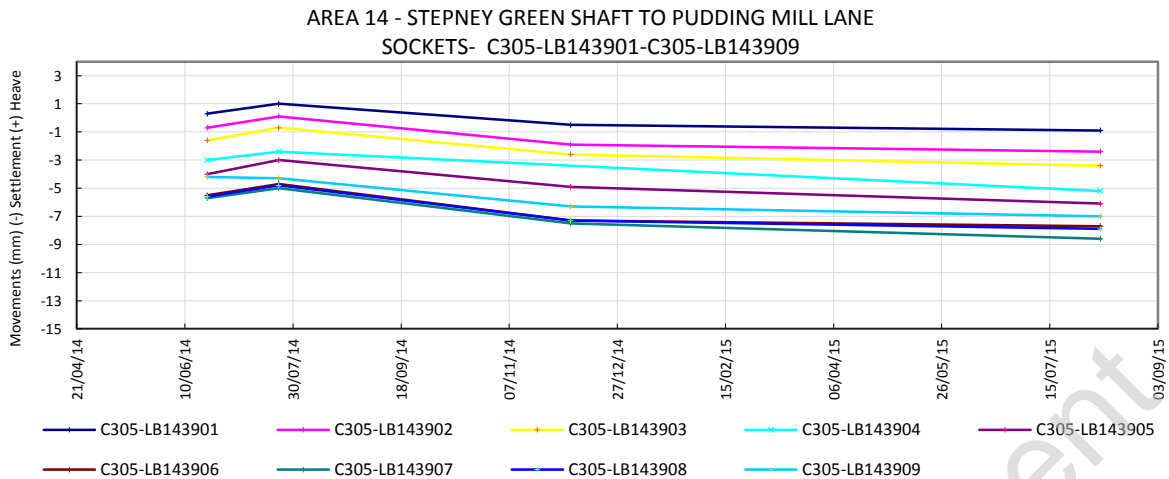
The percentage of the sockets with a settlement rate less than 3 mm/year is 60%.

**C305-LB143901 – C305-LB143909**

The graph presented below shows the socket readings from this array. A maximum settlement of -0.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.6 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



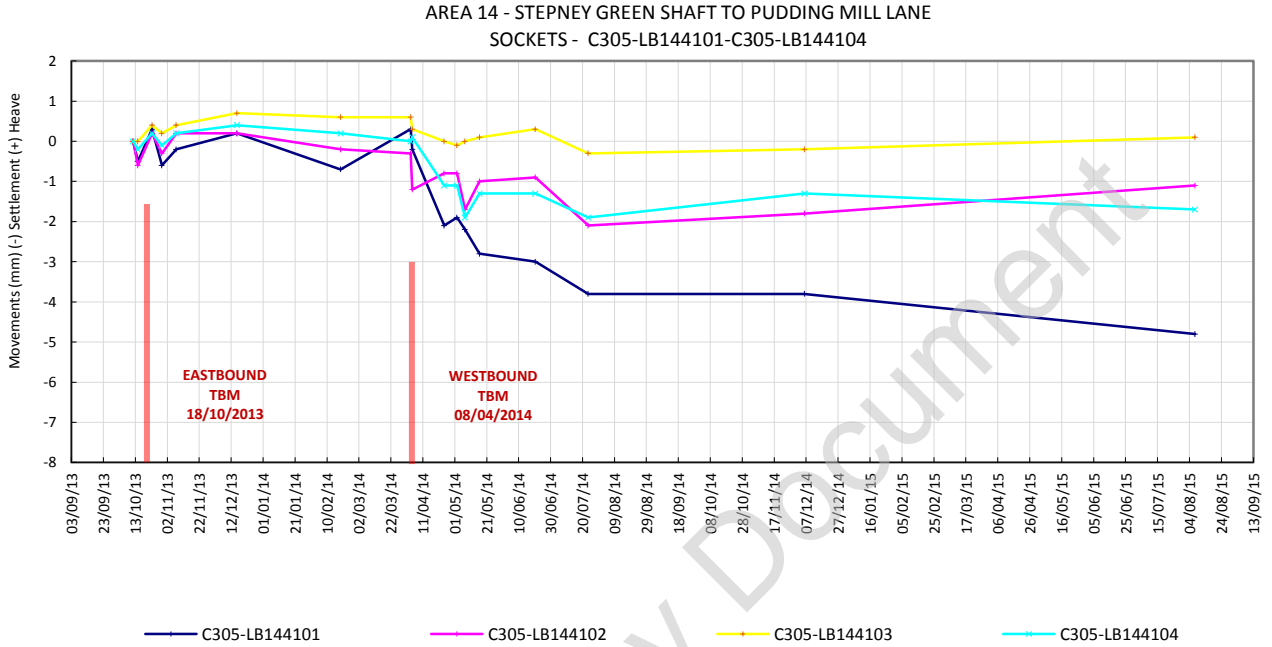
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	20/06/2014	23/07/2014	05/12/2014	07/08/2015	
C305-LB143901	0.30	1.00	-0.50	-0.90	-1.408
C305-LB143902	-0.70	0.10	-1.90	-2.40	-1.918
C305-LB143903	-1.60	-0.70	-2.60	-3.40	-2.039
C305-LB143904	-3.00	-2.40	#N/A	-5.20	-2.255
C305-LB143905	-4.00	-3.00	-4.90	-6.10	-2.344
C305-LB143906	-5.50	-4.70	-7.30	-7.70	-2.396
C305-LB143907	-5.70	-5.00	-7.50	-8.60	-2.982
C305-LB143908	-5.60	-4.80	-7.30	-7.90	-2.481
C305-LB143909	-4.20	-4.30	-6.30	-7.00	-2.574
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	78%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

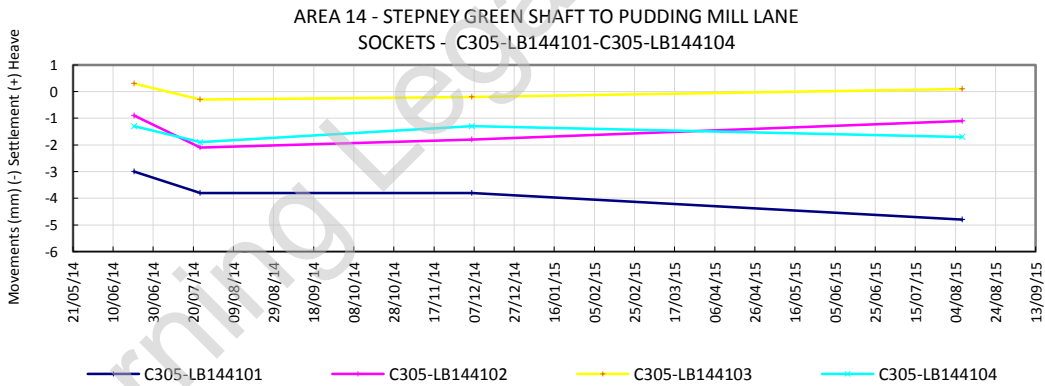
The percentage of the sockets with a settlement rate less than 2 mm/year is 78%.

**C305-LB144101– C305-LB144104**

The graph presented below shows the socket readings from this array. A maximum settlement of -0.6 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -4.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



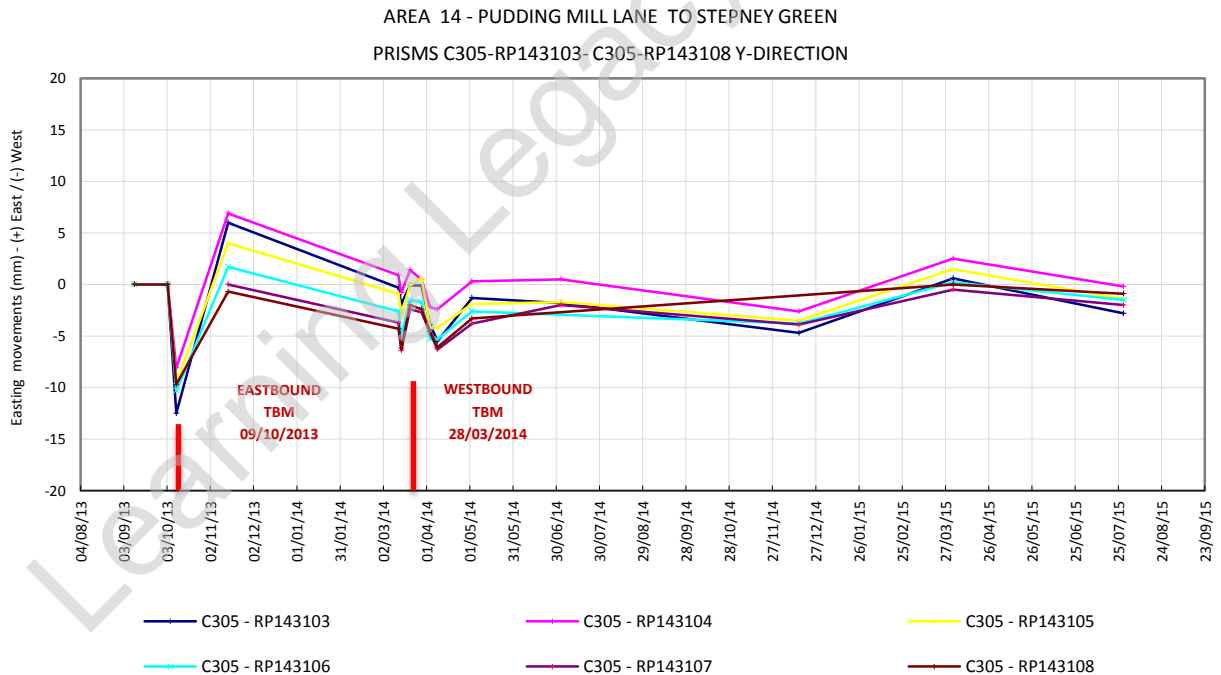
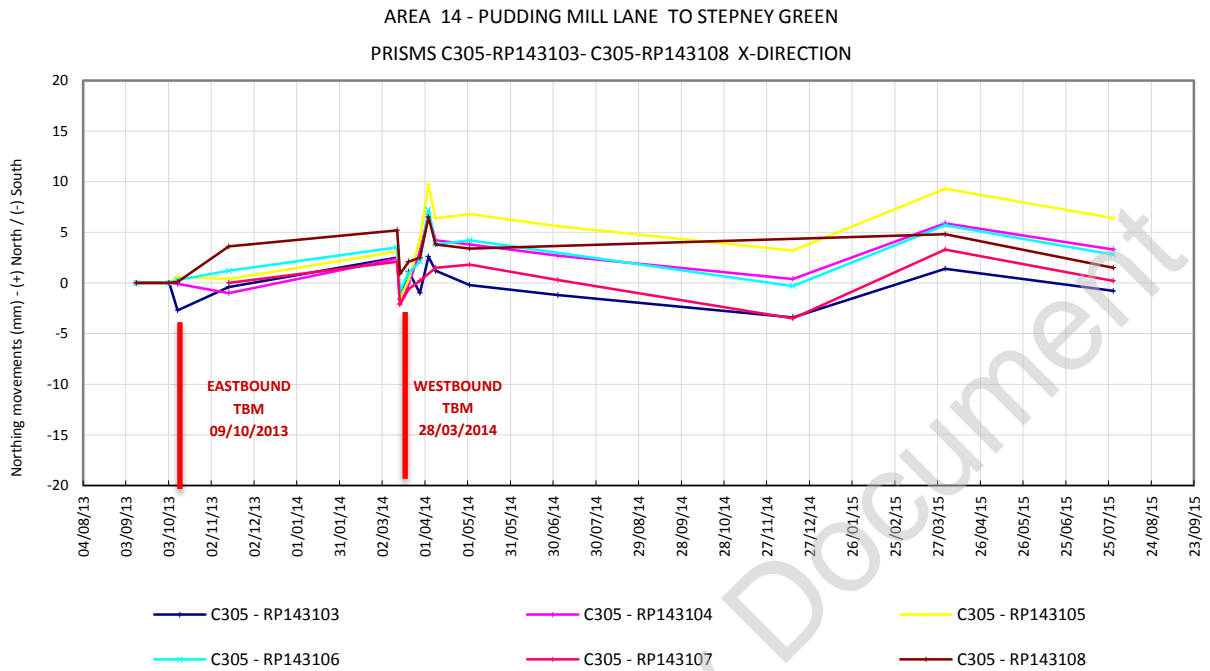
The table below lists the annual settlement rate for the sockets in this array.

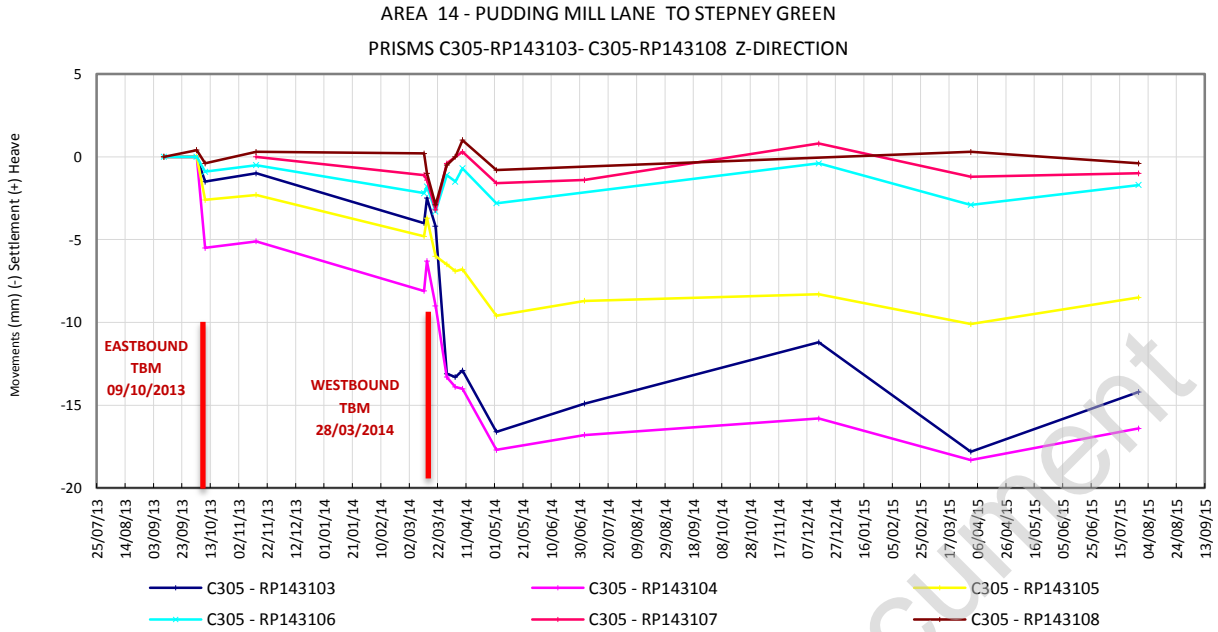
	Registered movement (mm)				mm/year
	24/06/2014	24/07/2014	08/12/2014	07/08/2015 10:00	
C305-LB144401	-1.00	-2.10	-2.60	-2.70	-1.152
C305-LB144402	#N/A	-1.60	-2.20	-2.70	-1.025
C305-LB144403	-1.60	-1.70	-2.30	-2.10	-0.446
C305-LB144104	-1.30	-1.90	-1.30	-1.70	-0.108
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

3D PRISMS AND RETRO TARGETS

C305-RP143103 – C305-RP143108



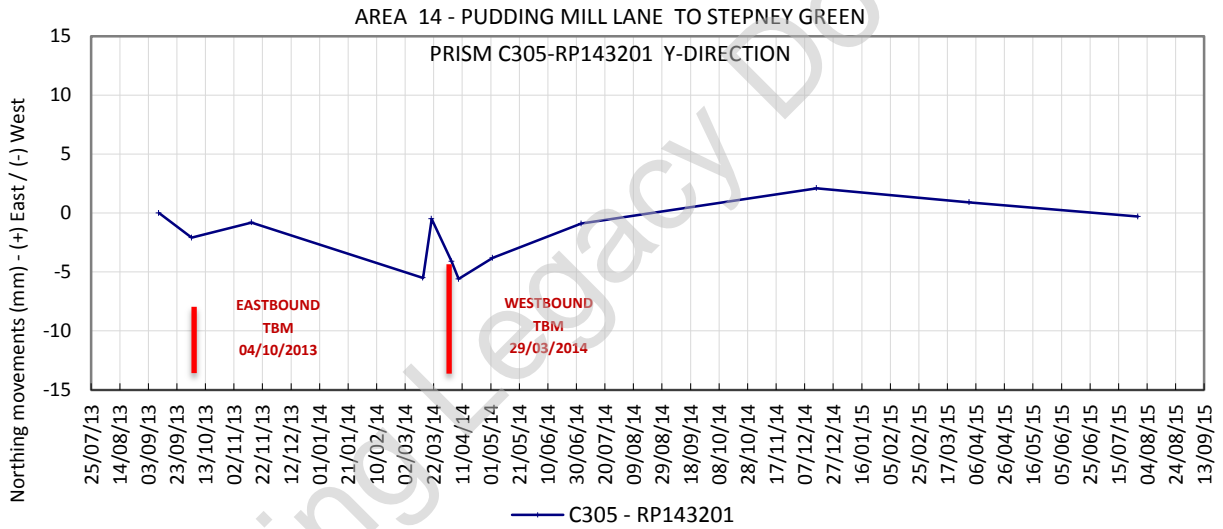
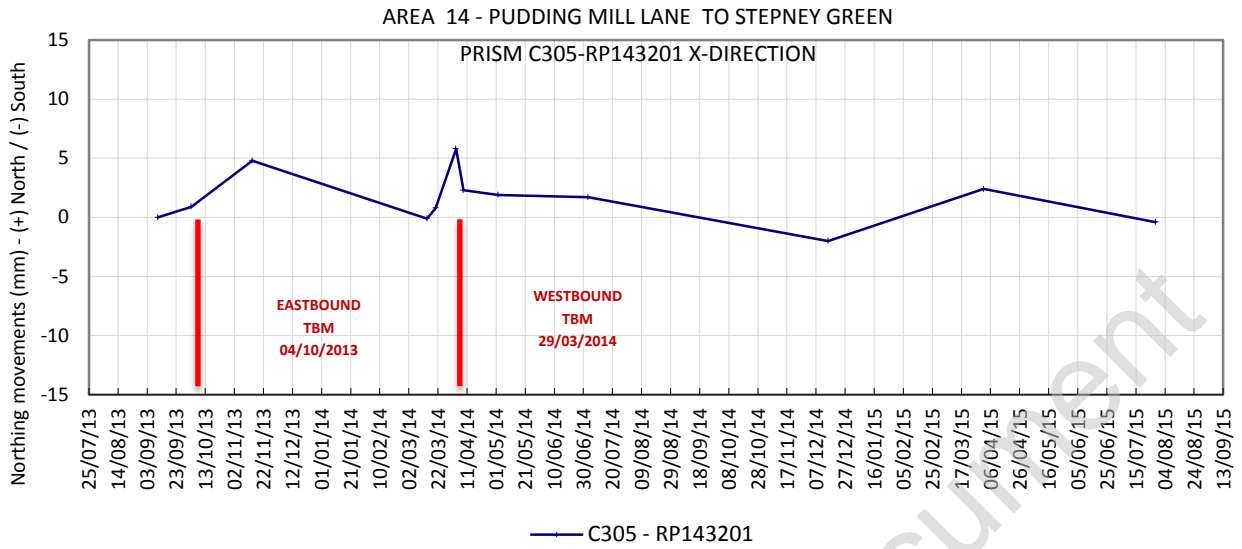


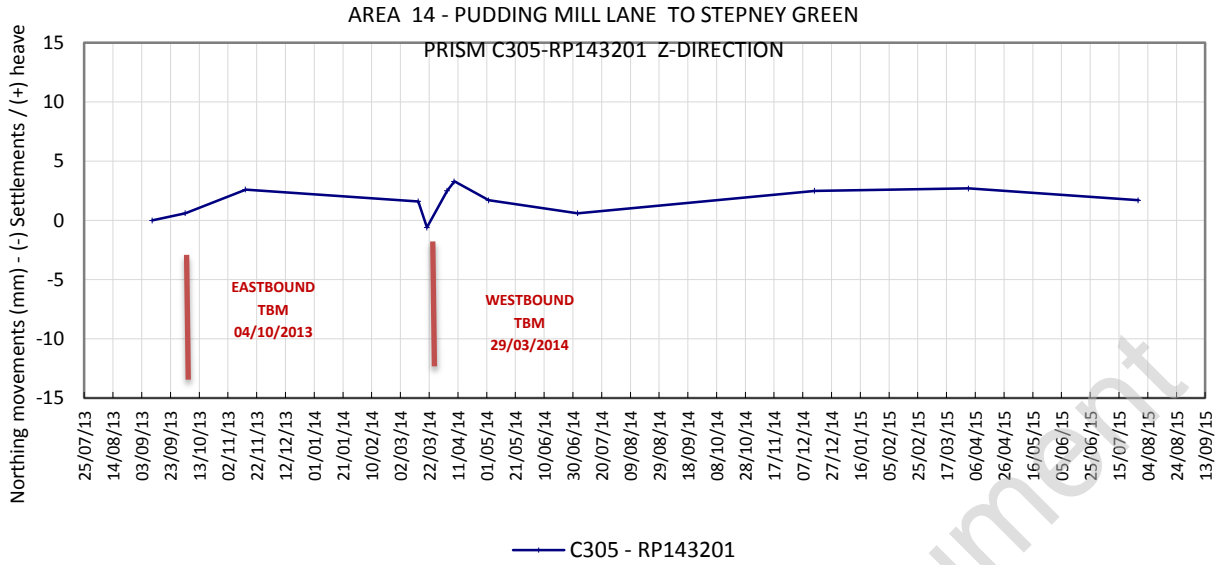
The X Axis shows a maximum movement of 9.7 mm after the Westbound TBM transit.

The Y Axis shows a maximum movement of -6.1 mm after the Westbound TBM transit.

The Z Axis shows a maximum settlement of -18.3 mm after the Westbound TBM transit.

**C305-RP143201**





The X Axis shows a maximum movement of 5.8 mm after the Westbound TBM transit.

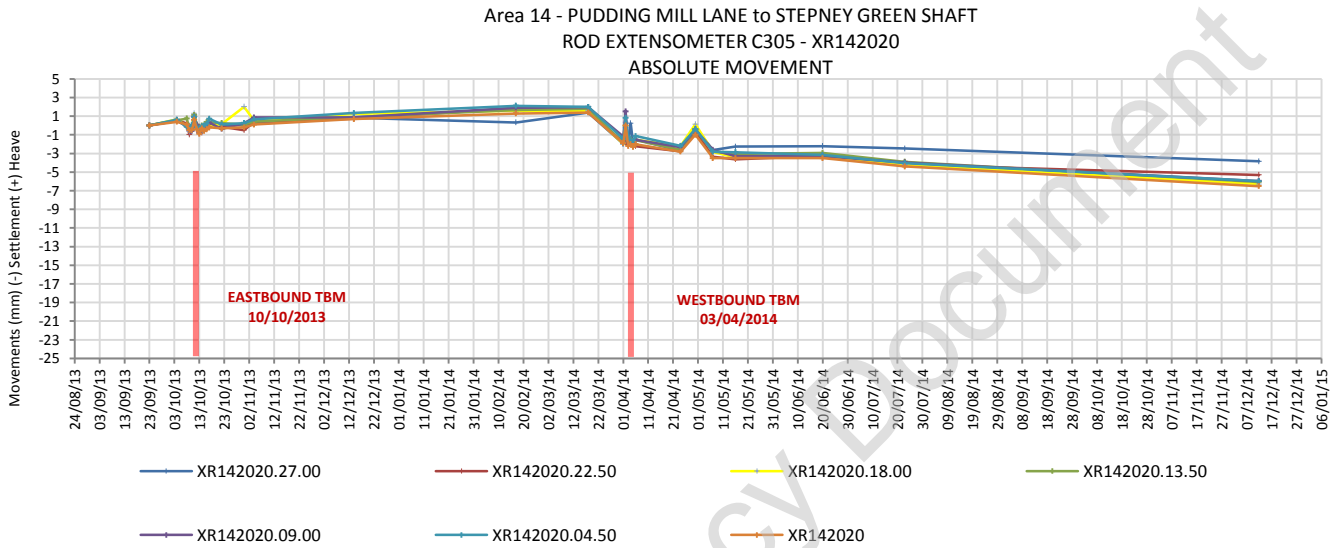
The Y Axis shows a maximum movement of -5.6 mm after the Westbound TBM transit.

The Z Axis shows a maximum settlement of -0.6 mm after the Westbound TBM transit.

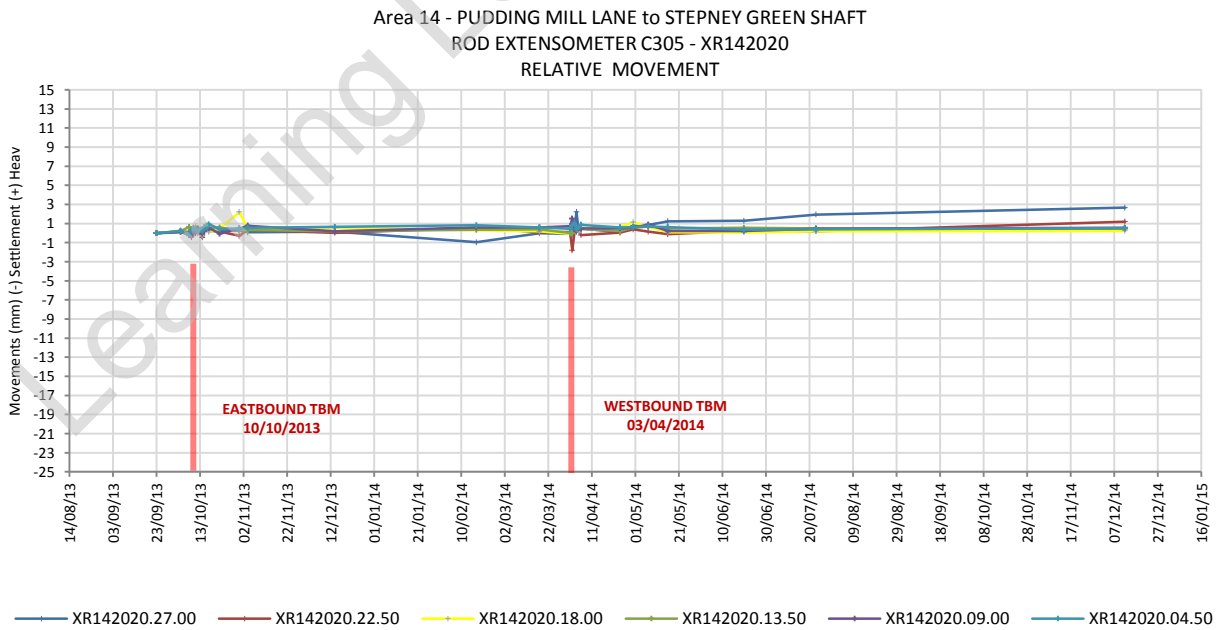
**ROD EXTENSOMETERS**

For each rod extensometer two graphs are displayed below; showing the relative and the absolute movements. The graph for relative movement shows the movement of the rod extensometers without taking in account the head level elevation. The graph for absolute movement includes the levelling value of the head level, adding the value to the relative movement of the rods.

**C305 - XR0142020**

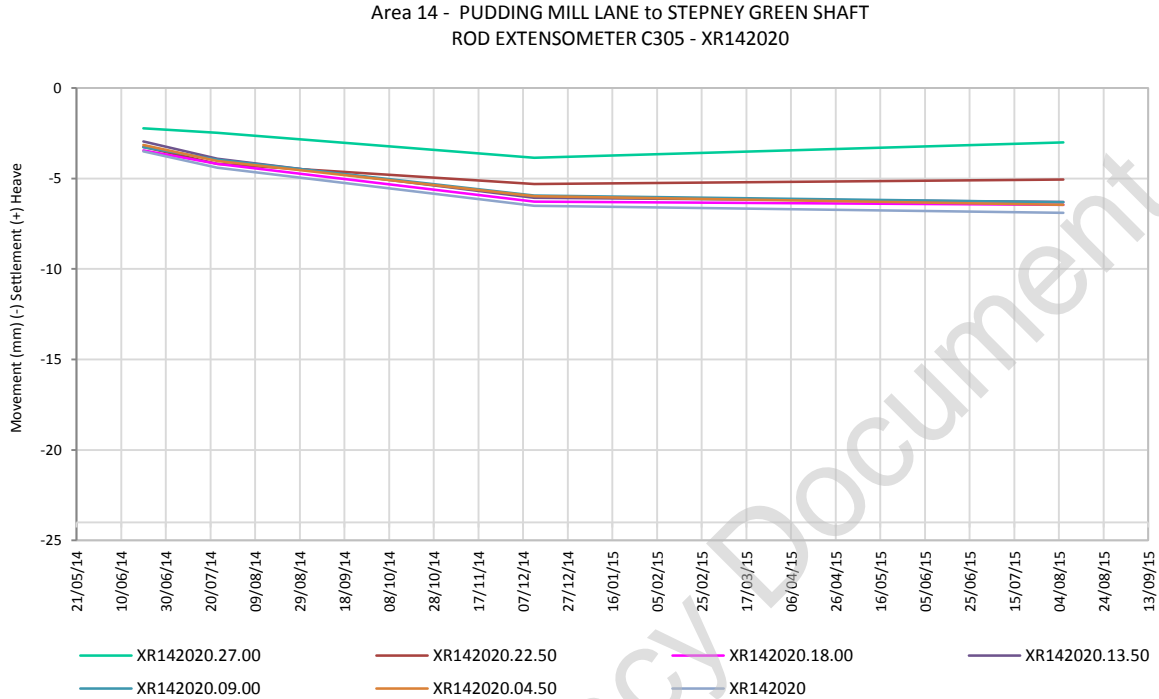


The graph above shows an absolute settlement of -1mm after the Eastbound TBM transit and an additional -6.5 mm settlement after the Westbound TBM transit.





The next plot shows the trend line adjustment for each rod.



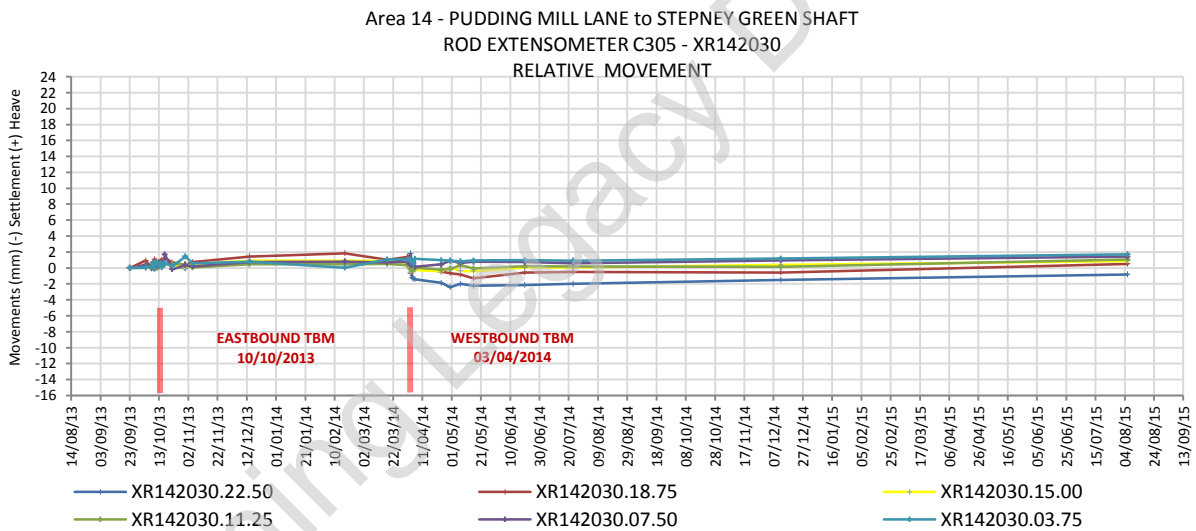
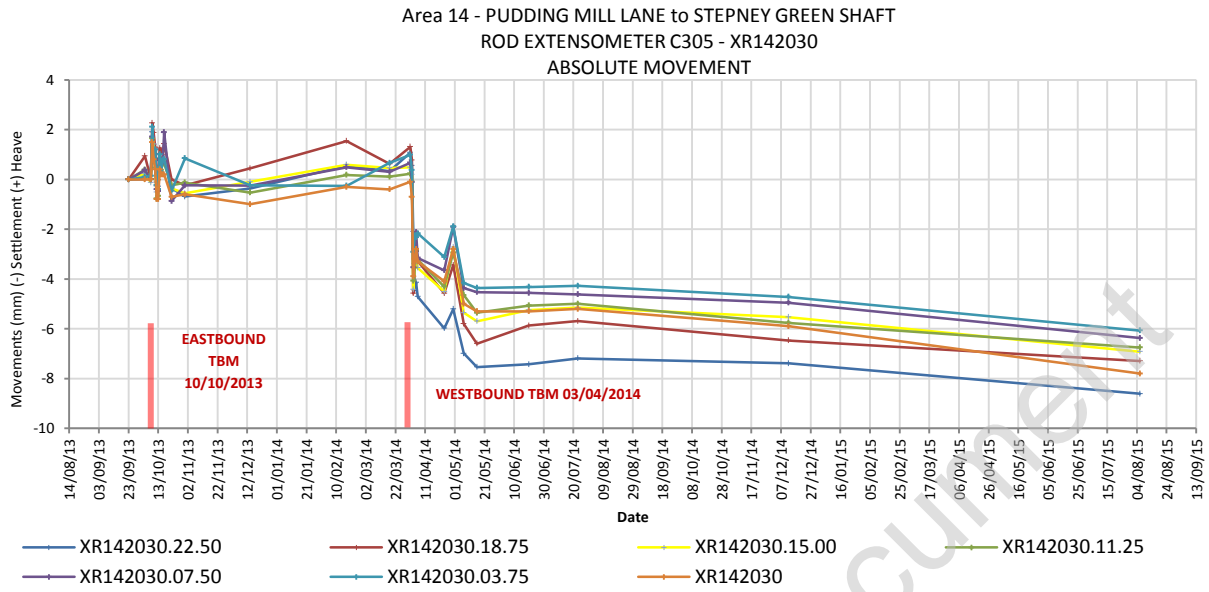
The table below lists the annual settlement rate for each rod of the extensometer.

	Registered Movement (mm)				Rate (mm/year)
	20/06/2014	23/07/2014	12/12/2014	06/08/2015	
XR142020.27.00	-2.22	-2.47	-3.85	-3.00	-0.324
XR142020.22.50	-3.25	-4.20	-5.30	-5.06	-0.706
XR142020.18.00	-3.44	-4.20	-6.28	-6.45	-1.972
XR142020.13.50	-2.95	-3.90	-6.06	-6.30	-2.113
XR142020.09.00	-3.27	-3.96	-5.95	-6.32	-2.099
XR142020.04.50	-3.15	-4.03	-5.97	-6.46	-2.178
XR142020	-3.50	-4.40	-6.50	-6.90	-2.224
	Rate less than -2.5 mm/year	% less 2 mm/ year			100.00%
	Rate greater than -3.5 mm/year	% less 3 mm/ year			100.00%

Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

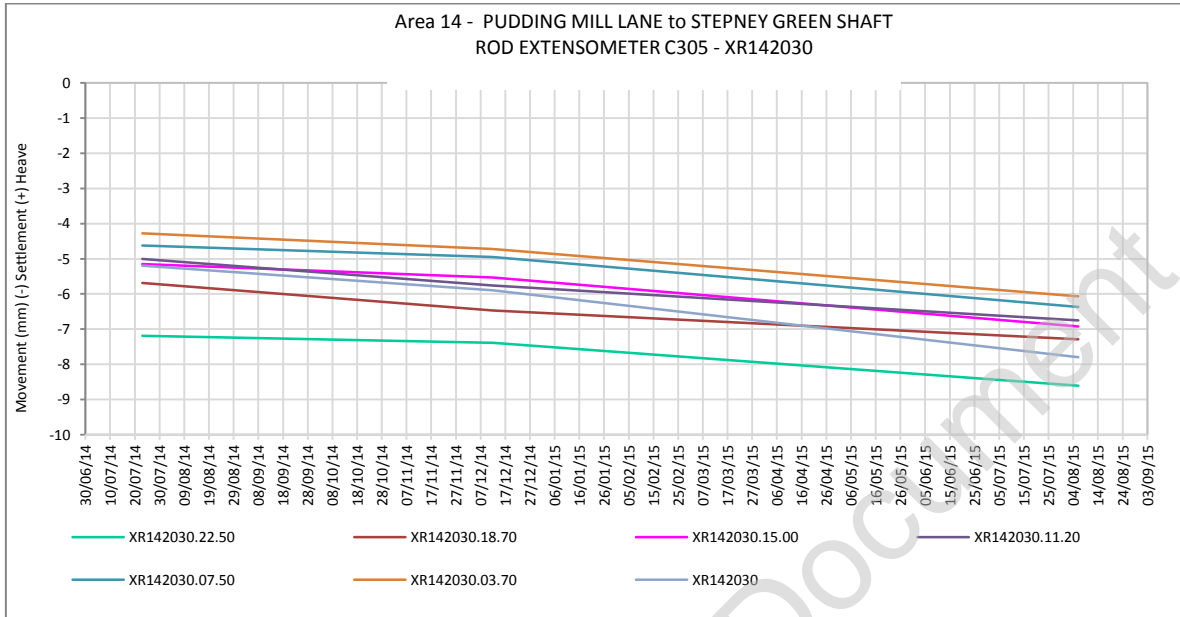
The percentage of the rods with a settlement rate less than 2 mm/year is 100%

C305 - XR0142030



The graph above shows an absolute settlement of -1 mm after the Eastbound TBM transit and an additional -8.6 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

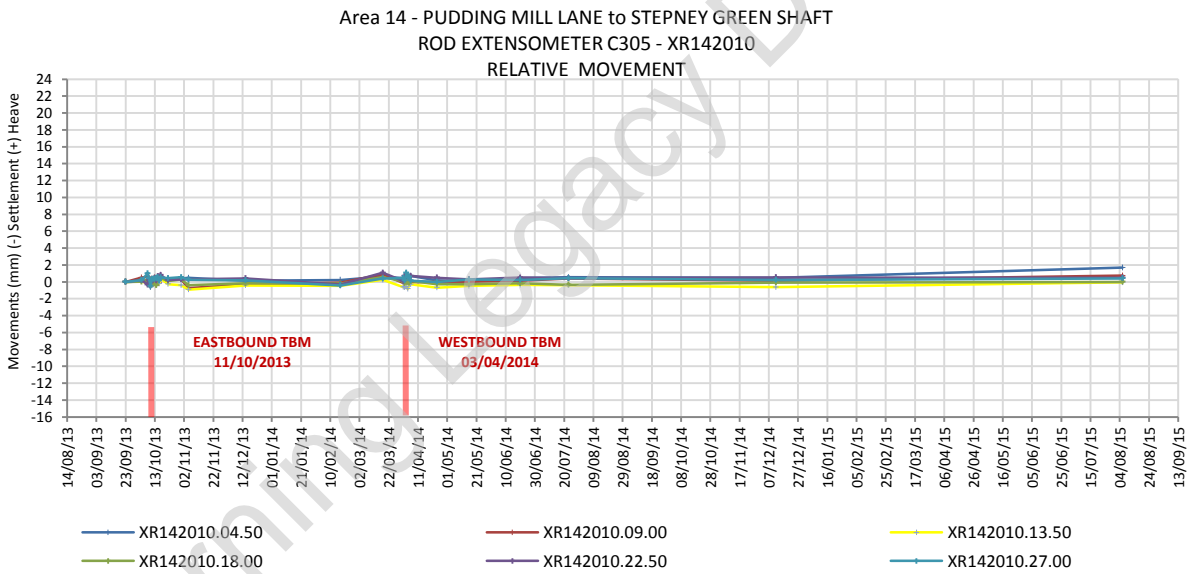
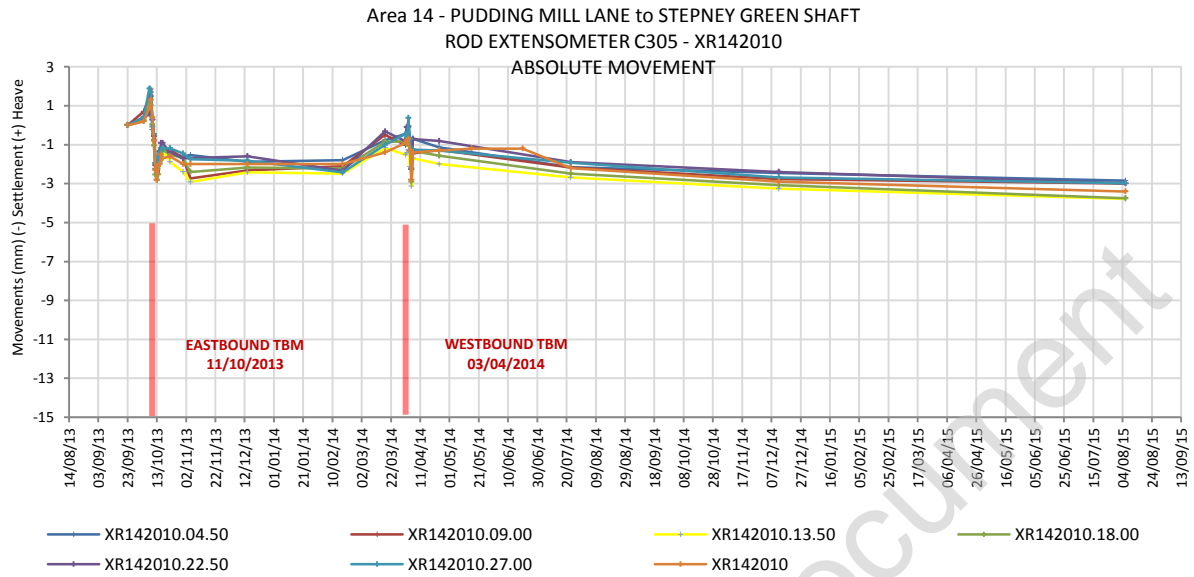
	Registered Movement (mm)			Rate (mm/year)
	23/07/2014	12/12/2014	06/08/2015	
XR142030.22.50	-7.19	-7.39	-8.61	-1.420
XR142030.18.70	-5.69	-6.47	-7.29	-1.512
XR142030.15.00	-5.15	-5.53	-6.92	-1.749
XR142030.11.20	-5.00	-5.76	-6.75	-1.669
XR142030.07.50	-4.62	-4.95	-6.37	-1.737
XR142030.03.70	-4.28	-4.72	-6.07	-1.760
XR142030	-5.20	-5.90	-7.80	-2.547
	Rate less than -2.5 mm/year		% less 2 mm/ year	85.71%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	100.00%

Note: All the movements are in mm. (-) Settlement / (+) Heave

#N/A: No readings

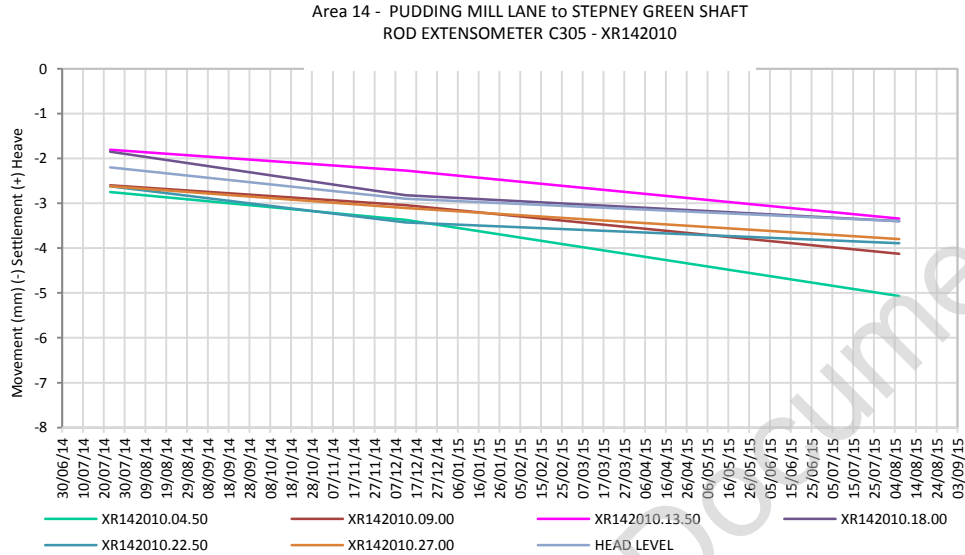
The percentage of the rods with a settlement rate less than 2 mm/year is 85.7%

**C305 - XR0142010**



The graph above shows an absolute settlement of -3 mm after the Eastbound TBM transit and an additional -5 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below illustrates the annual settlement rate for each rod of the extensometer.

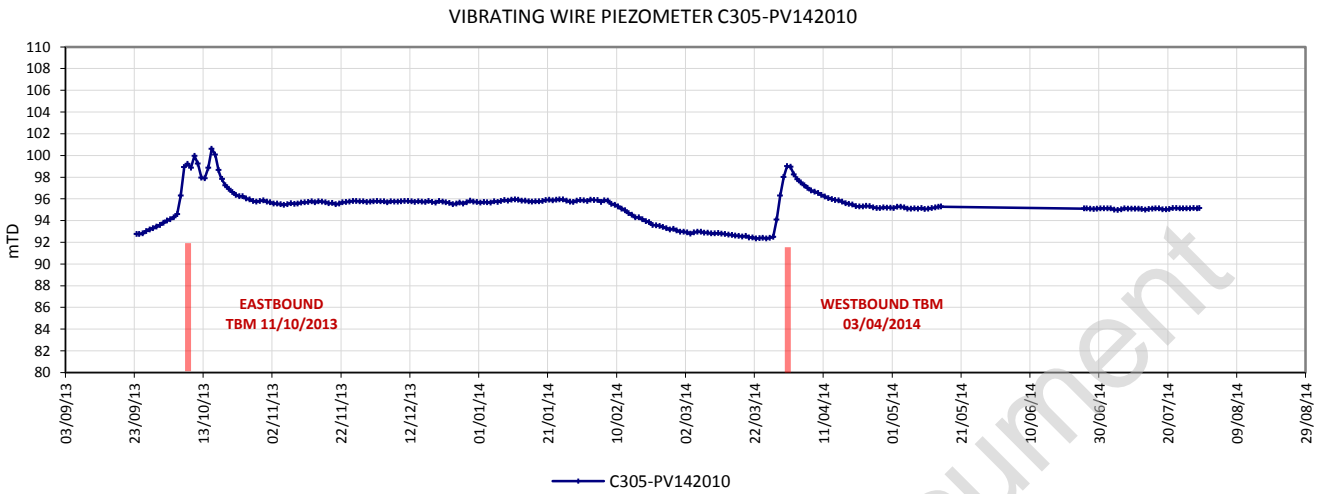
	Registered Movement (mm)			Rate (mm/year)
	23/07/2014	12/12/2014	06/08/2015	
XR142010.04.50	-2.75	-3.37	-5.07	-2.274
XR142010.09.00	-2.60	-3.04	-4.13	-1.494
XR142010.13.50	-1.81	-2.27	-3.34	-1.491
XR142010.18.00	-1.85	-2.82	-3.40	-1.431
XR142010.22.50	-2.62	-3.43	-3.89	-1.170
XR142010.27.00	-2.62	-3.11	-3.80	-1.129
HEAD LEVEL	-2.20	-2.90	-3.40	-1.116
	Rate less than -2.5 mm/year	% less 2 mm/ year		100.00%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		100.00%

Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

The percentage of the rods with a settlement rate less than 2 mm/year is 100%

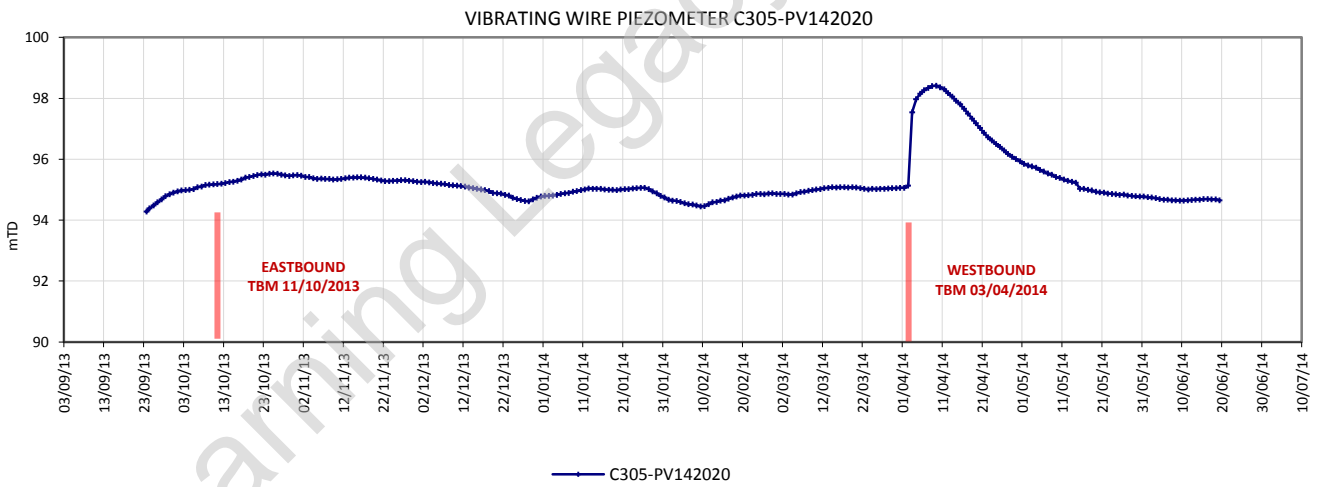
PIEZOMETERS

C305 – PV142010



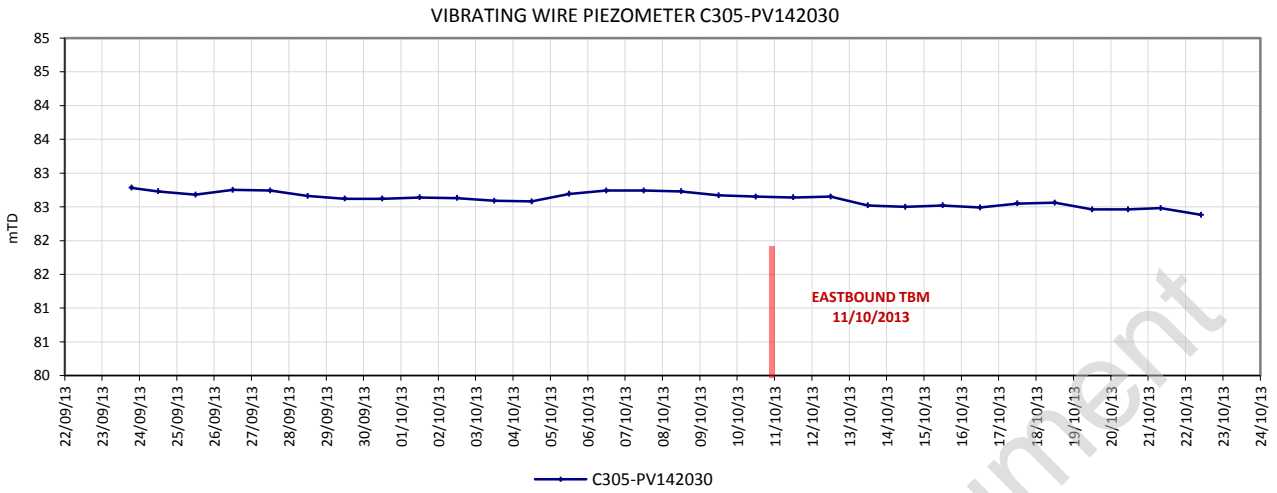
There was a rise in the water level (+6 m) during Eastbound TMB transit and another rise (+7 m) during Westbound TMB transit, the water recovered level to 95.92 m and 95.1 m respectively.

C305 – PV142020



There was no significant variation in the water level during Eastbound TMB transit. There was a rise (+3 m) during Westbound TMB transit and the water recovered level to 94.65.

C305 – PV142030



There was no significant variation in the water level during TMBs transit.

Learning Legacy Document

## INCLINOMETERS

- Instrument Type: Inclinometers
- Quantity: 3

Three Inclinometers have been installed. The figures below show the orientation of “A” and “B” AXIS and the distance of the instrument from the nearest tunnel drive.

Movements in A+ AXIS are always towards the expected AXIS, ie: towards the tunnel AXIS, and the B+ AXIS is clockwise +90° from the A+ axis (see orientation sketch, below right).

Orientation of the probe and casing:

A AXIS: the AXIS of the anticipated movement

A+ = the orientation of the casing groove into which the leading wheel of the inclinometer probe is located on the first run of a set of readings. This is also the orientation of the primary sensor

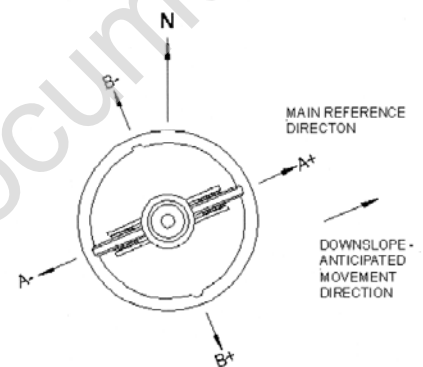
A- = the orientation of the casing groove into which the leading wheel of the inclinometer probe is located on the second run of a set of readings. This is also the orientation of the primary sensor

B+ = the orientation of the secondary sensor during the first run of a set of readings

B- = the orientation of the secondary sensor during the second run of a set of readings

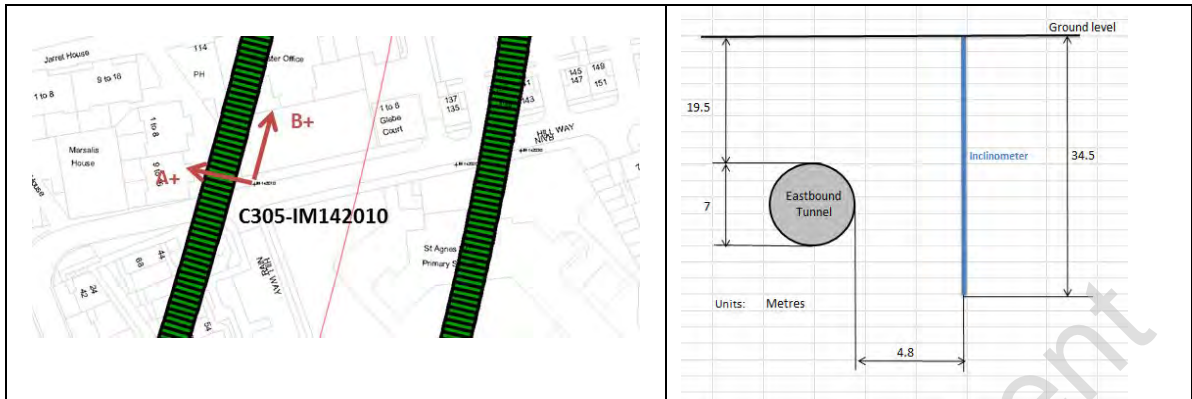
The first reading of the baseline is an average of the three commissioning readings taken prior baseline readings.

Corrections, due to the change of the different probes along the time when the readings were taken, have been applied when using different probes on the raw data. This correction is calculated as the following way. An average of the raw readings along the inclinometer is obtained in each case. Then the difference between the average values before and after the change of the probes is calculated. This difference is applied to the readings taken with the different probe in each direction.





C305-IM142010



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 310 (Project chainage – 82850)	11/10/2013
Westbound Drive-Z	Ring 303 (Project chainage – 82861)	03/04/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

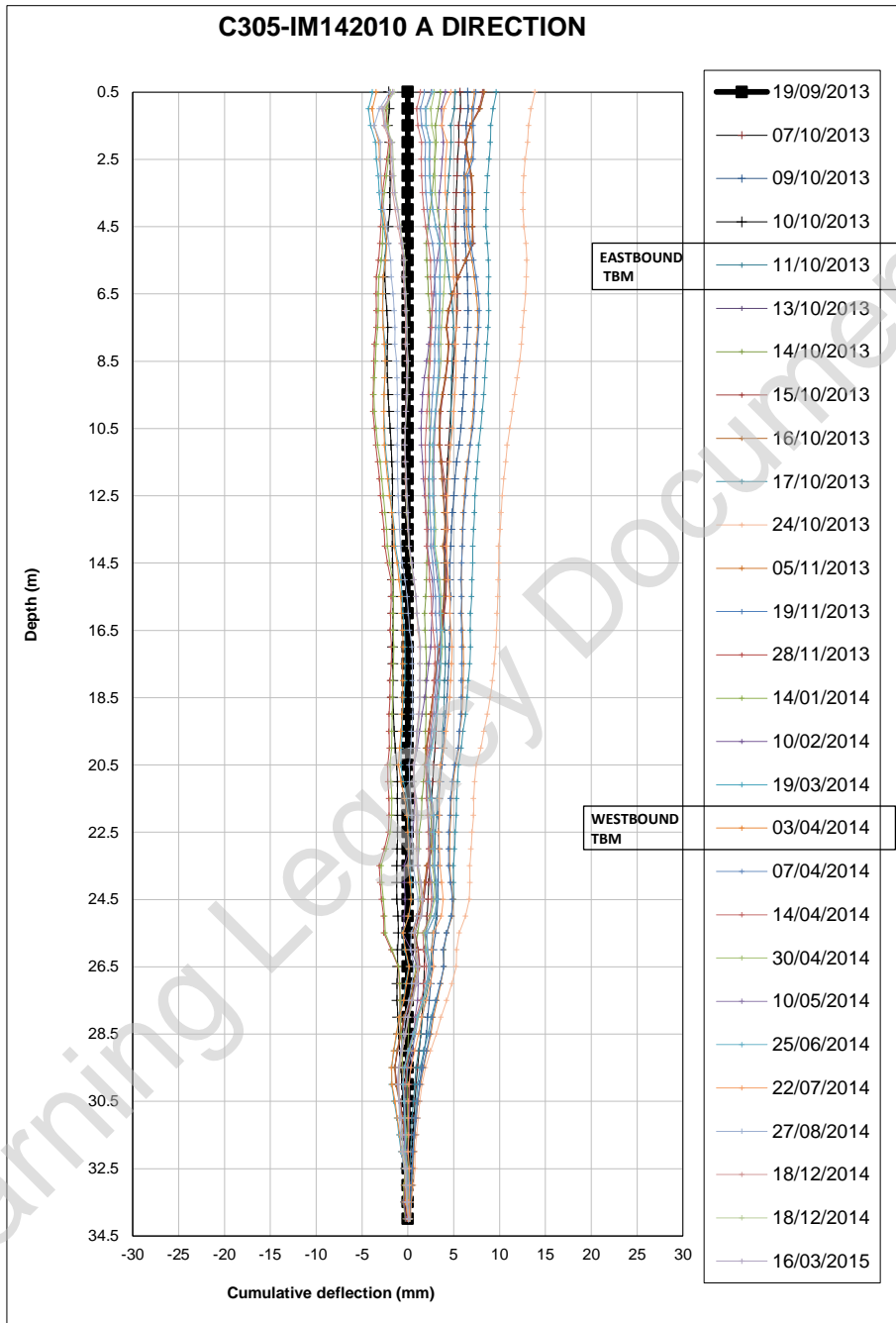
For the inclinometer C305-IM142010 different probes have been used. Related correction factors are presented in the table below:

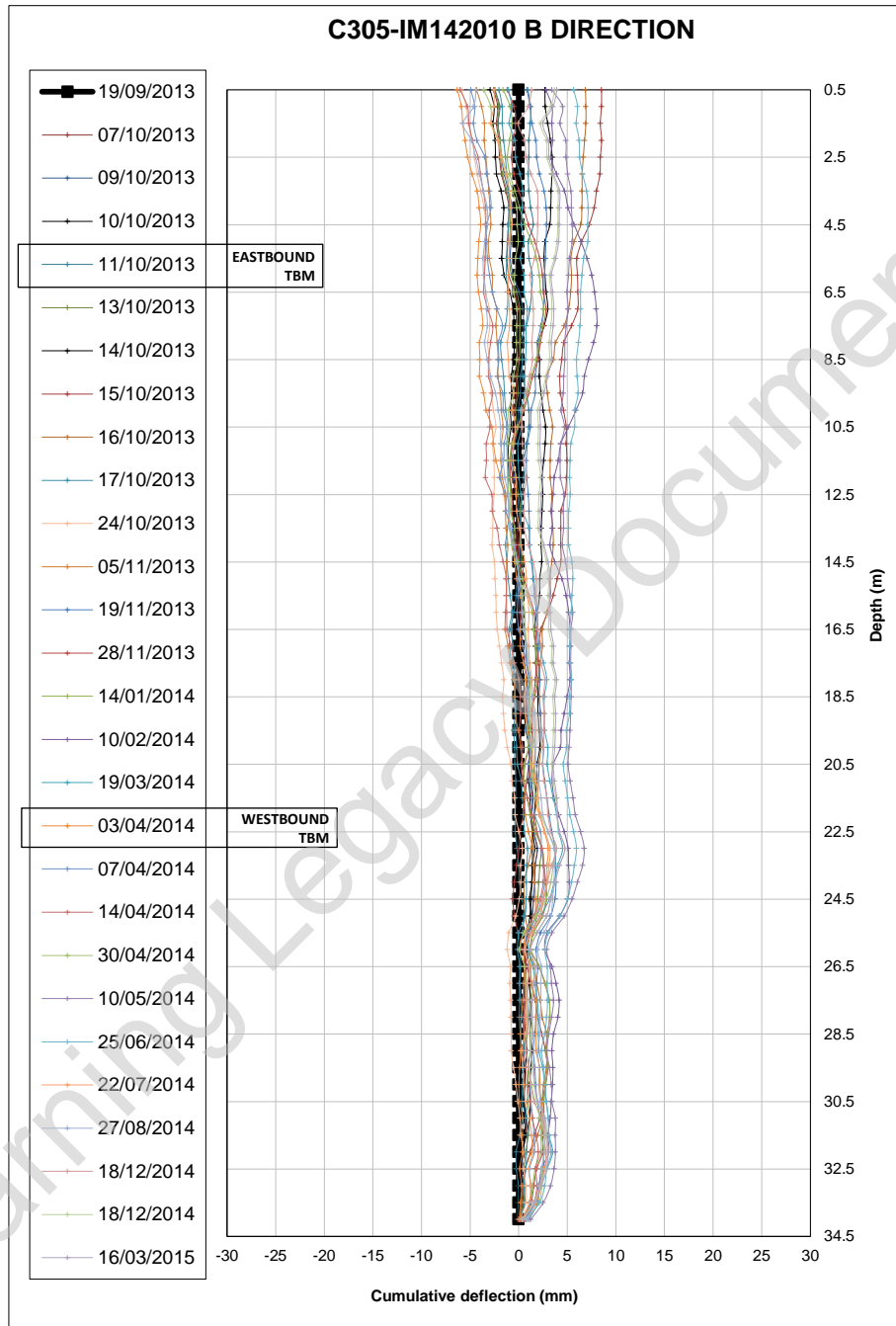
ID Sensor	C305-IM142010		
	Serial number	DI1244/DI1217	DI1217/1144940
Date	28/11/2013	19/03/2014	
A+	154	-174	
A-	139	-170	
B+	-144	166	
B-	-124	146	

An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

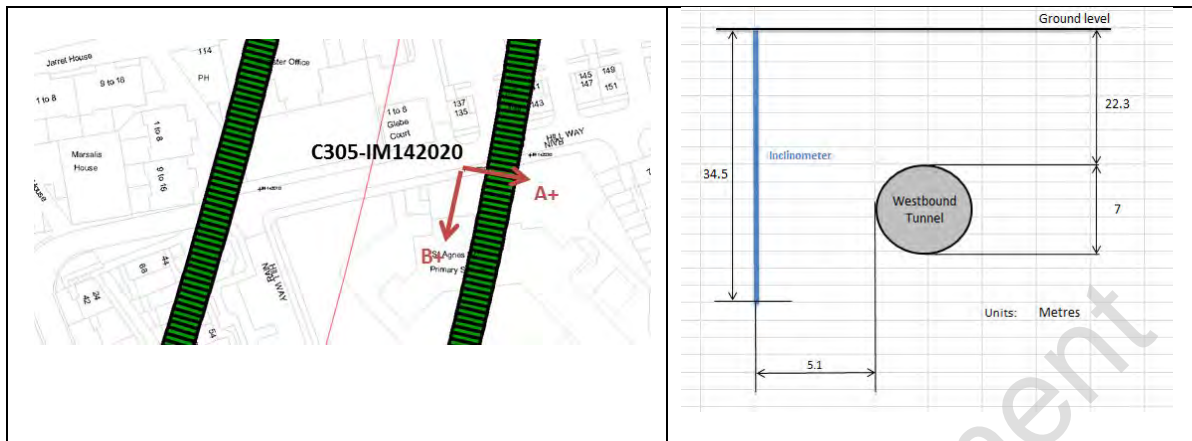
There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM142010.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”





C305-IM142020



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 303 (Project chainage – 82861)	11/10/2013
Westbound Drive-Z	Ring 296 (Project chainage – 82872)	03/04/2014

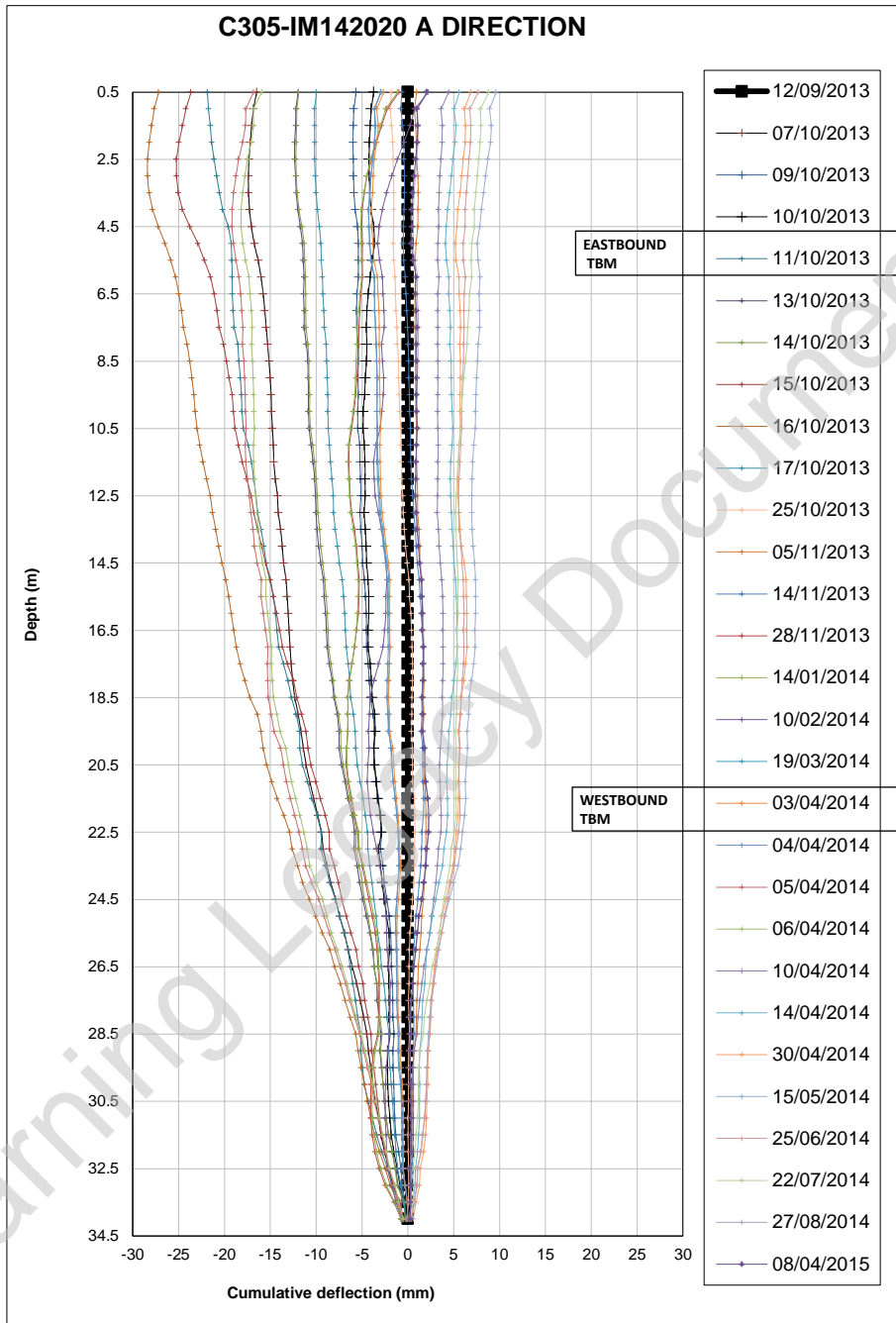
No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

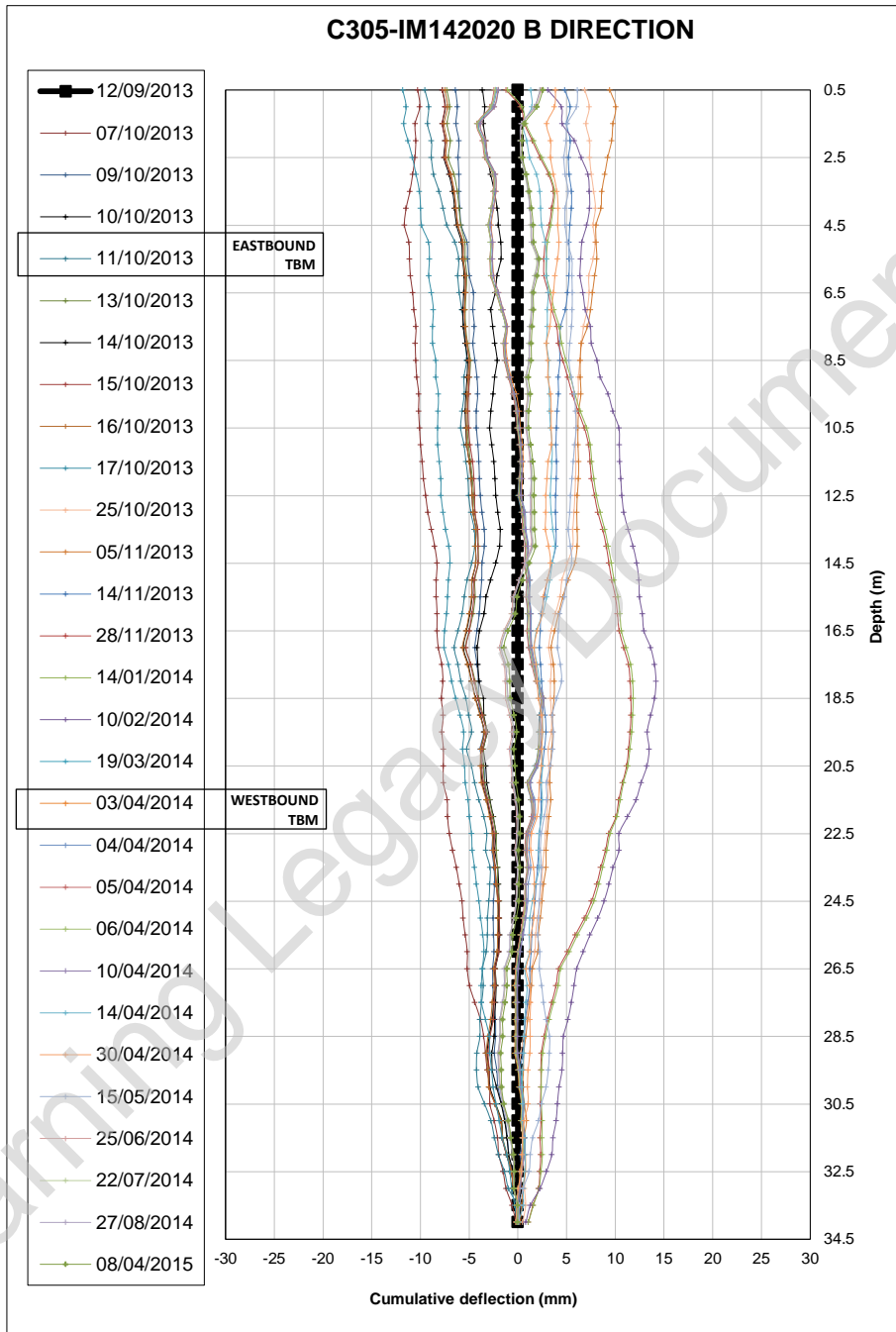
For the inclinometer C305-IM142020 different probes have been used. Related correction factors are presented in the table below:

ID Sensor	C305-IM142020	
	DI1244/DI1217	DI1244/1144940
<b>Serial number</b>	DI1244/DI1217	DI1244/1144940
<b>Date</b>	28/11/2013	19/03/2014
A+	136	-146
A-	174	-179
B+	-141	169
B-	-126	142

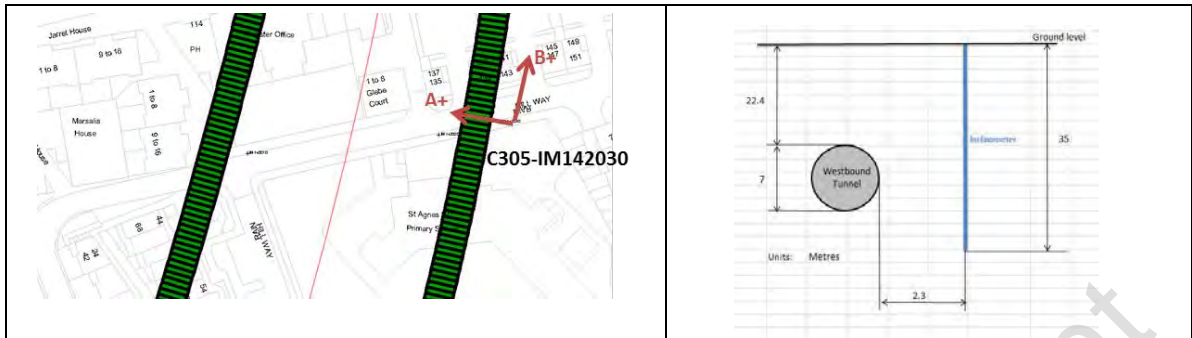
An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey. There is no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM142020.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”





C305-IM142030



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 300 (Project chainage – 82866)	11/10/2013
Westbound Drive-Z	Ring 292 (Project chainage – 82879)	03/04/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

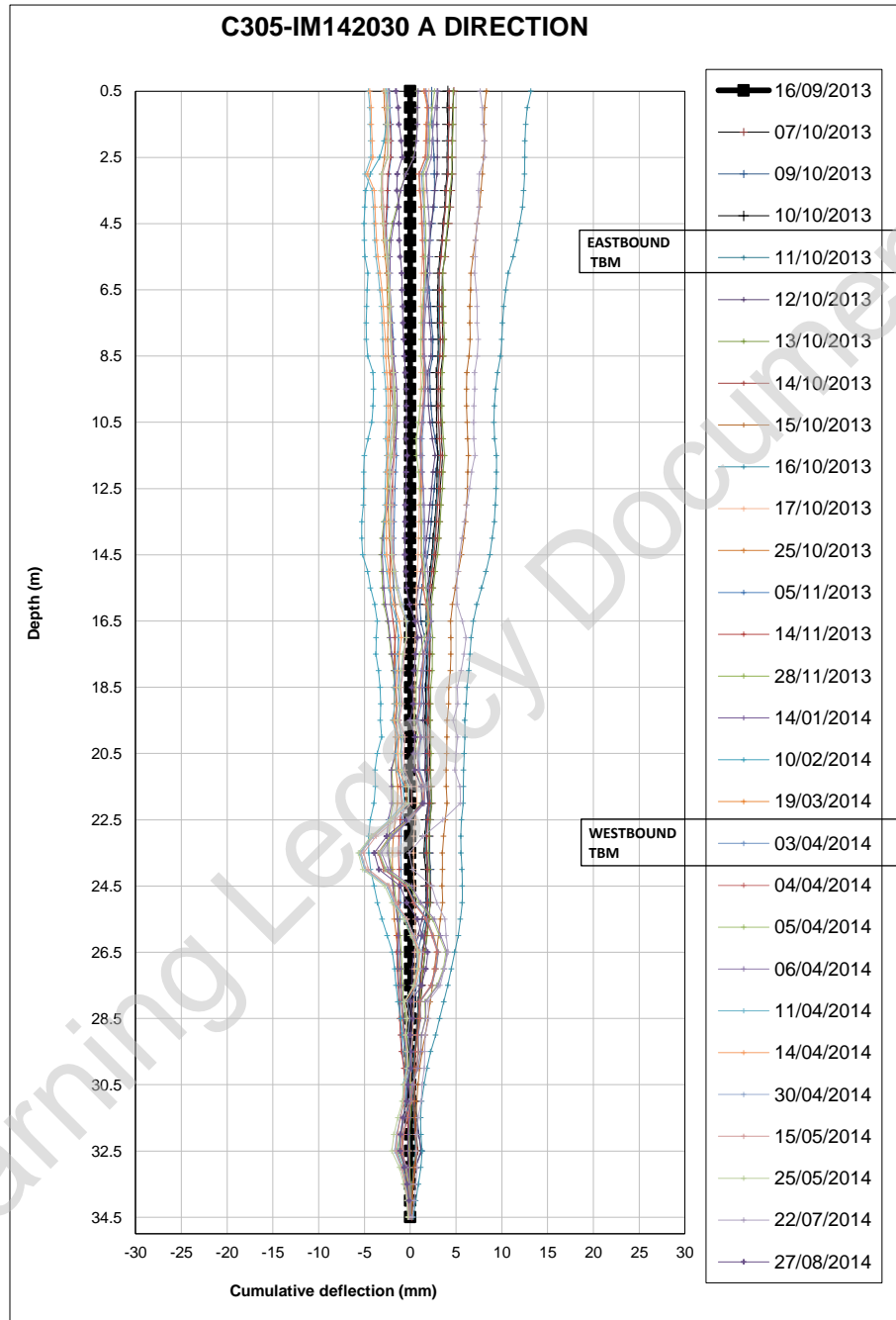
For the inclinometer C305-IM142030 different probes have been used. Related correction factors are presented in the table below:

ID Sensor	C305-IM142030		
	Serial number	DI1244/DI1217	DI1217/1144940
Date	28/11/2013	19/03/2014	
A+	157	-166	
A-	158	-186	
B+	-148	178	
B-	-107	136	

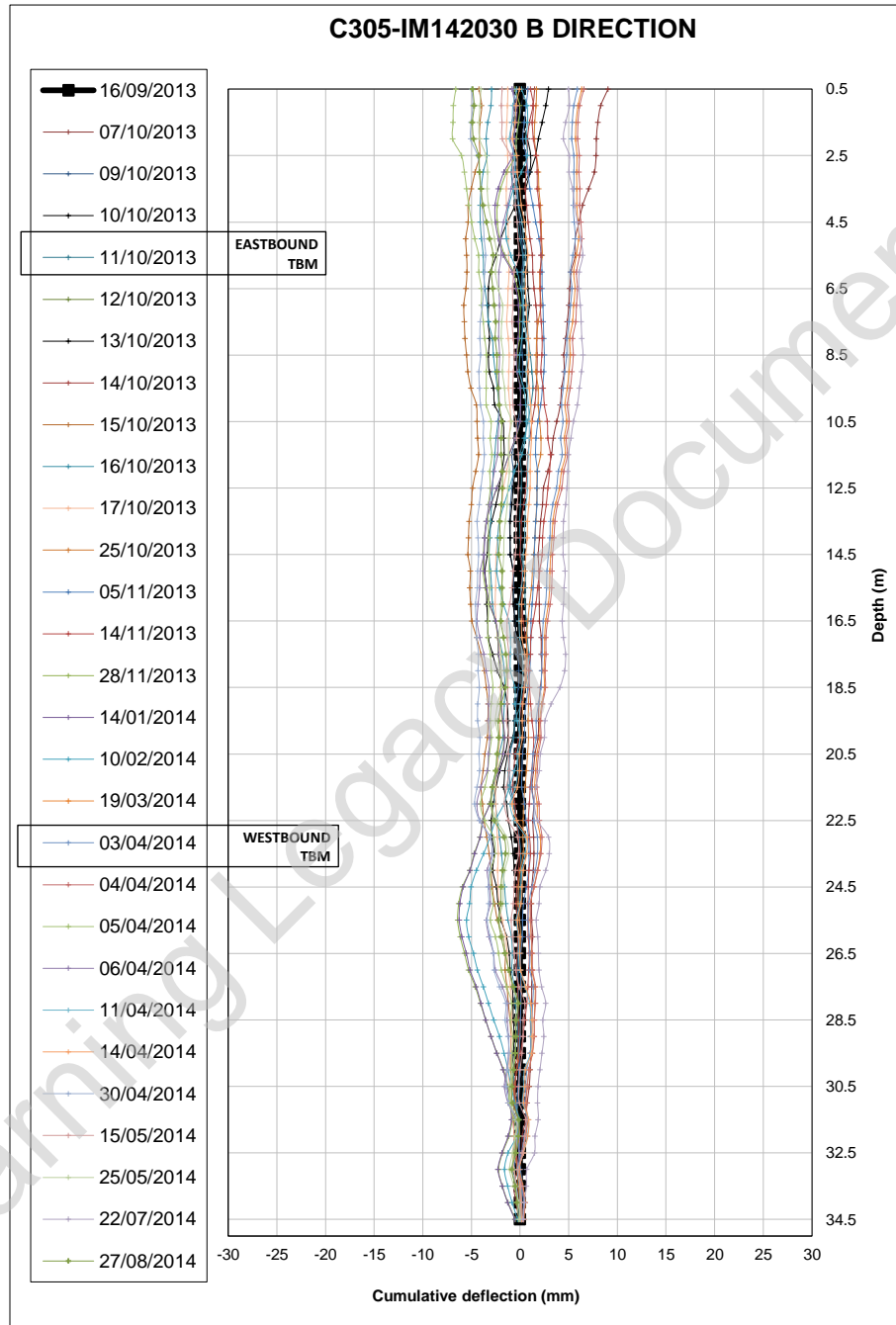
An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM142030.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”







#### SUB-AREA 4

The instrumentation is located between Bow Church Station and Bow Common Lane, as shown in the figure below, and comprises the following:

- 320 Levelling points
- 72 Sockets
- 20 3D prisms and Retro Targets
- 2 Shallow datum
- 9 Rod Extensometers
- 4 Piezometers
- 5 Inclinometers



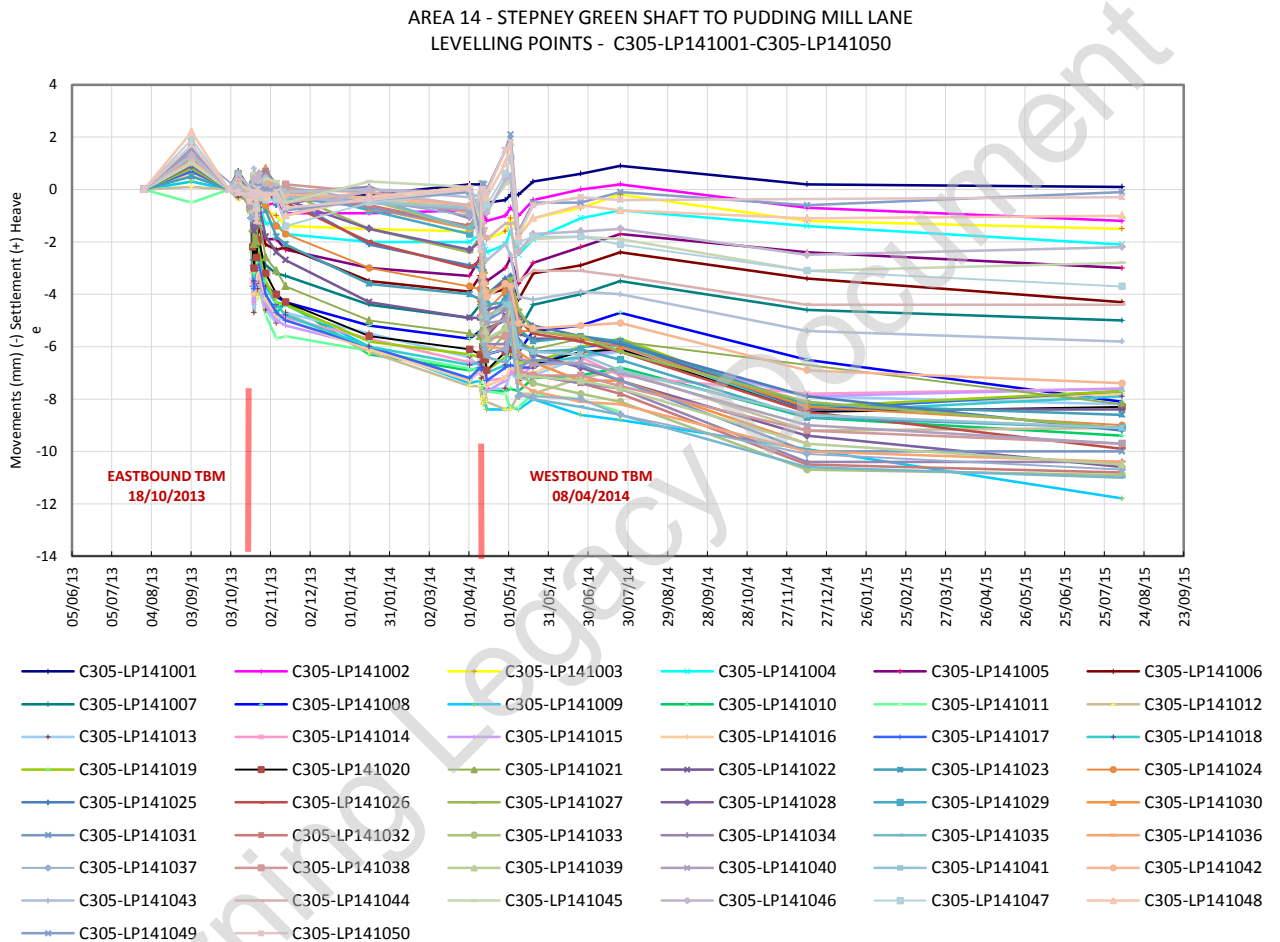
Note: The following arrays, located at Eagling Close and Bow Triangle, were affected by site works by others; C-360 Eleanor Street Shaft works which were concurrent.

- C305-LP141101 – C305-LP141139
- C305-LB144501 – C305-LP144539
- C305 - XR0143120

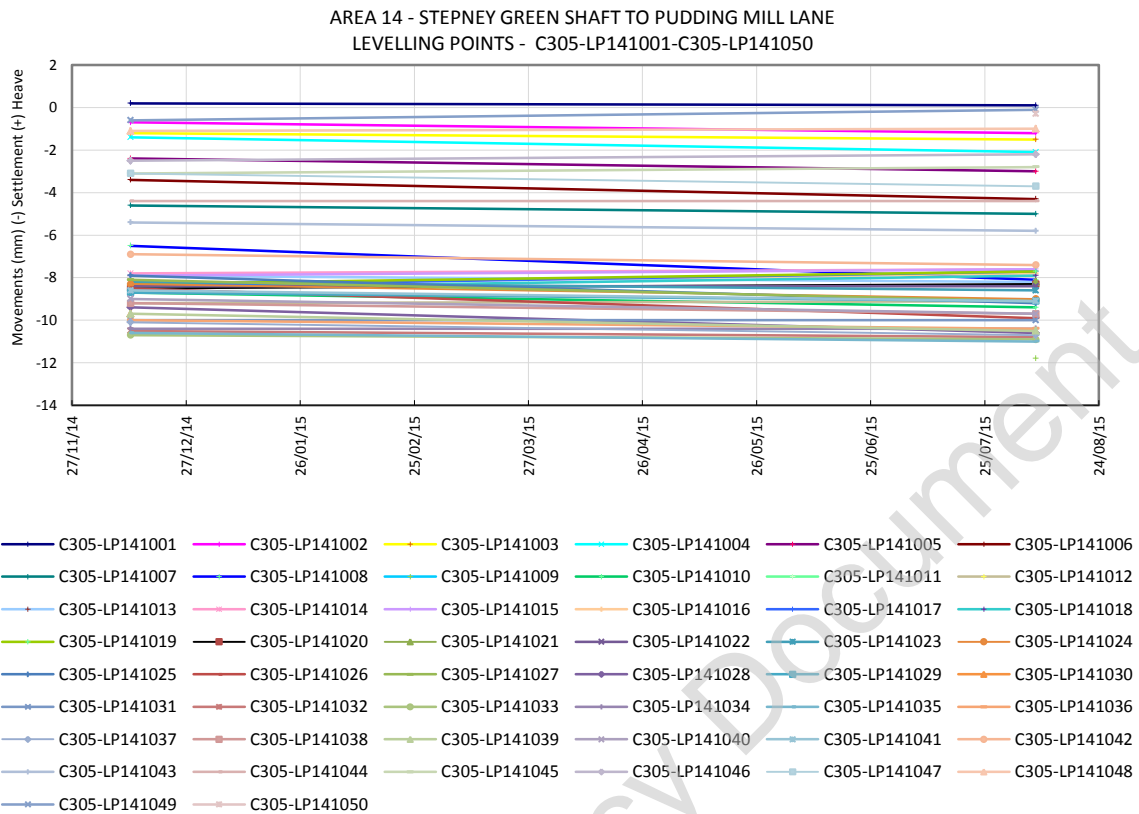
**LEVELLING POINTS**

**C305-LP141001 – C305-LP141050**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -6 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -11.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

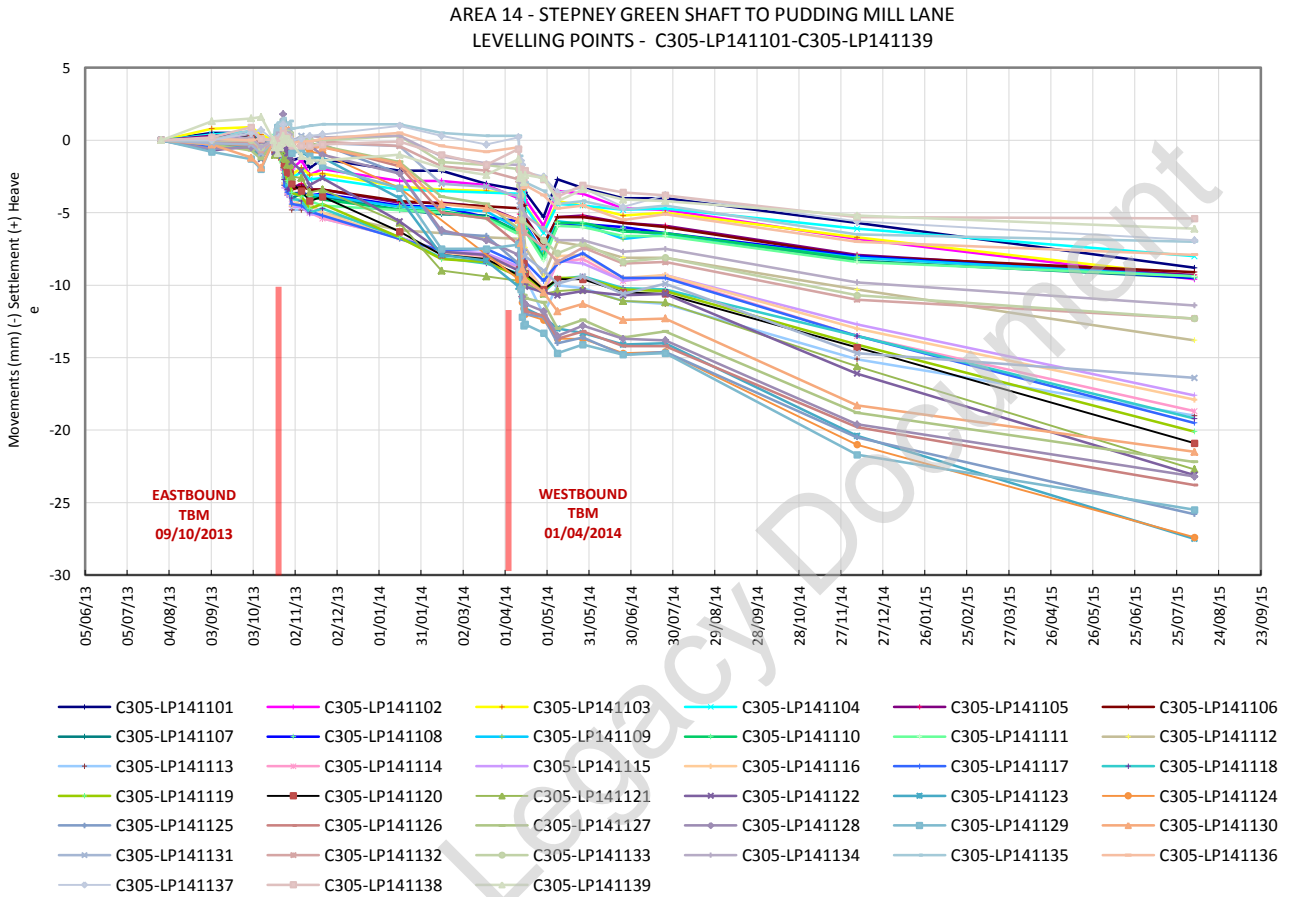
	Registered movement (mm)		mm/year
	12/12/2014	07/08/2015	
C305-LP141001	0.20	0.10	-0.153
C305-LP141002	-0.70	-1.20	-0.767
C305-LP141003	-1.20	-1.50	-0.460
C305-LP141004	-1.40	-2.10	-1.073
C305-LP141005	-2.40	-3.00	-0.920
C305-LP141006	-3.40	-4.30	-1.380
C305-LP141007	-4.60	-5.00	-0.613
C305-LP141008	-6.50	-8.10	-2.453
C305-LP141009	#N/A	-11.80	#N/A
C305-LP141010	-8.70	-9.40	-1.073
C305-LP141011	#N/A	#N/A	#N/A
C305-LP141012	-9.20	-9.10	0.153
C305-LP141013	-7.90	-8.20	-0.460
C305-LP141014	-7.80	-7.60	0.307
C305-LP141015	-7.90	-7.60	0.460
C305-LP141016	-8.30	-7.80	0.767
C305-LP141017	-8.40	-7.70	1.073
C305-LP141018	-8.50	-7.90	0.920
C305-LP141019	-8.30	-7.70	0.920
C305-LP141020	-8.50	-8.30	0.307
C305-LP141021	#N/A	-8.20	#N/A
C305-LP141022	-8.40	-8.40	0.000
C305-LP141023	-8.20	-8.60	-0.613
C305-LP141024	-8.30	-9.00	-1.073
C305-LP141025	-7.90	-9.20	-1.993
C305-LP141026	-8.50	-9.90	-2.147
C305-LP141027	-8.10	-9.10	-1.533
C305-LP141028	-9.40	-10.60	-1.840

	Registered movement (mm)		mm/year
	12/12/2014	07/08/2015	
C305-LP141029	-8.70	-9.10	-0.613
C305-LP141030	-9.70	#N/A	#N/A
C305-LP141031	-10.00	-10.00	0.000
C305-LP141032	-10.50	-10.80	-0.460
C305-LP141033	-10.70	-10.90	-0.307
C305-LP141034	-10.40	-10.40	0.000
C305-LP141035	-10.60	-11.00	-0.613
C305-LP141036	-10.00	-10.40	-0.613
C305-LP141037	-10.10	-10.70	-0.920
C305-LP141038	-9.20	-9.70	-0.767
C305-LP141039	-9.70	-10.50	-1.227
C305-LP141040	-9.00	-9.70	-1.073
C305-LP141041	-8.60	-9.10	-0.767
C305-LP141042	-6.90	-7.40	-0.767
C305-LP141043	-5.40	-5.80	-0.613
C305-LP141044	-4.40	-4.40	0.000
C305-LP141045	-3.10	-2.80	0.460
C305-LP141046	-2.50	-2.20	0.460
C305-LP141047	-3.10	-3.70	-0.920
C305-LP141048	-1.10	-1.00	0.153
C305-LP141049	-0.60	-0.10	0.767
C305-LP141050	#N/A	-0.30	#N/A
		<b>% less 2 mm/ year</b>	<b>100%</b>
		<b>% less 3 mm/ year</b>	<b>100%</b>

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

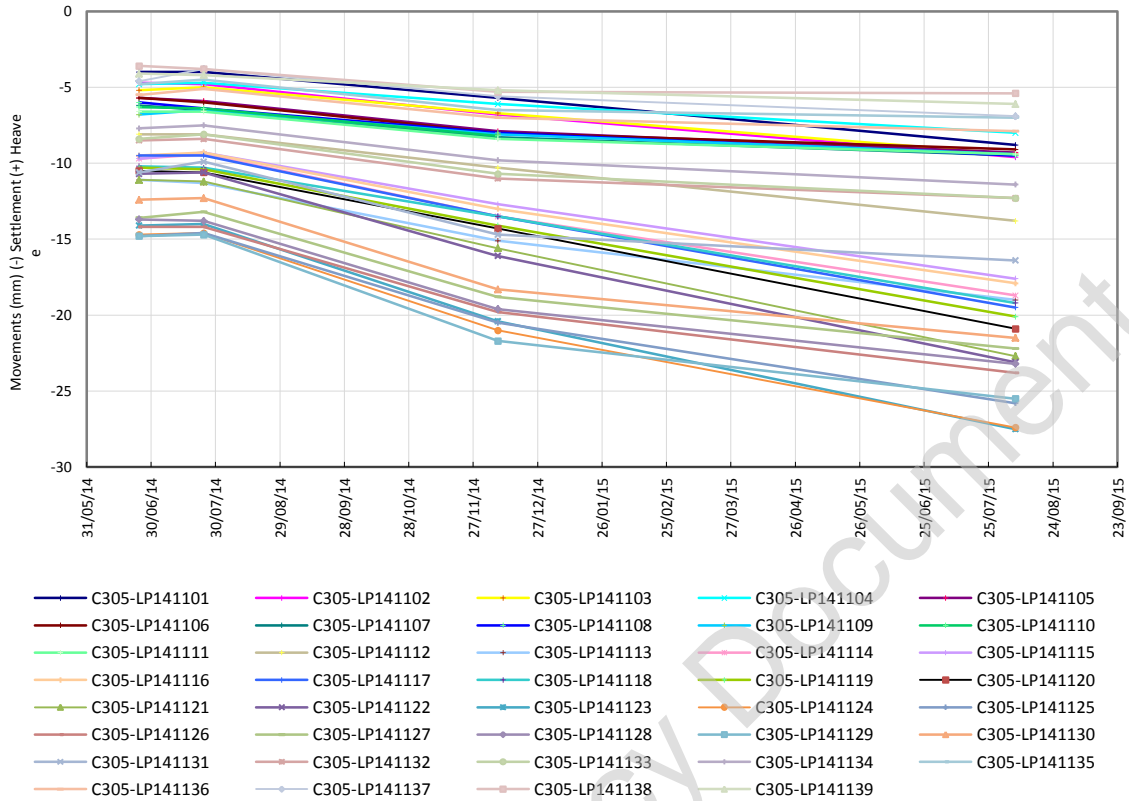
**C305-LP141101 – C305-LP141139**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -9.4 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -27.5 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP141101-C305-LP141139



The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	24/06/2014	24/07/2014	08/12/2014	06/08/2015	
C305-LP141101	-4.00	-4.00	-5.70	-8.80	-4.429
C305-LP141102	-4.70	-4.80	-6.80	-9.60	-4.499
C305-LP141103	-5.20	-5.00	-6.70	-9.40	-3.961
C305-LP141104	-4.80	-4.70	-6.10	-8.00	-3.005
C305-LP141105	-5.70	-5.90	-7.90	-9.30	-3.288
C305-LP141106	-5.70	-6.00	-8.00	-9.10	-3.070
C305-LP141107	-6.20	-6.50	-8.30	-9.50	-2.969
C305-LP141108	-6.00	-6.40	-8.00	-9.50	-3.101
C305-LP141109	-6.80	-6.50	-8.10	-9.40	-2.548
C305-LP141110	-6.30	-6.40	-8.20	#N/A	#N/A
C305-LP141111	-6.60	-6.60	-8.40	-9.40	-2.628
C305-LP141112	-8.10	-8.10	-10.30	-13.80	-5.269
C305-LP141113	-11.10	-11.30	-15.10	-19.00	-7.271
C305-LP141114	-9.70	-9.40	-13.50	-18.70	-8.466
C305-LP141115	-9.70	-9.30	-12.70	-17.60	-7.471
C305-LP141116	-9.50	-9.30	-13.00	-17.90	-7.865
C305-LP141117	-9.50	-9.50	-13.50	-19.50	-9.252
C305-LP141118	-10.20	-10.30	-13.50	-19.20	-8.268
C305-LP141119	-10.30	-10.40	-14.10	-20.10	-9.018
C305-LP141120	-10.50	-10.60	-14.30	-20.90	-9.560
C305-LP141121	-11.10	-11.20	-15.60	-22.70	-10.682
C305-LP141122	-10.70	-10.60	-16.10	-23.10	-11.540
C305-LP141123	-14.10	-14.00	-20.40	-27.50	-12.493

	Registered movement (mm)				mm/year
	24/06/2014	24/07/2014	08/12/2014	06/08/2015	
C305-LP141124	-14.70	-14.60	-21.00	-27.40	-11.861
C305-LP141125	-14.80	-14.60	-20.50	-25.80	-10.335
C305-LP141126	-14.20	-14.20	-19.80	-23.80	-8.980
C305-LP141127	-13.60	-13.20	-18.80	-22.20	-8.225
C305-LP141128	-13.70	-13.80	-19.60	-23.20	-8.864
C305-LP141129	-14.80	-14.70	-21.70	-25.50	-10.088
C305-LP141130	-12.40	-12.30	-18.30	-21.50	-8.588
C305-LP141131	-10.60	-9.90	-14.70	-16.40	-5.764
C305-LP141132	-8.50	-8.40	-11.00	-12.30	-3.613
C305-LP141133	-8.40	-8.10	-10.70	-12.30	-3.777
C305-LP141134	-7.70	-7.50	-9.80	-11.40	-3.543
C305-LP141135	-4.80	-4.50	-6.50	-7.00	-2.209
C305-LP141136	-5.50	-5.10	-7.00	-7.90	-2.421
C305-LP141137	-4.60	-3.80	-5.60	-6.90	-2.474
C305-LP141138	-3.60	-3.80	-5.30	-5.40	-1.634
C305-LP141139	-4.10	-4.20	-5.20	-6.10	-1.824
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	13%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	32%

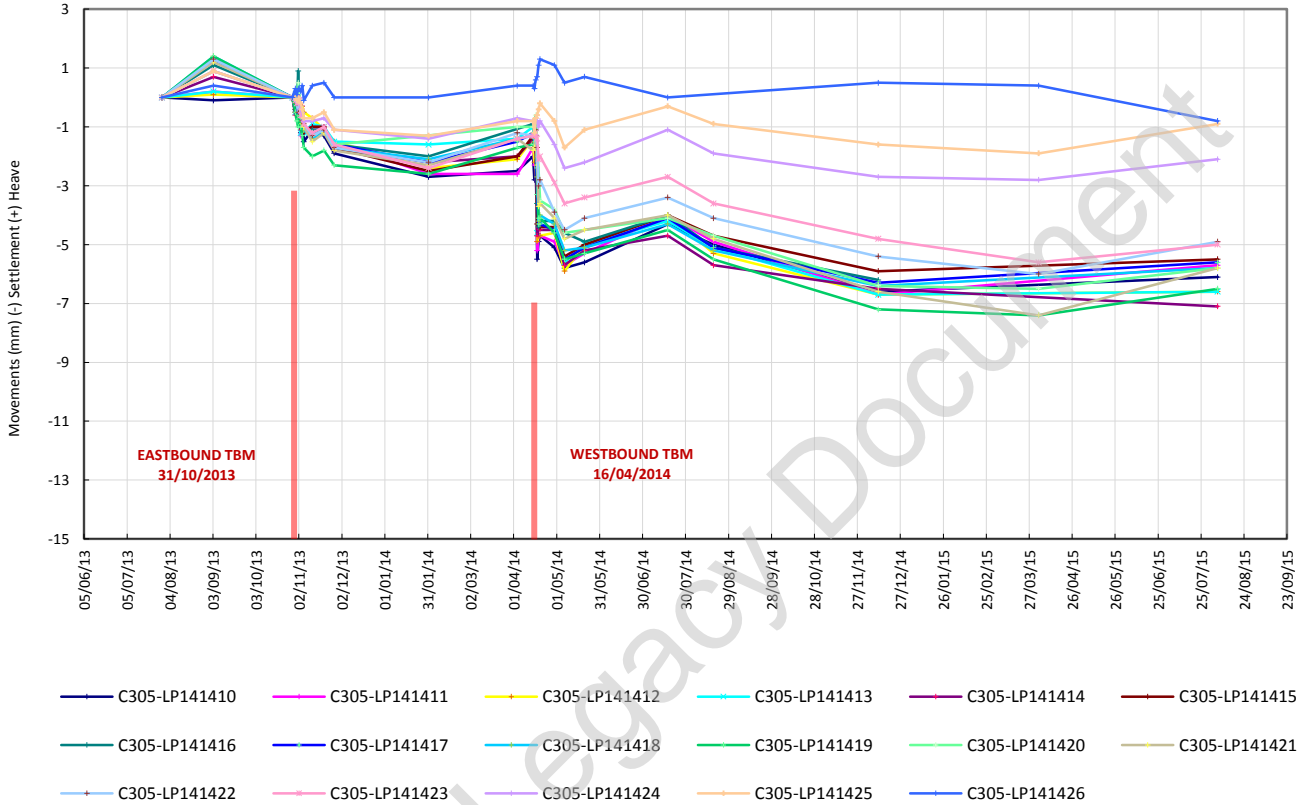
The percentage of the levelling points with a settlement rate less than 3 mm/year is 32%.



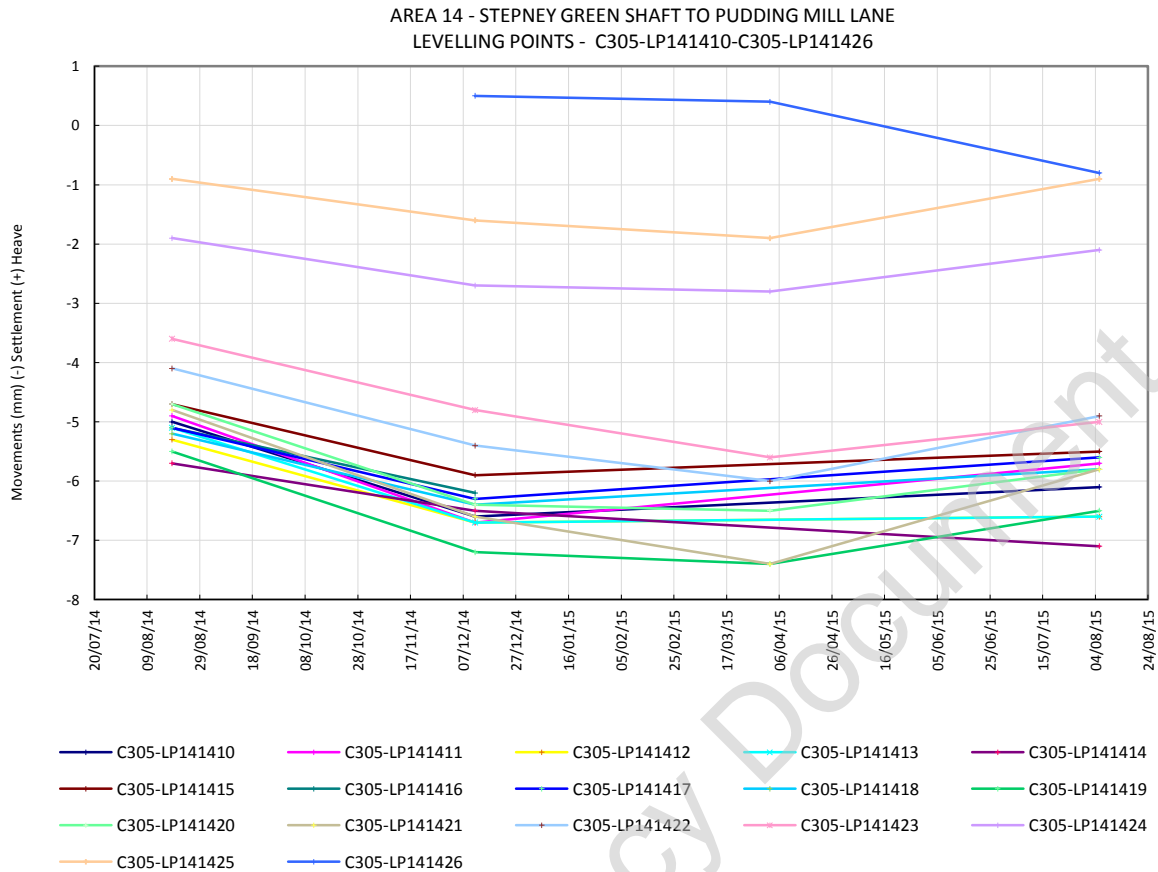
**C305-LP141410 – C305-LP141426**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -2.6 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7.4 mm after the Westbound TBM transit.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP141410-C305-LP141426



The next plot shows the trend line adjustment for the levelling points in this array.



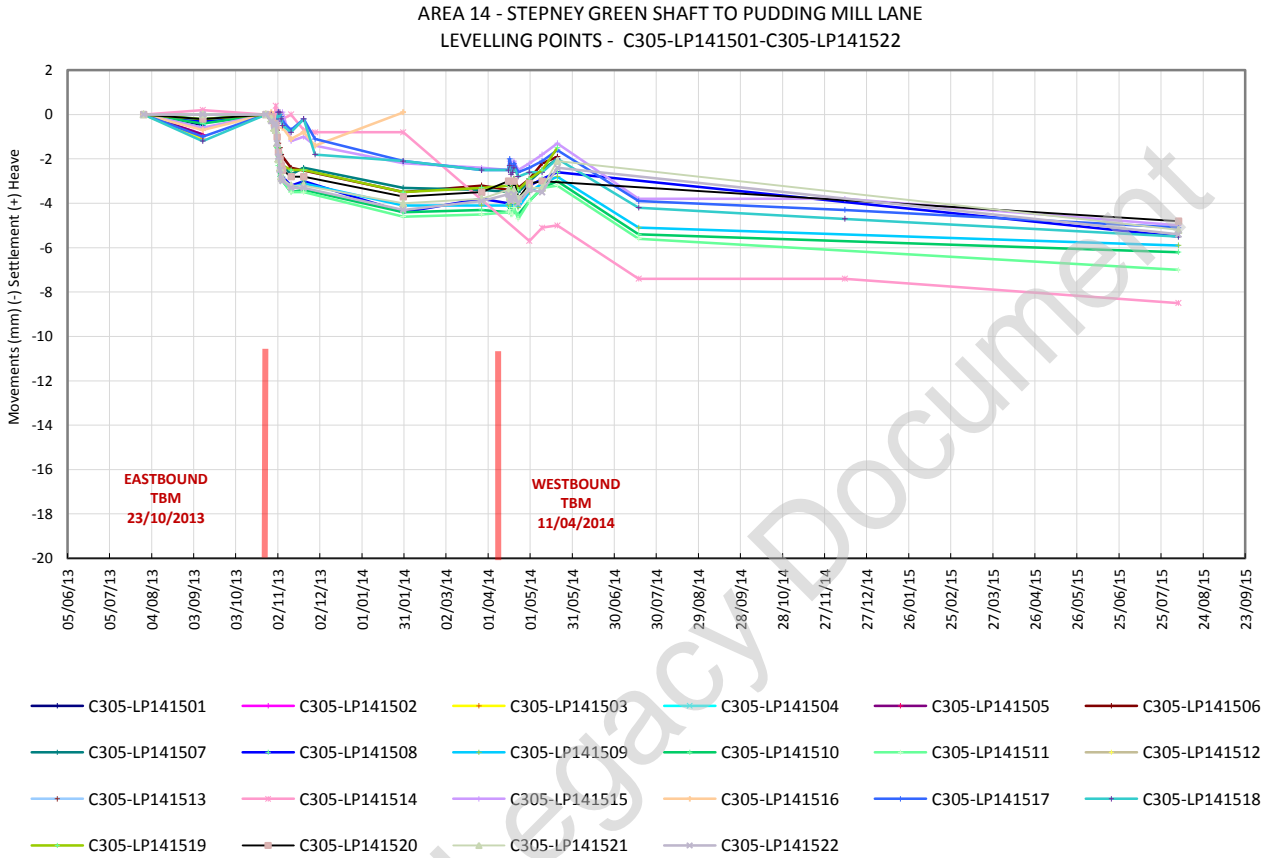
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	18/08/2014	11/12/2014	02/04/2015	05/08/2015	
C305-LP141410	-5.00	-6.60	#N/A	-6.10	-0.855
C305-LP141411	-4.90	-6.70	#N/A	-5.70	-0.475
C305-LP141412	-5.30	-6.70	#N/A	-6.60	-1.123
C305-LP141413	-5.10	-6.70	#N/A	-6.60	-1.300
C305-LP141414	-5.70	-6.50	#N/A	-7.10	-1.373
C305-LP141415	-4.70	-5.90	#N/A	-5.50	-0.613
C305-LP141416	-5.10	-6.20	#N/A	#N/A	#N/A
C305-LP141417	-5.10	-6.30	#N/A	-5.60	-0.280
C305-LP141418	-5.20	-6.40	#N/A	-5.80	-0.391
C305-LP141419	-5.50	-7.20	-7.40	-6.50	-0.966
C305-LP141420	-4.70	-6.40	-6.50	-5.80	-1.033
C305-LP141421	-4.80	-6.60	-7.40	-5.80	-1.135
C305-LP141422	-4.10	-5.40	-6.00	-4.90	-0.901
C305-LP141423	-3.60	-4.80	-5.60	-5.00	-1.533
C305-LP141424	-1.90	-2.70	-2.80	-2.10	-0.198
C305-LP141425	-0.90	-1.60	-1.90	-0.90	-0.067
C305-LP141426	#N/A	0.50	0.40	-0.80	-2.031
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

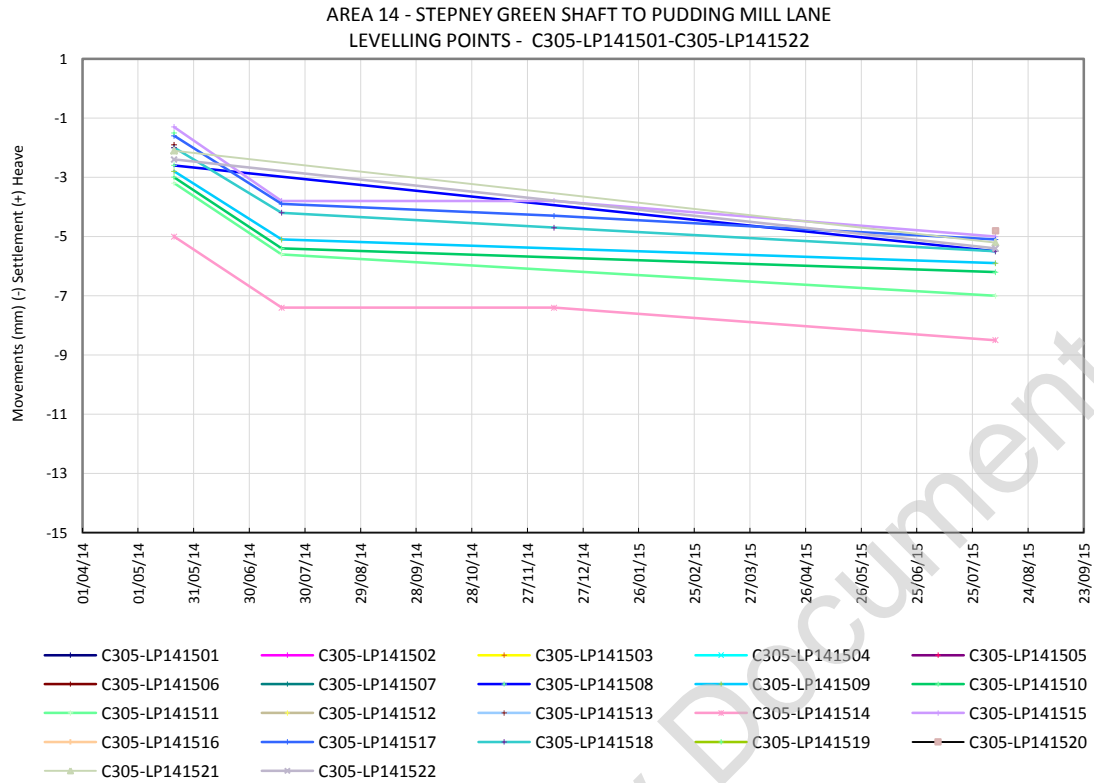
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP141501 – C305-LP141522**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -4.3 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.5 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

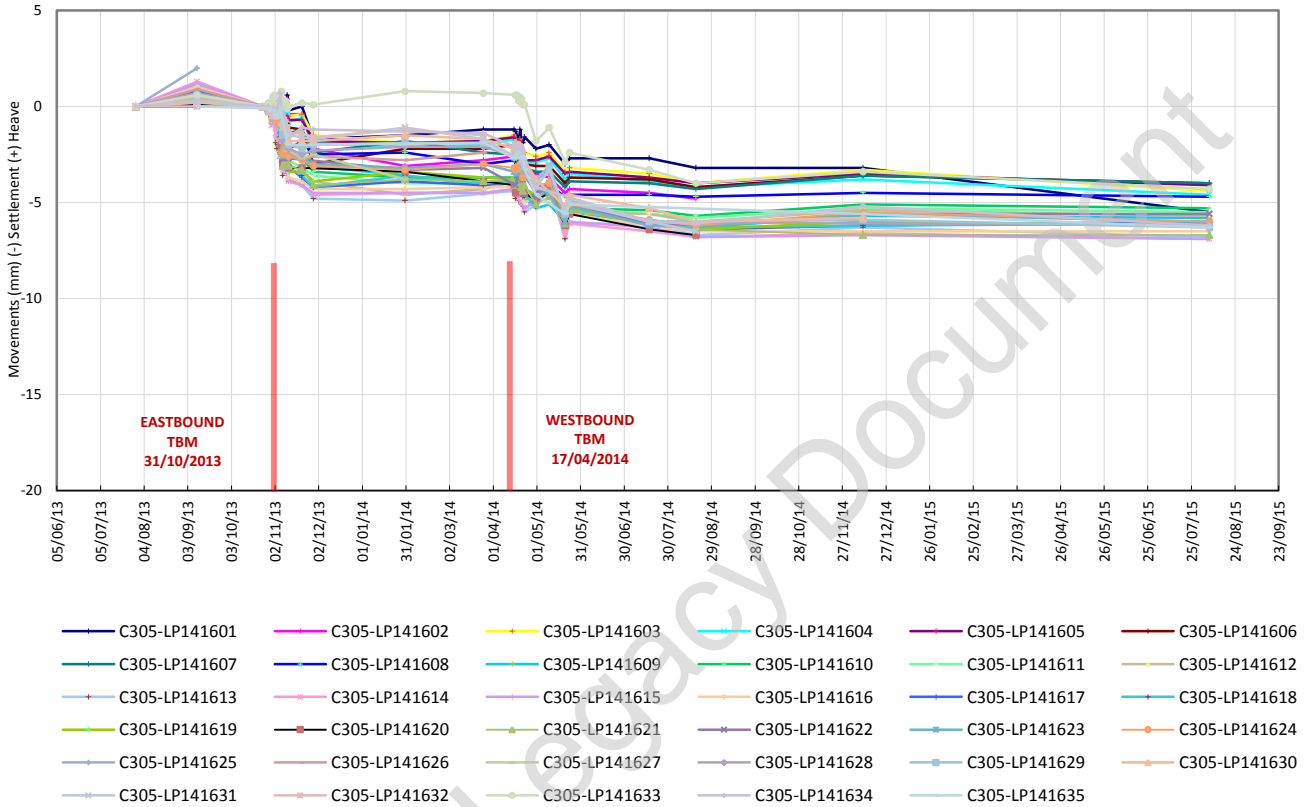
	Registered movement (mm)				mm/year
	20/05/2014	17/07/2014	11/12/2014	06/08/2015	
C305-LP141501	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141502	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141503	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141504	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141505	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141506	-1.90	#N/A	#N/A	#N/A	#N/A
C305-LP141507	-2.00	#N/A	#N/A	#N/A	#N/A
C305-LP141508	-2.60	#N/A	#N/A	-5.50	#N/A
C305-LP141509	-2.80	-5.10	#N/A	-5.90	-1.904
C305-LP141510	-3.00	-5.40	#N/A	-6.20	-1.957
C305-LP141511	-3.20	-5.60	#N/A	-7.00	-2.478
C305-LP141512	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141513	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141514	-5.00	-7.40	-7.40	-8.50	-2.235
C305-LP141515	-1.30	-3.80	-3.80	-5.00	-2.373
C305-LP141516	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141517	-1.60	-3.90	-4.30	-5.10	-2.299
C305-LP141518	-2.00	-4.20	-4.70	-5.50	-2.336
C305-LP141519	-1.50	#N/A	#N/A	#N/A	#N/A
C305-LP141520	#N/A	#N/A	#N/A	-4.80	#N/A
C305-LP141521	-2.10	#N/A	#N/A	-5.20	#N/A
C305-LP141522	-2.40	#N/A	#N/A	-5.40	#N/A
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP141601 – C305-LP141635**

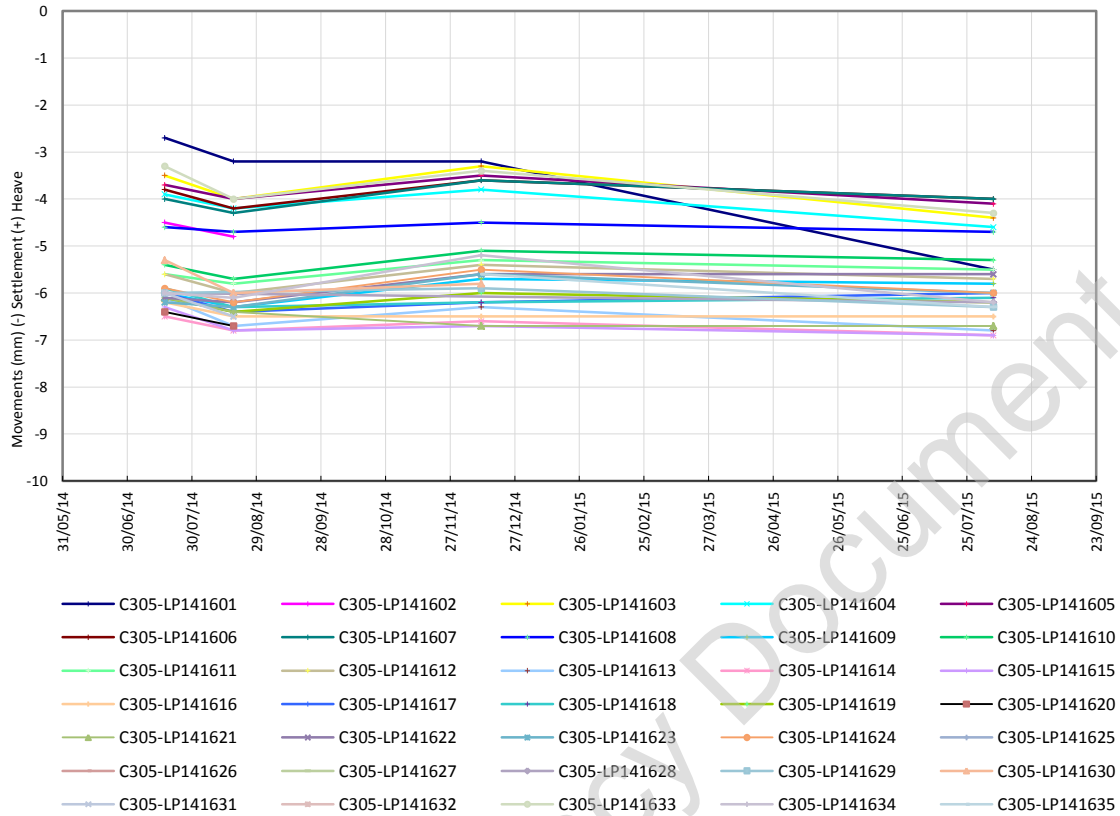
The graph presented below shows the levelling point readings from this array. A maximum settlement of -4.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.7 mm after the Westbound TBM transit.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP141601-C305-LP141635



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP141601-C305-LP141635



The table below lists the annual settlement rate for the levelling points in this array.

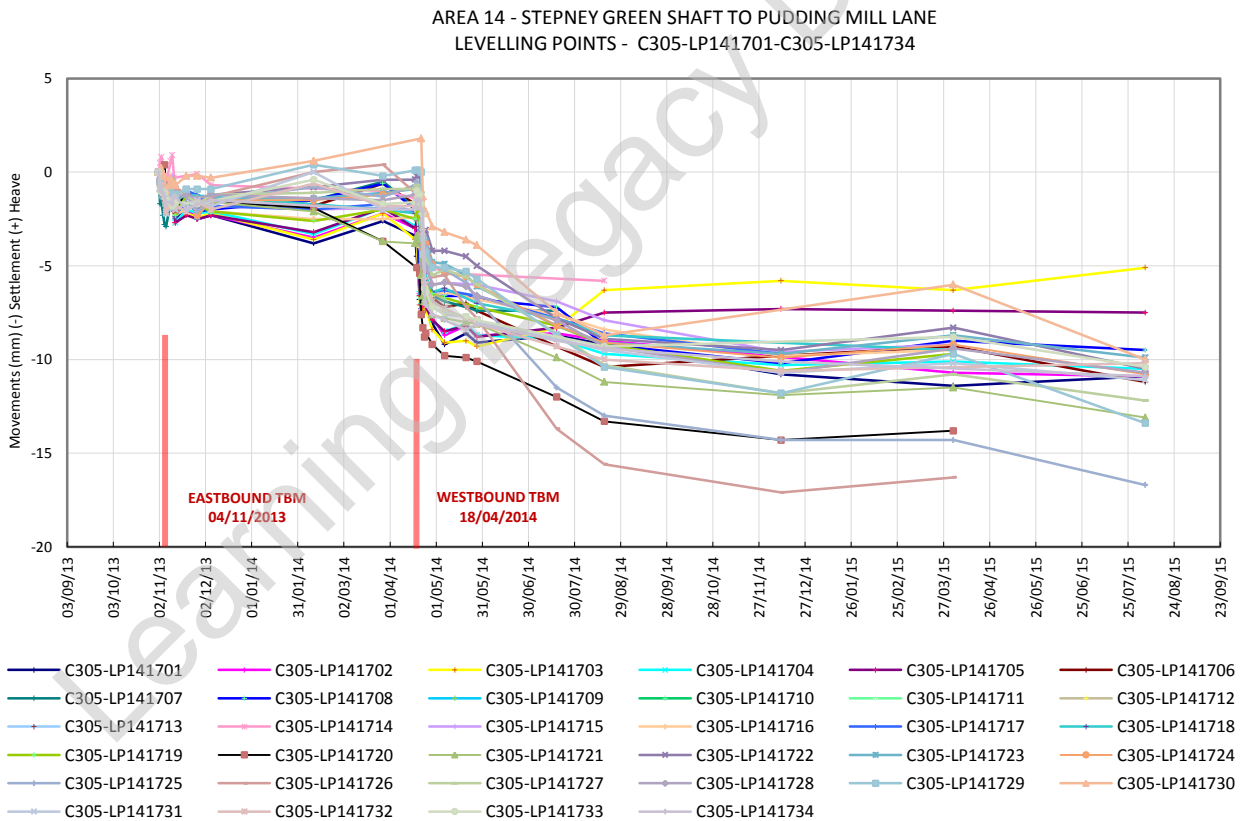
	Registered movement (mm)				mm/year
	17/07/2014	18/08/2014	11/12/2014	06/08/2015	
C305-LP141601	-2.70	-3.20	-3.20	-5.50	-2.525
C305-LP141602	-4.50	-4.80	#N/A	#N/A	#N/A
C305-LP141603	-3.50	-4.00	-3.30	-4.40	-0.655
C305-LP141604	-3.90	-4.20	-3.80	-4.60	-0.550
C305-LP141605	-3.70	-4.00	-3.50	-4.10	-0.255
C305-LP141606	-3.80	-4.20	-3.60	-4.00	-0.016
C305-LP141607	-4.00	-4.30	-3.60	-4.00	0.140
C305-LP141608	-4.60	-4.70	-4.50	-4.70	-0.052
C305-LP141609	-6.00	-6.30	-5.70	-5.80	0.333
C305-LP141610	-5.40	-5.70	-5.10	-5.30	0.235
C305-LP141611	-5.60	-5.80	-5.30	-5.50	0.192
C305-LP141612	-5.60	-6.00	-5.40	-5.70	0.082
C305-LP141613	-6.10	-6.70	-6.30	-6.80	-0.426
C305-LP141614	-6.50	-6.80	-6.60	-6.90	-0.262
C305-LP141615	-6.30	-6.80	-6.70	-6.90	-0.377
C305-LP141616	-6.20	-6.50	-6.50	-6.50	-0.169
C305-LP141617	-6.00	-6.40	-6.20	-6.00	0.169
C305-LP141618	-5.90	-6.30	-6.20	-6.10	-0.028
C305-LP141619	-6.10	-6.40	-6.00	-6.20	0.036
C305-LP141620	-6.40	-6.70	#N/A	#N/A	#N/A
C305-LP141621	-6.10	-6.40	-6.70	-6.70	-0.469
C305-LP141622	-6.10	-6.20	-5.60	-5.60	0.543
C305-LP141623	-6.20	-6.30	-5.60	-6.00	0.253
C305-LP141624	-5.90	-6.20	-5.50	-6.00	0.043
C305-LP141625	#N/A	#N/A	#N/A	#N/A	#N/A

	Registered movement (mm)				mm/year
	17/07/2014	18/08/2014	11/12/2014	06/08/2015	
C305-LP141626	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141627	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141628	-6.00	#N/A	#N/A	-6.20	-0.190
C305-LP141629	-6.00	#N/A	-5.90	-6.30	-0.316
C305-LP141630	-5.30	-6.00	-5.80	#N/A	-0.742
C305-LP141631	-6.00	-6.50	#N/A	#N/A	#N/A
C305-LP141632	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141633	-3.30	-4.00	-3.40	-4.30	-0.673
C305-LP141634	-6.00	-6.10	-5.20	-6.20	-0.132
C305-LP141635	#N/A	#N/A	-5.60	-6.30	#N/A
Rate less than -2.5 mm/year				% less 2 mm/ year	96%
Rate greater than -3.5 mm/year				% less 3 mm/ year	100%

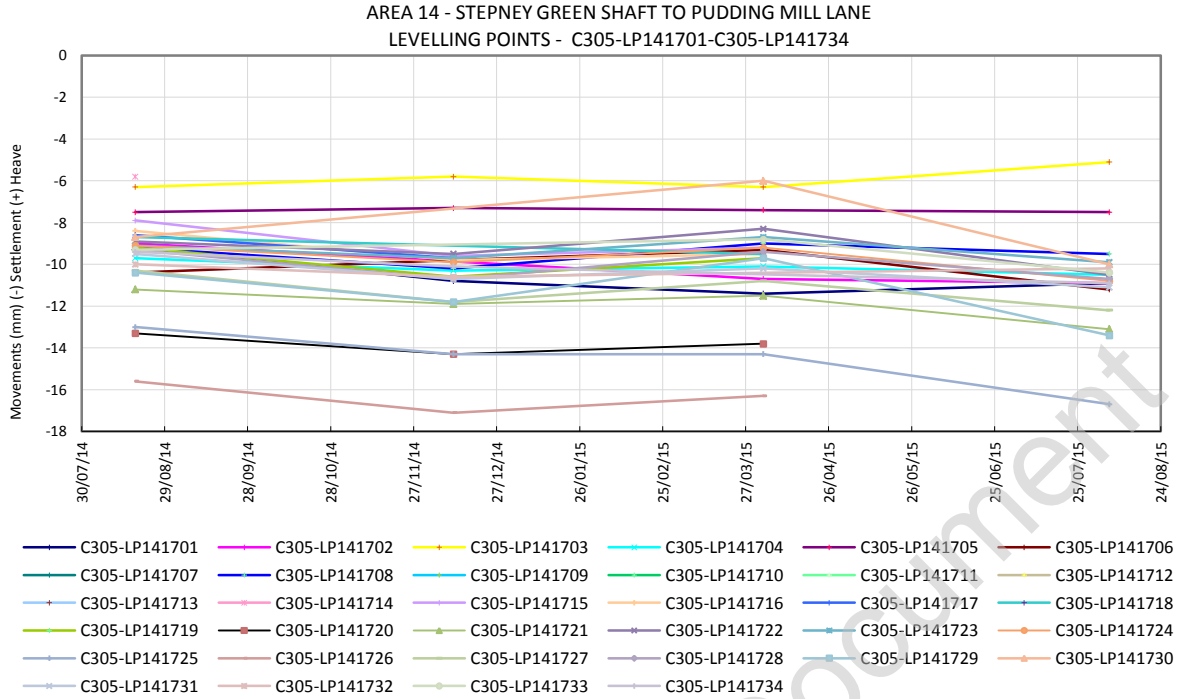
The percentage of the levelling points with a settlement rate less than 2 mm/year is 96%.

**C305-LP141701 – C305-LP141734**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -3.6 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -17 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

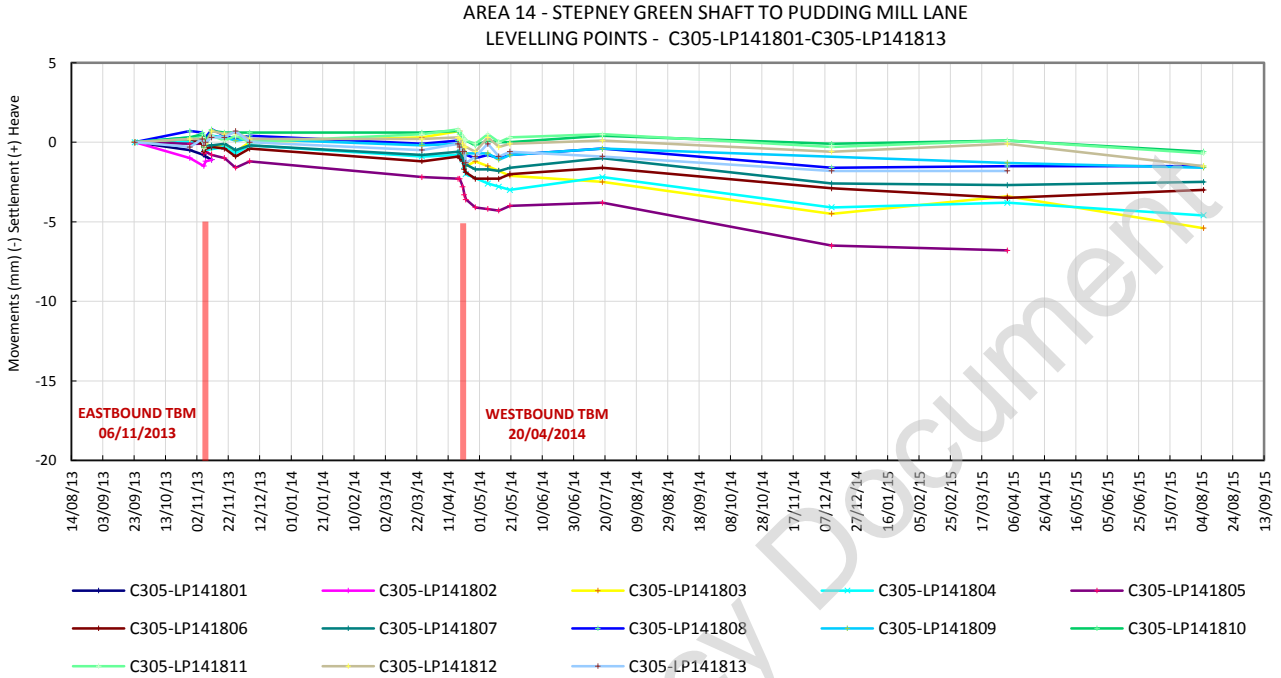
	Registered movement (mm)				mm/year
	18/08/2014	11/12/2014	02/04/2015	05/08/2015	
C305-LP141701	-9.20	-10.80	-11.40	-10.90	-1.752
C305-LP141702	-9.00	#N/A	-10.70	-10.90	-2.063
C305-LP141703	-6.30	-5.80	-6.30	-5.10	0.989
C305-LP141704	-9.70	-10.30	-10.10	-10.50	-0.690
C305-LP141705	-7.50	-7.30	-7.40	-7.50	-0.034
C305-LP141706	-10.40	-9.80	-9.30	-11.20	-0.637
C305-LP141707	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141708	-9.20	-10.20	-9.00	-9.50	0.084
C305-LP141709	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141710	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141711	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141712	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141713	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141714	-5.80	#N/A	#N/A	#N/A	#N/A
C305-LP141715	-7.90	-9.60	-9.20	#N/A	-2.105
C305-LP141716	-8.40	-9.80	-9.50	#N/A	-1.781
C305-LP141717	-8.60	-9.70	#N/A	#N/A	#N/A
C305-LP141718	-8.70	#N/A	-9.50	#N/A	#N/A
C305-LP141719	-9.20	-10.60	-9.70	#N/A	-0.820
C305-LP141720	-13.30	-14.30	-13.80	#N/A	-0.815
C305-LP141721	-11.20	-11.90	-11.50	-13.10	-1.681
C305-LP141722	-8.90	-9.50	-8.30	-10.50	-1.168
C305-LP141723	-9.10	-9.70	-8.70	-9.90	-0.462
C305-LP141724	-9.10	-9.90	-9.20	-10.80	-1.401
C305-LP141725	-13.00	-14.30	-14.30	-16.70	-3.497
C305-LP141726	-15.60	-17.10	-16.30	#N/A	-1.142
C305-LP141727	-10.30	-11.80	-10.80	-12.20	-1.488
C305-LP141728	-9.30	-10.70	-9.40	-10.70	-0.927
C305-LP141729	-10.40	-11.80	-9.70	-13.40	-2.226
C305-LP141730	-8.70	#N/A	-6.00	-10.00	-0.659
C305-LP141731	-9.50	-10.70	-10.20	-11.10	-1.352
C305-LP141732	-10.00	-10.60	#N/A	-10.20	-0.084
C305-LP141733	-9.30	#N/A	-8.80	-10.40	-0.905
C305-LP141734	-9.40	-10.10		-10.90	-1.507
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	96%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 96%.

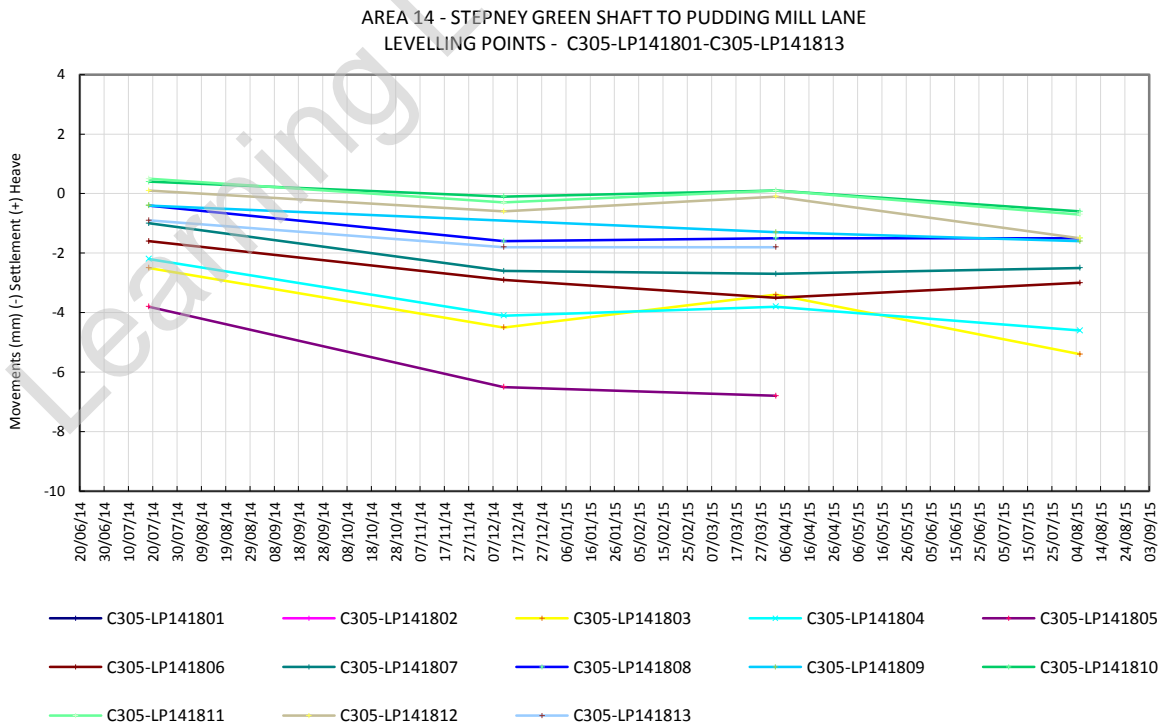


**C305-LP141801 – C305-LP141813**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -1.6 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



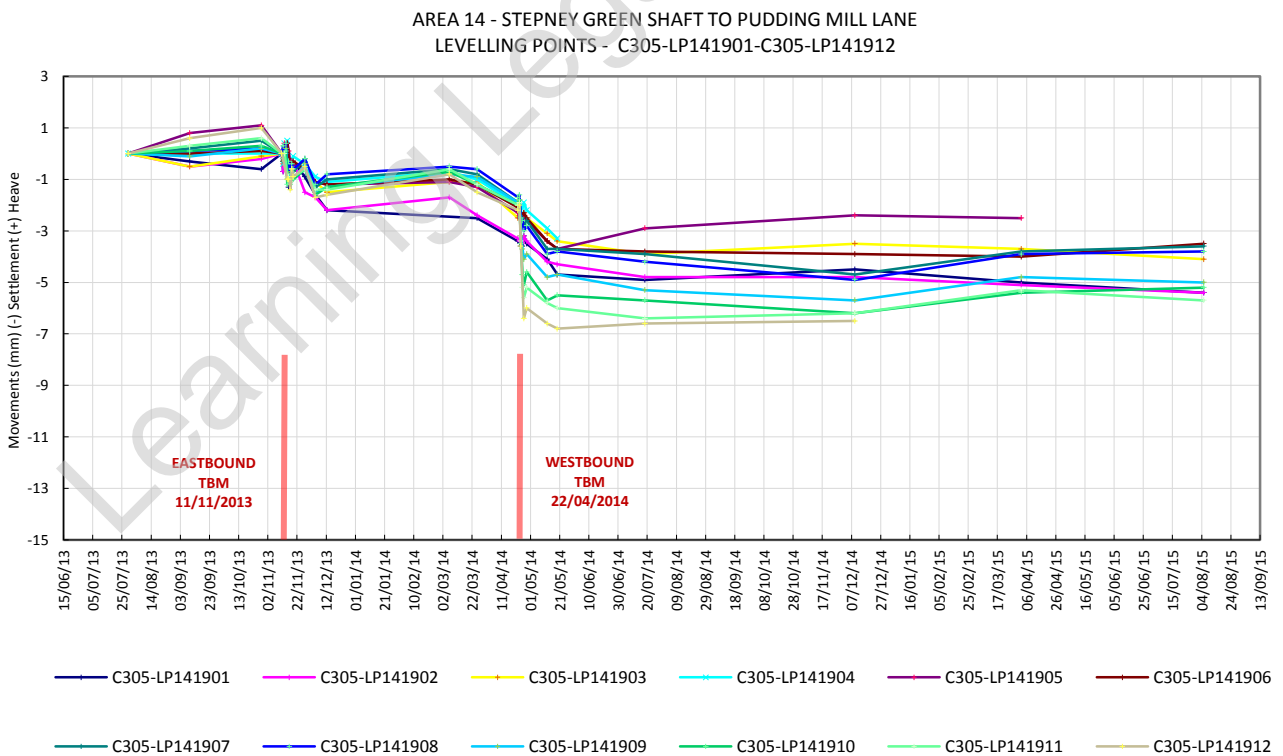
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	18/07/2014	11/12/2014	02/04/2015	05/08/2015	
C305-LP141801	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141802	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP141803	-2.50	-4.50	-3.40	-5.40	-2.260
C305-LP141804	-2.20	-4.10	-3.80	-4.60	-2.053
C305-LP141805	-3.80	-6.50	-6.80	#N/A	#N/A
C305-LP141806	-1.60	-2.90	-3.50	-3.00	-1.424
C305-LP141807	-1.00	-2.60	-2.70	-2.50	-1.383
C305-LP141808	-0.40	-1.60	-1.50	-1.50	-0.967
C305-LP141809	-0.40	#N/A	-1.30	-1.60	-1.163
C305-LP141810	0.40	-0.10	0.10	-0.60	-0.820
C305-LP141811	0.50	-0.30	0.10	-0.70	-0.949
C305-LP141812	0.10	-0.60	-0.10	-1.50	-1.258
C305-LP141813	-0.90	-1.80	-1.80	#N/A	-1.322
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

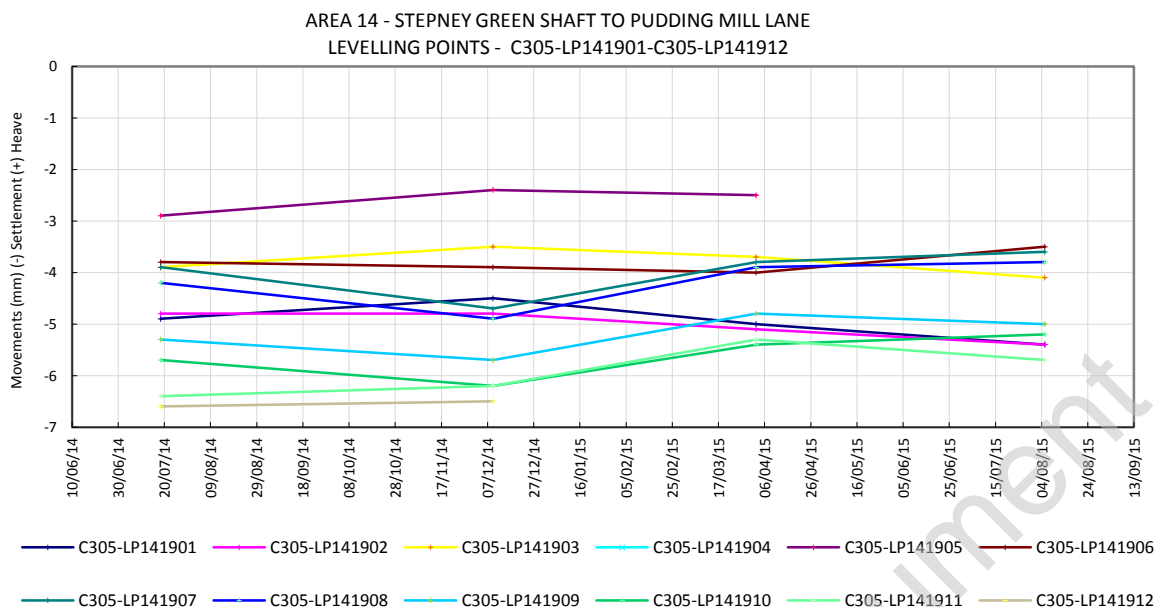
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP141901 – C305-LP141912**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -2.4 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



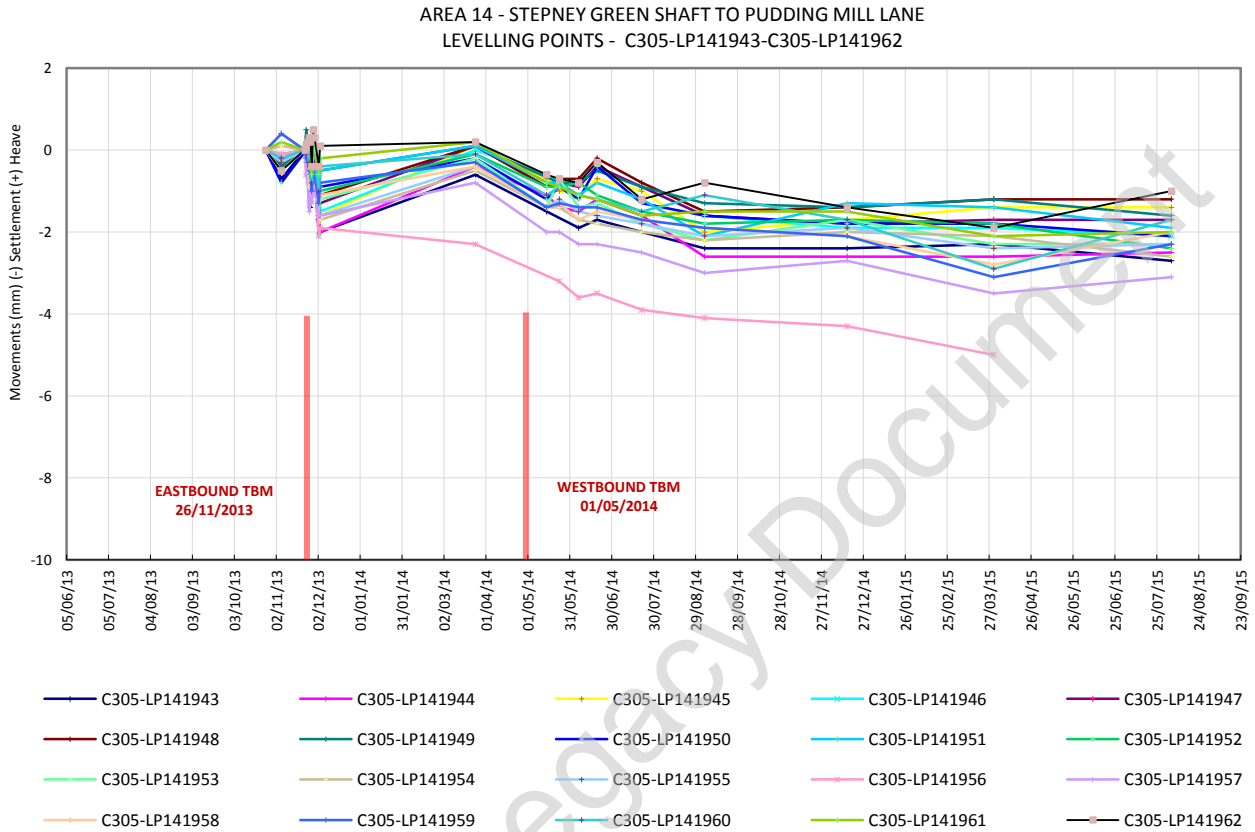
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	18/07/2014	09/12/2014	02/04/2015	05/08/2015	
C305-LP141901	-4.90	-4.50	-5.00	-5.40	-0.550
C305-LP141902	-4.80	-4.80	-5.10	-5.40	-0.596
C305-LP141903	-3.90	-3.50	-3.70	-4.10	-0.210
C305-LP141904	#N/A	#N/A	#N/A	#N/A	3.771
C305-LP141905	-2.90	-2.40	-2.50	#N/A	0.596
C305-LP141906	-3.80	-3.90	-4.00	-3.50	0.223
C305-LP141907	-3.90	-4.70	-3.80	-3.60	0.475
C305-LP141908	-4.20	-4.90	-3.90	-3.80	0.593
C305-LP141909	-5.30	-5.70	-4.80	-5.00	0.492
C305-LP141910	-5.70	-6.20	-5.40	-5.20	0.630
C305-LP141911	-6.40	-6.20	-5.30	-5.70	0.859
C305-LP141912	-6.60	-6.50	#N/A	#N/A	#N/A
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

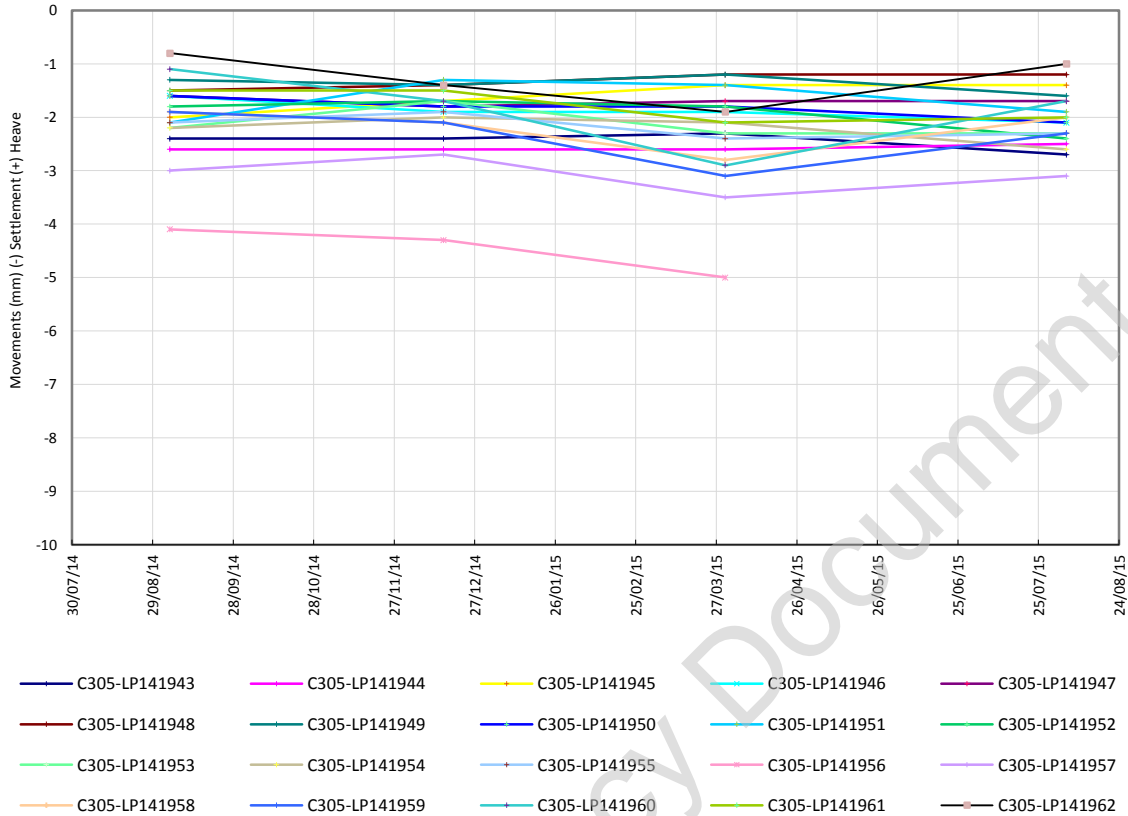
**C305-LP141943 – C305-LP141962**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -1.6 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -5 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP141943-C305-LP141962



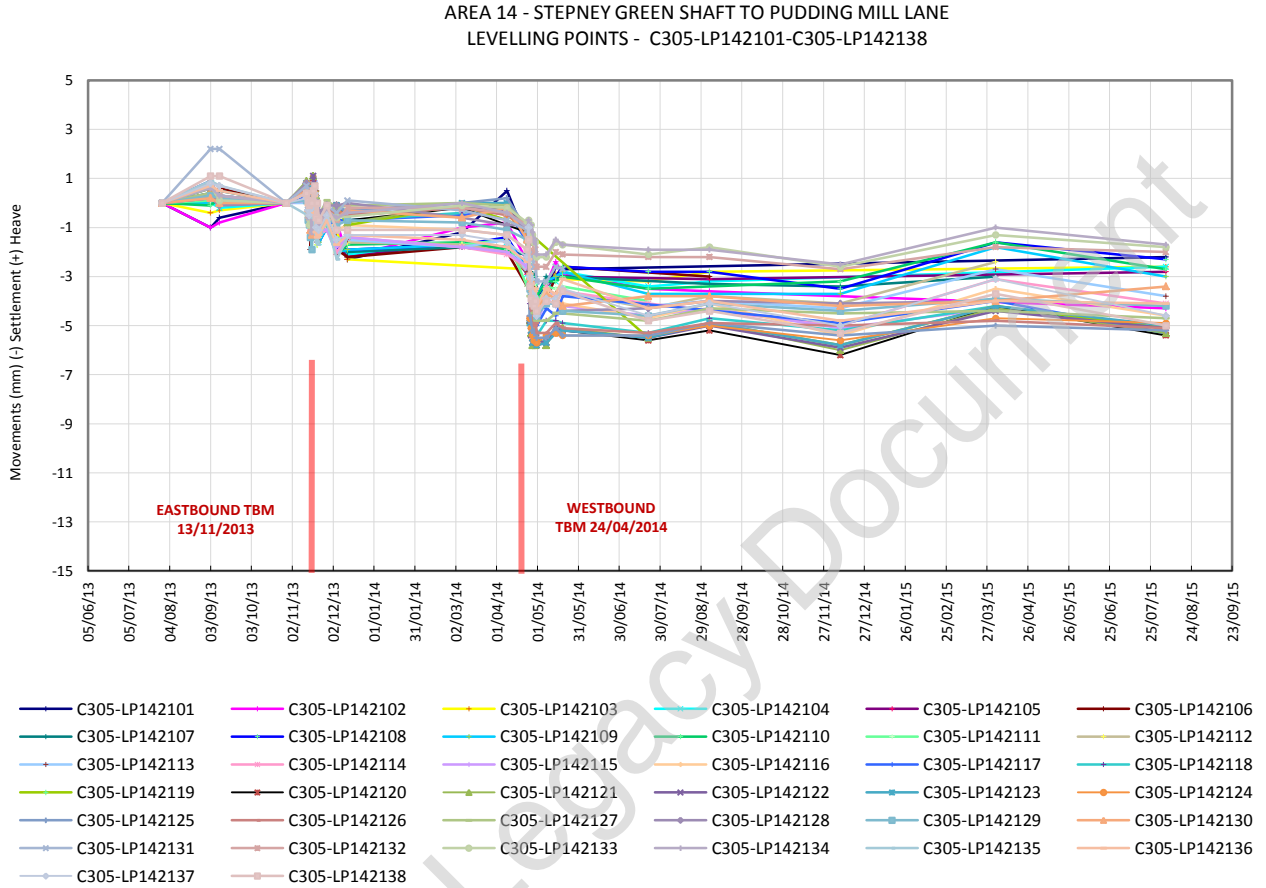
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	04/09/2014	15/12/2014	30/03/2015	04/08/2015	
C305-LP141943	-2.40	-2.40	-2.30	-2.70	-0.281
C305-LP141944	-2.60	-2.60	-2.60	-2.50	0.103
C305-LP141945	-2.00	-1.70	-1.40	-1.40	0.678
C305-LP141946	-1.60	-1.90	-1.90	-2.10	-0.492
C305-LP141947	-1.60	-1.80	-1.70	-1.70	-0.061
C305-LP141948	-1.50	-1.40	-1.20	-1.20	0.356
C305-LP141949	-1.30	-1.40	-1.20	-1.60	-0.246
C305-LP141950	-1.60	-1.80	-1.80	-2.10	-0.500
C305-LP141951	-2.10	-1.30	-1.40	-1.90	0.119
C305-LP141952	-1.80	-1.70	-1.80	-2.40	-0.652
C305-LP141953	-2.20	-1.70	-2.30	-2.30	-0.305
C305-LP141954	-2.20	-2.00	-2.10	-2.60	-0.454
C305-LP141955	-2.10	-1.90	-2.40	-2.30	-0.358
C305-LP141956	-4.10	-4.30	-5.00	#N/A	-1.592
C305-LP141957	-3.00	-2.70	-3.50	-3.10	-0.345
C305-LP141958	-1.90	-2.10	-2.80	-2.00	-0.280
C305-LP141959	-1.90	-2.10	-3.10	-2.30	-0.671
C305-LP141960	-1.10	-1.70	-2.90	-1.70	-0.902
C305-LP141961	-1.50	-1.50	-2.10	-2.00	-0.679
C305-LP141962	-0.80	-1.40	-1.90	-1.00	-0.298
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

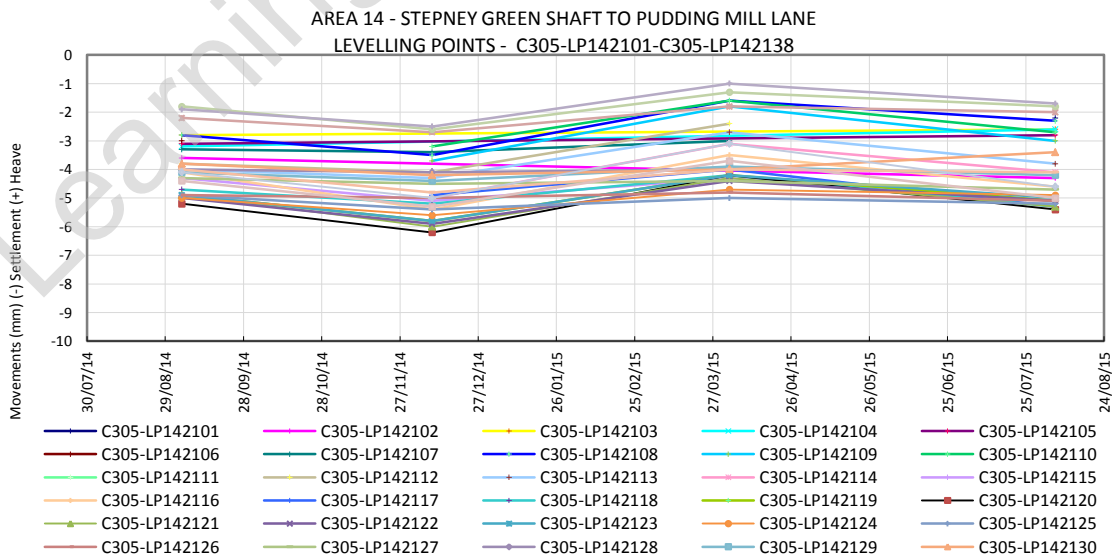
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP142101 – C305-LP142138**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -1.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -5.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

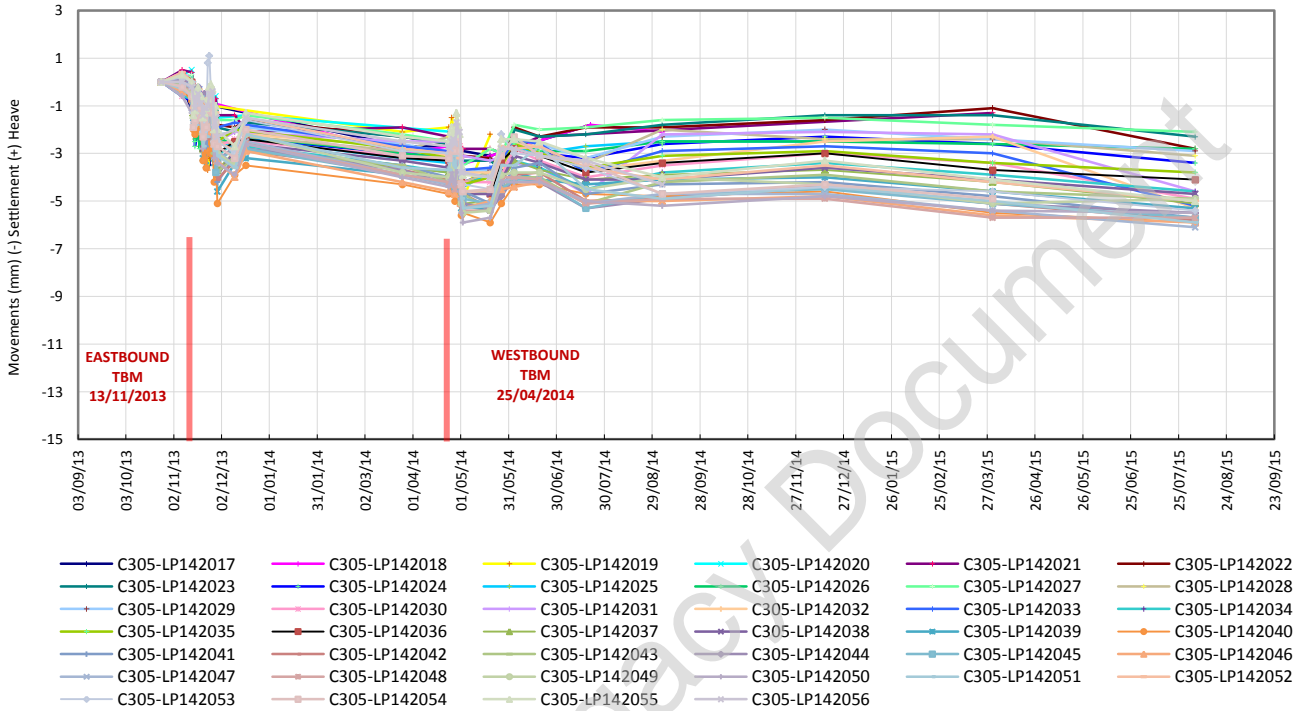
	Registered movement (mm)				mm/year
	04/09/2014	09/12/2014	02/04/2015	05/08/2015	
C305-LP142101	#N/A	#N/A	#N/A	-2.20	#N/A
C305-LP142102	-3.60	#N/A	#N/A	-4.30	-0.763
C305-LP142103	-2.80	#N/A	#N/A	-2.60	0.218
C305-LP142104	-3.20	#N/A	#N/A	-2.60	0.654
C305-LP142105	-3.10	#N/A	#N/A	-2.80	0.327
C305-LP142106	-3.00	#N/A	#N/A	#N/A	#N/A
C305-LP142107	-3.30	-3.40	-3.00	#N/A	0.545
C305-LP142108	-2.80	-3.50	-1.60	-2.30	1.116
C305-LP142109	#N/A	-3.70	-1.80	-3.00	0.995
C305-LP142110	#N/A	-3.20	-1.60	-2.70	0.700
C305-LP142111	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142112	-3.80	-4.10	-2.40	#N/A	2.526
C305-LP142113	-4.00	-4.30	-2.70	-3.80	0.691
C305-LP142114	#N/A	-5.00	-3.10	-4.10	1.305
C305-LP142115	-4.30	-5.10	-4.30	-5.10	-0.514
C305-LP142116	-4.10	-5.40	-3.50	-4.60	0.151
C305-LP142117	#N/A	-4.90	-4.00	-5.30	-0.662
C305-LP142118	-4.70	-5.20	-4.20	-5.30	-0.278
C305-LP142119	-4.90	-5.80	-4.20	-5.10	0.335
C305-LP142120	-5.20	-6.20	-4.20	-5.40	0.459
C305-LP142121	-4.90	-6.00	-4.30	-5.30	0.178
C305-LP142122	-5.00	-5.90	-4.40	-5.10	0.408
C305-LP142123	-4.90	-5.80	-4.20	-5.00	0.437
C305-LP142124	-5.00	-5.60	-4.70	-4.90	0.412
C305-LP142125	-4.90	-5.40	-5.00	-5.20	-0.147
C305-LP142126	-4.90	-5.00	-4.80	-5.10	-0.137
C305-LP142127	-4.30	-4.50	-4.40	-4.70	-0.360
C305-LP142128	-4.00	-4.10	-4.00	#N/A	0.010
C305-LP142129	-4.10	-4.40	-3.90	-4.20	0.068
C305-LP142130	-3.80	-4.20	-4.00	-3.40	0.498
C305-LP142131	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142132	-2.20	-2.70	-1.80	-2.00	0.505
C305-LP142133	-1.80	-2.60	-1.30	-1.80	0.443
C305-LP142134	-1.90	-2.50	-1.00	-1.70	0.687
C305-LP142135	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142136	-4.00	-4.80	-4.00	-4.10	0.197
C305-LP142137	-4.10	-5.00	-3.10	-4.60	0.117
C305-LP142138	-4.40	-5.30	-3.70	-5.00	-0.071
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP142017 – C305-LP142056**

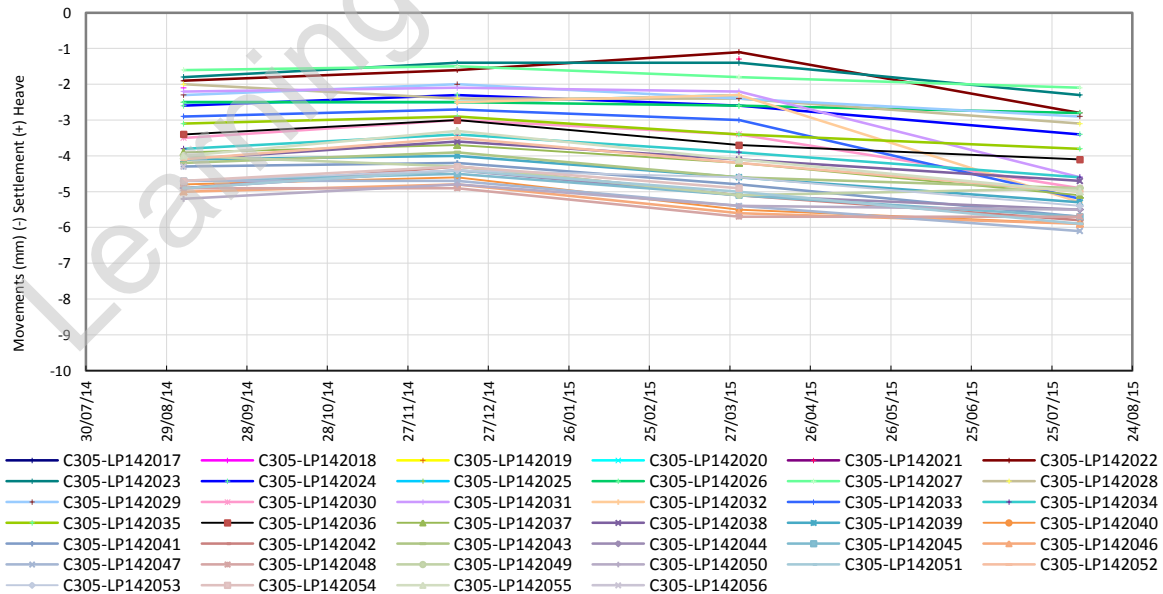
The graph presented below shows the levelling point readings from this array. A maximum settlement of -5.1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.1 mm after the Westbound TBM transit.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142017-C305-LP142056



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142017-C305-LP142056





The table below lists the annual settlement rate for the levelling points in this array.

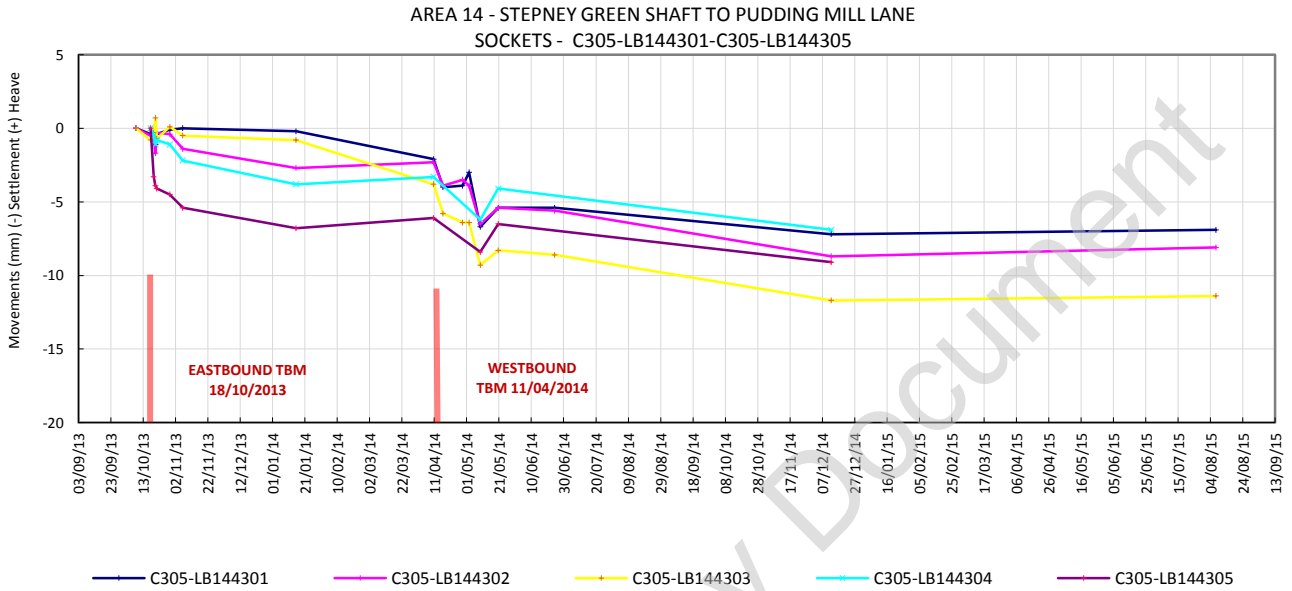
	Registered movement (mm)				mm/year
	04/09/2014	15/12/2014	30/03/2015	04/08/2015	
C305-LP142017	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142018	-2.10	#N/A	#N/A	#N/A	#N/A
C305-LP142019	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142020	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142021	#N/A	#N/A	-1.30	#N/A	#N/A
C305-LP142022	-1.90	-1.60	-1.10	-2.80	-0.811
C305-LP142023	-1.80	-1.40	-1.40	-2.30	-0.544
C305-LP142024	-2.60	-2.30	-2.60	-3.40	-0.928
C305-LP142025	-2.50	-2.50	-2.30	#N/A	0.354
C305-LP142026	-2.50	-2.50	-2.60	-2.80	-0.336
C305-LP142027	-1.60	-1.50	-1.80	-2.10	-0.604
C305-LP142028	-2.00	-2.40	-2.40	-3.10	-1.102
C305-LP142029	-2.30	-2.00	-2.40	-2.90	-0.749
C305-LP142030	-3.50	-3.00	-3.40	-4.90	-1.587
C305-LP142031	-2.20	-2.10	-2.20	-4.60	-2.504
C305-LP142032	#N/A	-2.50	-2.30	-5.30	#N/A
C305-LP142033	-2.90	-2.70	-3.00	-5.20	-2.464
C305-LP142034	-3.80	-3.40	-3.90	-4.60	-0.990
C305-LP142035	-3.10	-2.90	-3.40	-3.80	-0.872
C305-LP142036	-3.40	-3.00	-3.70	-4.10	-0.942
C305-LP142037	-3.90	-3.70	-4.20	-5.10	-1.387
C305-LP142038	-4.10	-3.60	-4.10	-4.70	-0.792
C305-LP142039	-4.10	-4.00	-4.60	-5.30	-1.407
C305-LP142040	-4.80	-4.60	-5.50	-5.90	-1.394
C305-LP142041	-4.30	-4.20	-4.80	-5.70	-1.613
C305-LP142042	-4.90	-4.30	-5.10	-5.80	-1.190
C305-LP142043	-4.20	-3.90	-4.60	-4.90	-0.935
C305-LP142044	-4.90	-4.40	-5.10	-5.50	-0.847
C305-LP142045	-4.70	-4.50	-5.10	-5.70	-1.208
C305-LP142046	-5.00	-4.80	-5.60	-5.90	-1.160
C305-LP142047	-4.70	-4.70	-5.40	-6.10	-1.633
C305-LP142048	-4.90	-4.90	-5.70	-5.70	-1.043
C305-LP142049	-4.00	-4.30	-5.10	-4.90	-1.123
C305-LP142050	-5.20	-4.80	-5.40	-5.50	-0.503
C305-LP142051	-4.90	-4.40	-5.00	-5.90	-1.231
C305-LP142052	-4.10	-3.50	-4.20	-5.00	-1.163
C305-LP142053	-4.70	-4.40	-4.60	-5.40	-0.797
C305-LP142054	-4.70	-4.30	-4.90	#N/A	-0.361
C305-LP142055	-4.00	-3.30	-4.10	-5.00	-1.300
C305-LP142056	-4.30	#N/A	#N/A	#N/A	#N/A
	Rate less than -2.5 mm/year			% less 2 mm/ year	97%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 97%.

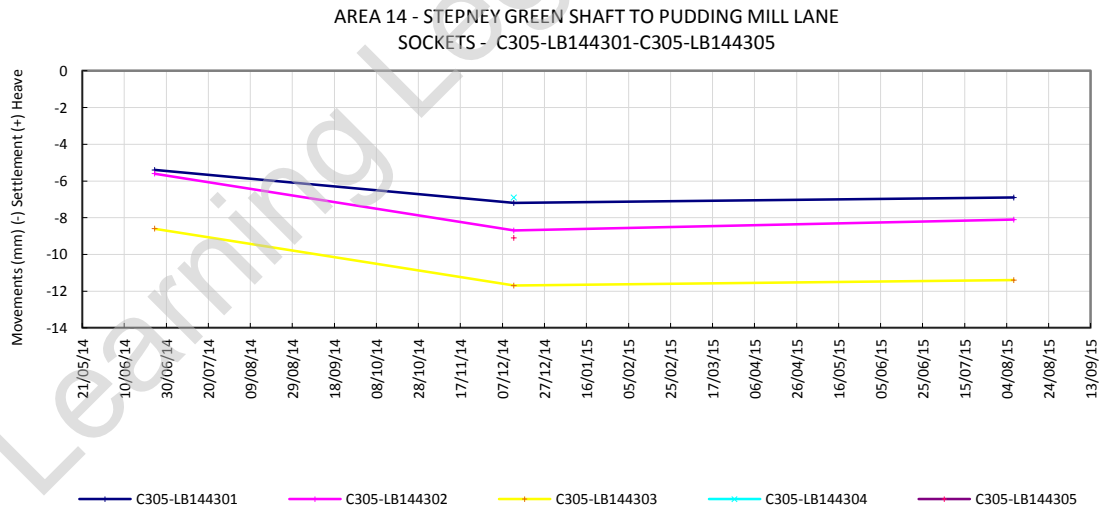
**SOCKETS**

**C305-LB144301 – C305-LB144305**

The graph presented below shows the readings from the socket readings from this array. A maximum settlement of -6.8 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -11.7 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



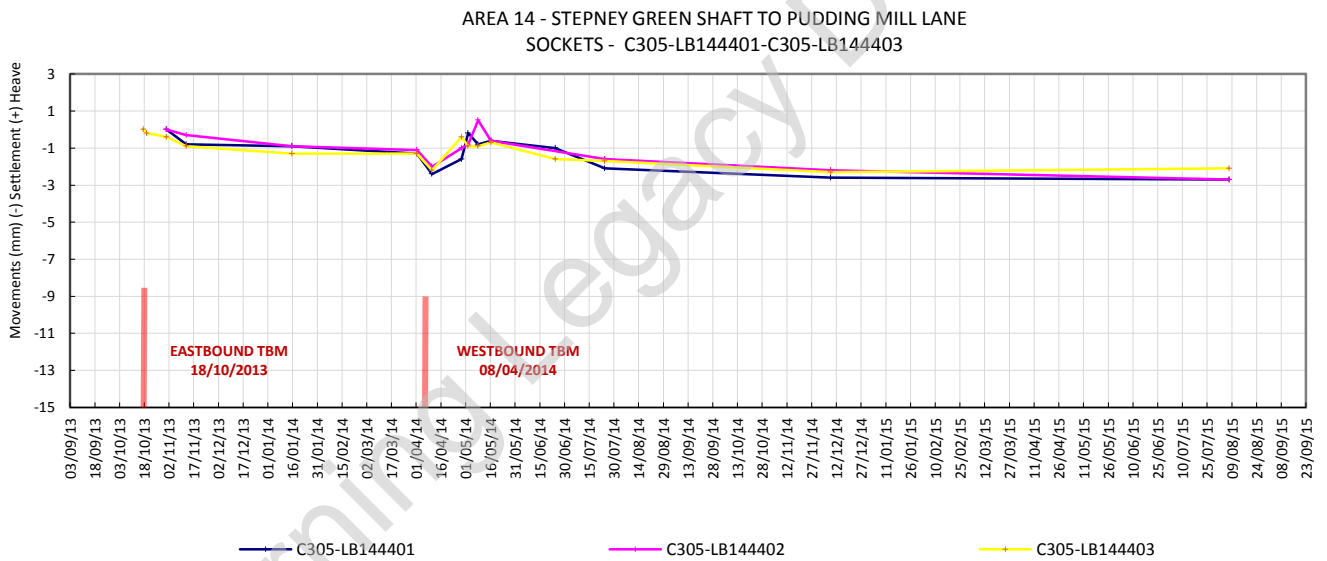
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)			mm/year
	24/06/2014	12/12/2014	07/08/2015	
C305-LB144301	-5.40	-7.20	-6.90	-1.226
C305-LB144302	-5.60	-8.70	-8.10	-2.033
C305-LB144303	-8.60	-11.70	-11.40	-2.313
C305-LB144304	#N/A	-6.90	#N/A	#N/A
C305-LB144305	#N/A	-9.10	#N/A	#N/A
	Rate less than -2.5 mm/year		% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

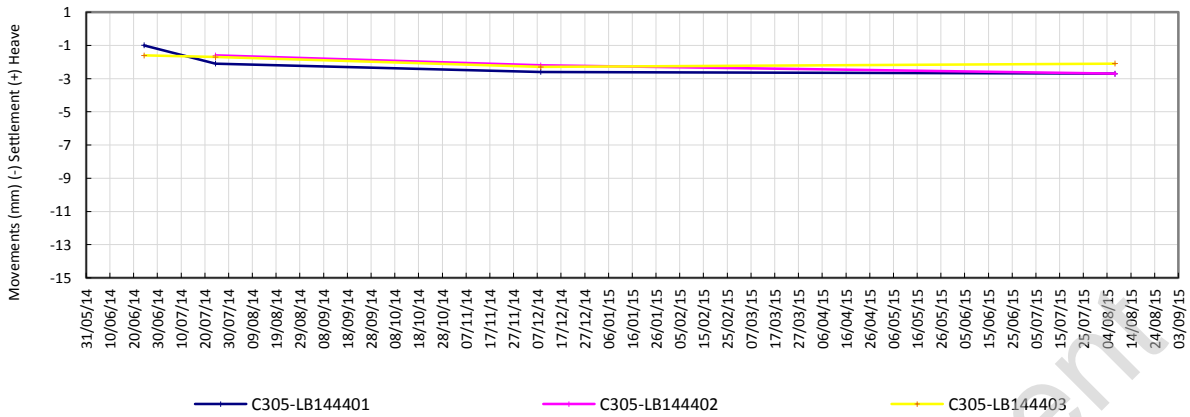
### C305-LB144401 – C305-LB144403

The graph presented below shows the readings from the socket readings from this array. A maximum settlement of -1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -2 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 SOCKETS - C305-LB144401-C305-LB144403



The table below lists the annual settlement rate for the sockets in this array.

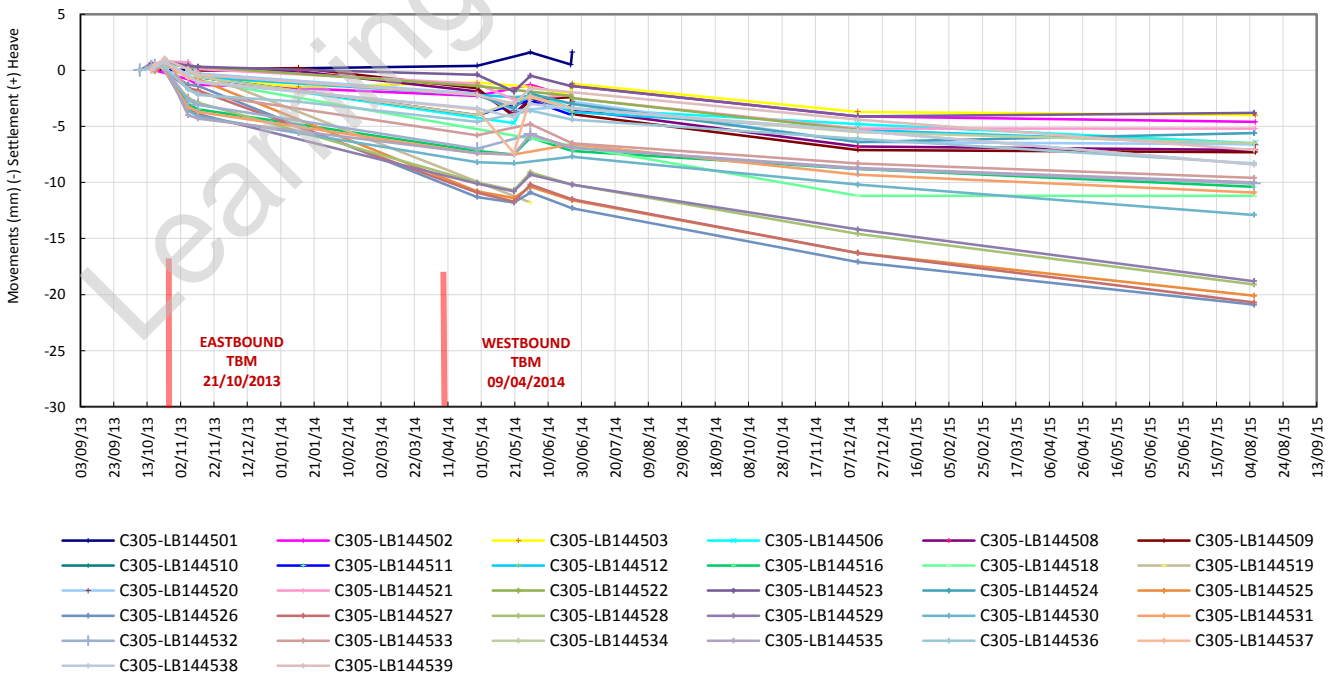
	Registered movement (mm)				mm/year
	24/06/2014	24/07/2014	08/12/2014	07/08/2015 10:00	
C305-LB144401	-1.00	-2.10	-2.60	-2.70	-1.152
C305-LB144402	#N/A	-1.60	-2.20	-2.70	-1.025
C305-LB144403	-1.60	-1.70	-2.30	-2.10	-0.446
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

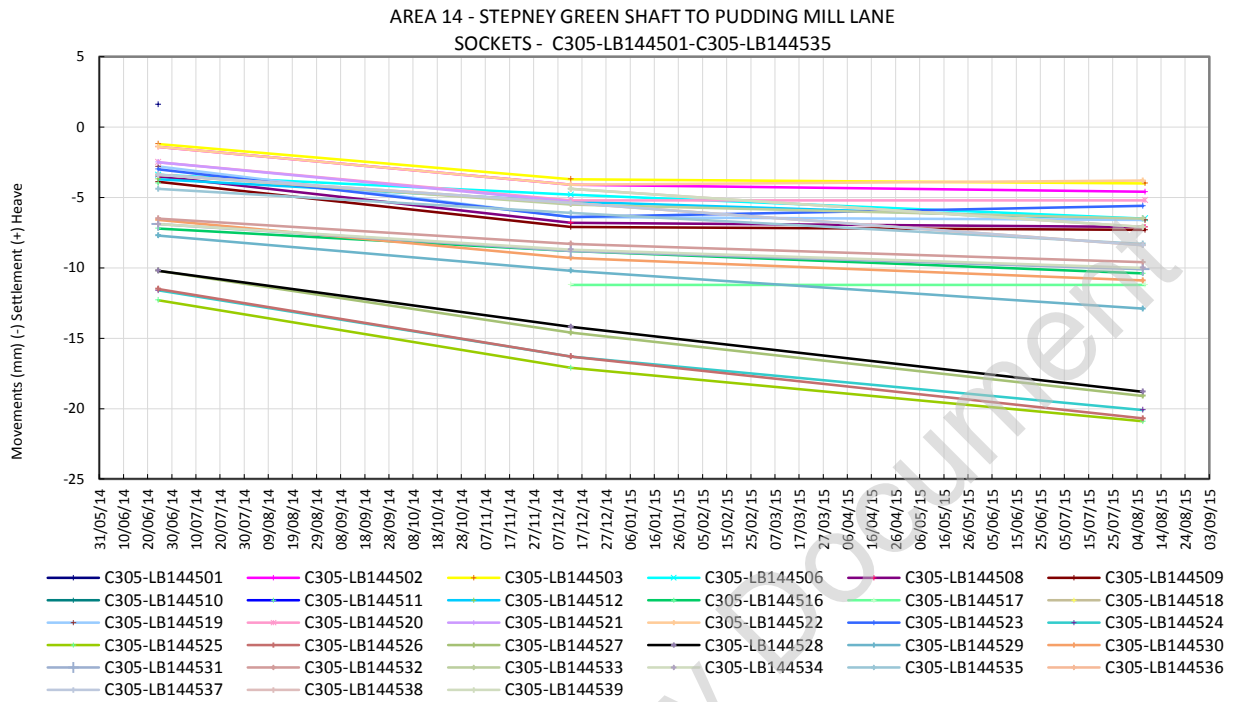
**C305-LB144501 – C305-LB144539**

The graph presented below shows the readings from the socket readings from this array. A maximum settlement of -10 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -20.7 mm after the Westbound TBM transit.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 SOCKETS- C305-LB144501-C305-LB144535



The next plot shows the trend line adjustment for the sockets in this array.



The table below lists the annual settlement rate for the sockets in this array.

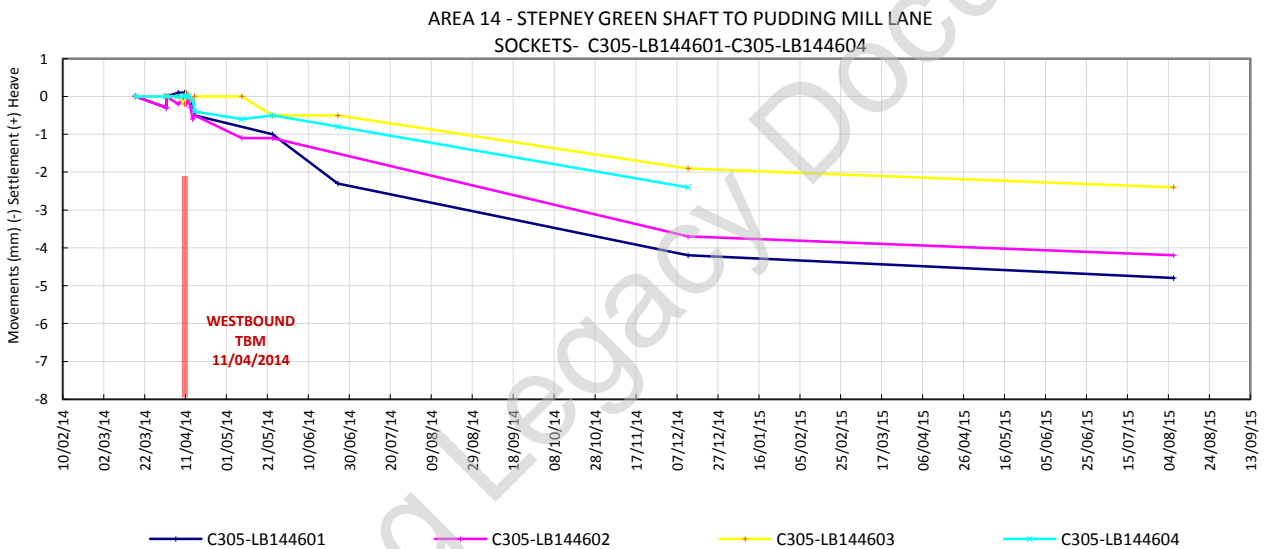
	Registered movement (mm)				mm/year
	24/06/2014	12/12/2014	06/08/2015	07/08/2015	
C305-LB144501	1.60	#N/A	#N/A	#N/A	#N/A
C305-LB144502	-1.40	-4.10	#N/A	-4.60	-2.725
C305-LB144503	-1.20	-3.70	#N/A	-4.00	-2.371
C305-LB144506	-3.40	-4.80	#N/A	-6.50	-2.757
C305-LB144508	-3.50	-6.80	#N/A	-7.10	-3.040
C305-LB144509	-3.90	-7.10	#N/A	-7.30	-2.863
C305-LB144510	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LB144511	-4.00	#N/A	#N/A	#N/A	#N/A
C305-LB144512	-3.70	-5.30	#N/A	-6.60	-2.551
C305-LB144516	-7.20	-8.80	-10.40	#N/A	-2.837
C305-LB144517	#N/A	-11.20	#N/A	-11.20	#N/A
C305-LB144518	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LB144519	-2.80	-6.40	#N/A	-6.60	-3.198
C305-LB144520	-2.50	-5.20	#N/A	-5.20	#N/A
C305-LB144521	-2.50	-5.30	#N/A	#N/A	-5.977
C305-LB144522	-1.40	-4.10	-3.80	#N/A	-1.984
C305-LB144523	-3.00	-6.40	-5.60	#N/A	-2.104
C305-LB144524	-11.60	-16.30	-20.10	#N/A	-7.494
C305-LB144525	-12.30	-17.10	-20.90	#N/A	-7.578
C305-LB144526	-11.50	-16.30	-20.70	#N/A	-8.138
C305-LB144527	-10.20	-14.60	-19.10	#N/A	-7.896
C305-LB144528	-10.20	-14.20	-18.80	#N/A	-7.654
C305-LB144529	-7.70	-10.20	-12.90	#N/A	-4.620
C305-LB144530	-6.60	-9.30	-10.90	#N/A	-3.760
C305-LB144531	-6.90	-8.80	-10.10	#N/A	-2.809
C305-LB144532	-6.50	-8.30	-9.60	#N/A	-2.725
C305-LB144533	-3.40	-5.50	-6.50	#N/A	-2.696
C305-LB144534	-6.90	-8.70	-10.00	#N/A	-2.725

	Registered movement (mm)				mm/year
	24/06/2014	12/12/2014	06/08/2015	07/08/2015	
C305-LB144535	-4.40	-6.10	-8.30	#N/A	-3.482
C305-LB144536	-3.40	-5.40	-8.40	#N/A	-4.481
C305-LB144537	-3.40	-5.40	-8.40	#N/A	-4.481
C305-LB144538	#N/A	-4.40	-7.10	#N/A	#N/A
C305-LB144539	#N/A	-4.40	-7.10	#N/A	#N/A
	Rate less than -2.5 mm/year			% less 2 mm/ year	12%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	60%

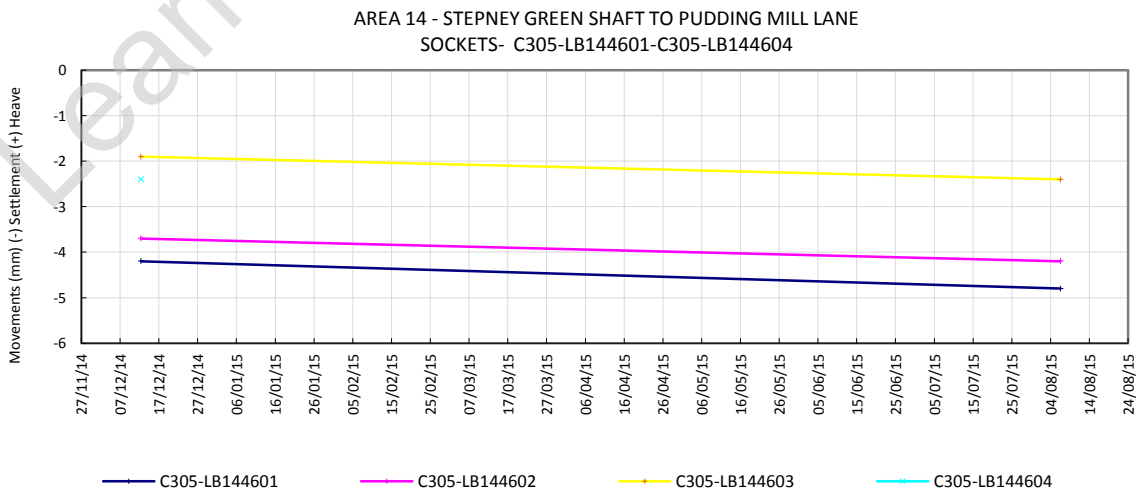
The percentage of the sockets with a settlement rate less than 3 mm/year is 60%

**C305-LB144601 – C305-LB144604**

The graph presented below shows the readings from the socket readings from this array. No significant settlement was recorded after the Eastbound TBM transit and a total maximum settlement of -4.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



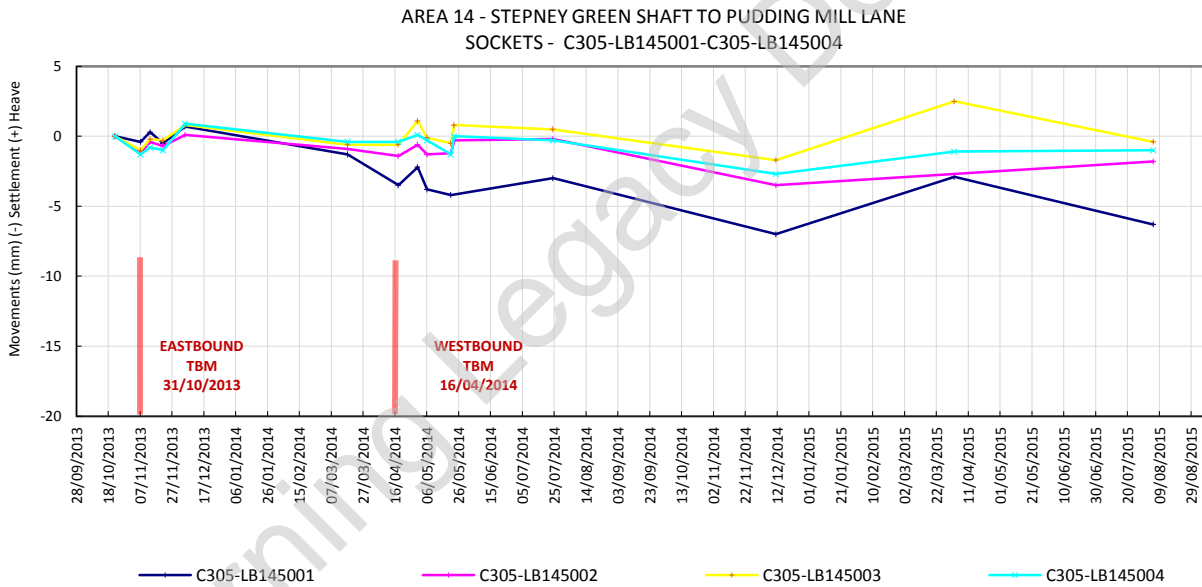
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)		mm/year
	12/12/2014	06/08/2015	
C305-LB144601	-4.20	-4.80	-0.923
C305-LB144602	-3.70	-4.20	-0.769
C305-LB144603	-1.90	-2.40	-0.769
C305-LB144604	-2.40	#N/A	#N/A
	Rate less than -2.5 mm/year	% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year	% less 3 mm/ year	100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

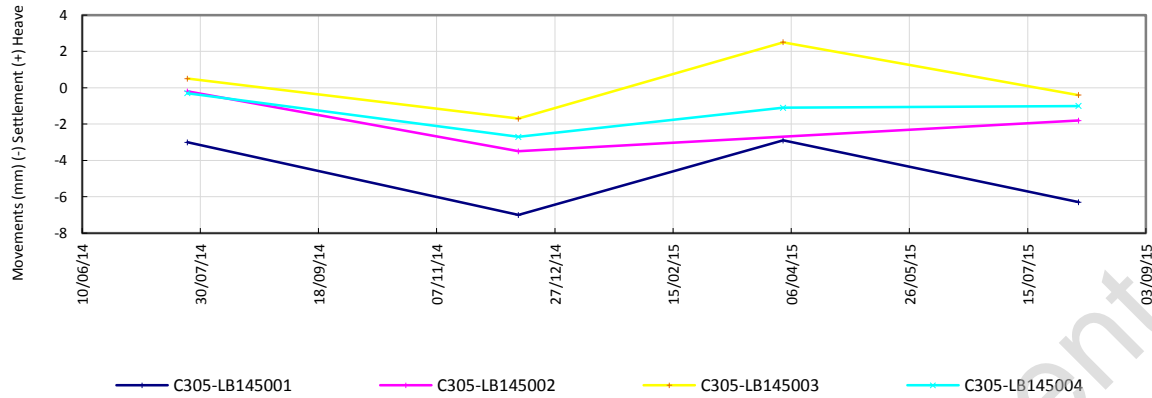
**C305-LB145001 – C305-LP145004**

The graph presented below shows the readings from the socket readings from this array. A maximum settlement of -0.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 SOCKETS- C305-LB145001-C305-LB145004



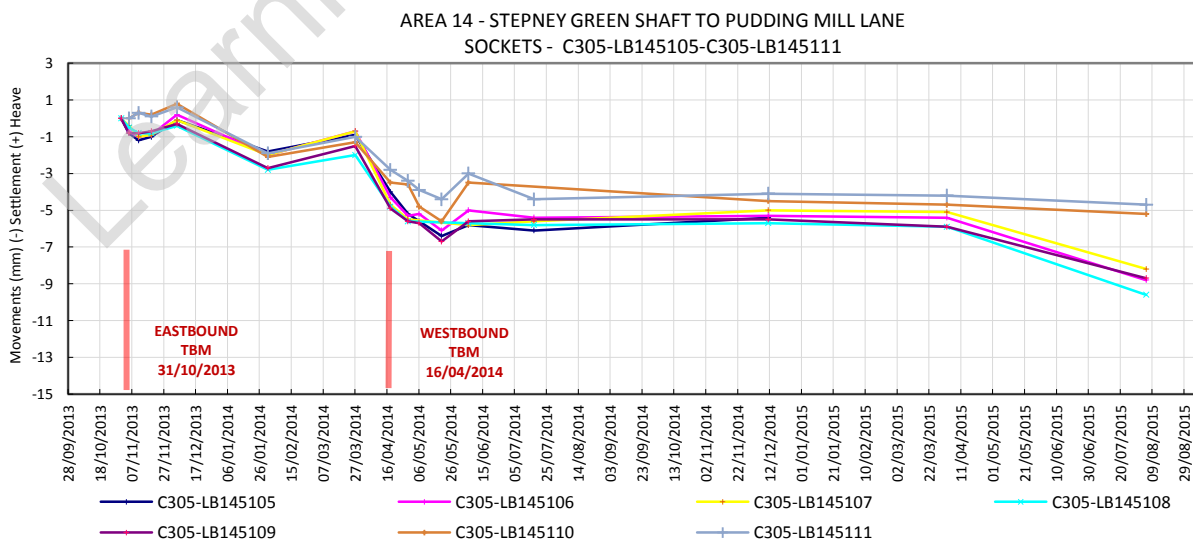
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	24/07/2014	11/12/2014	02/04/2015	05/08/2015	
C305-LB145001	-3.00	-7.00	-2.90	-6.30	-1.861
C305-LB145002	-0.20	-3.50	#N/A	-1.80	#N/A
C305-LB145003	0.50	-1.70	2.50	-0.40	0.322
C305-LB145004	-0.30	-2.70	-1.10	-1.00	-0.244
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

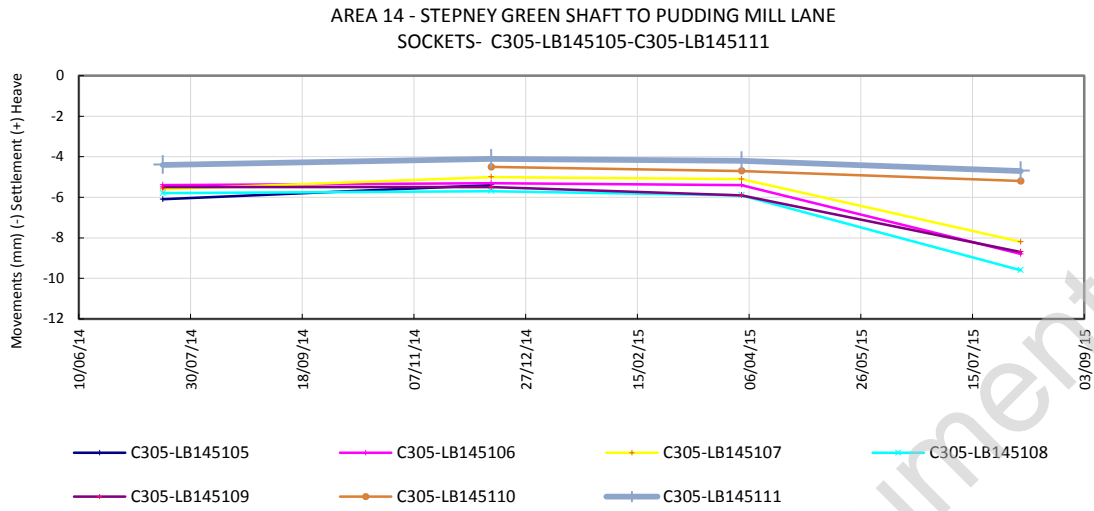
**C305-LB145105 – C305-LB145111**

The graph presented below shows the readings from the socket readings from this array. A maximum settlement of -3 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -9.6 mm after the Westbound TBM transit.





The next plot shows the trend line adjustment for the sockets in this array.



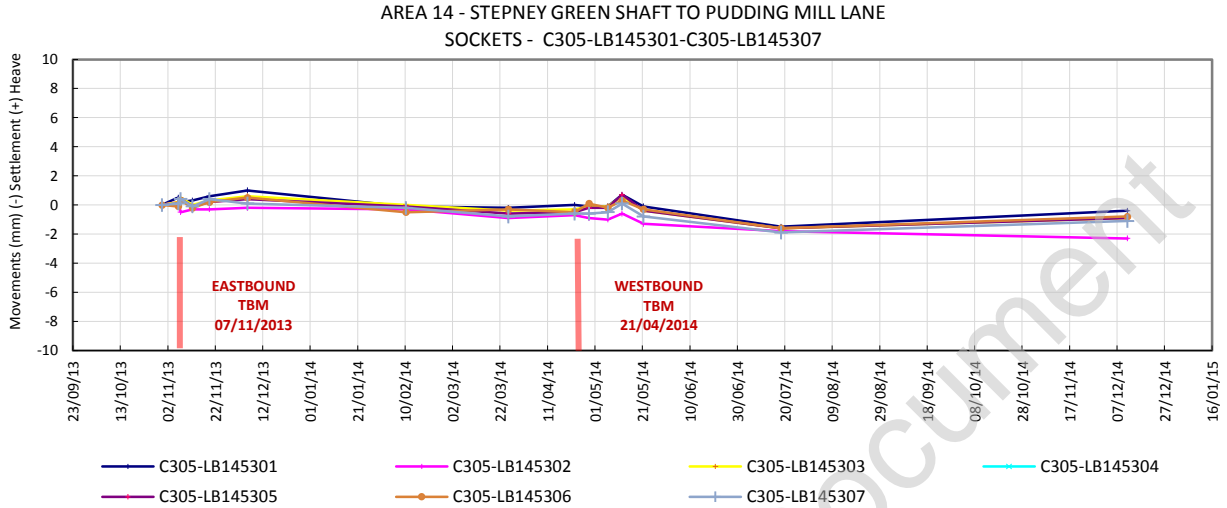
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	17/07/2014	11/12/2014	02/04/2015	05/08/2015	
C305-LB145105	-6.10	-5.40	#N/A	#N/A	#N/A
C305-LB145106	-5.40	-5.30	-5.40	-8.80	-2.912
C305-LB145107	-5.60	-5.00	-5.10	-8.20	-2.207
C305-LB145108	-5.80	-5.70	-5.90	-9.60	-3.280
C305-LB145109	-5.50	-5.50	-5.90	-8.70	-2.831
C305-LB145110	#N/A	-4.50	-4.70	-5.20	-1.085
C305-LB145111	-4.40	-4.10	-4.20	-4.70	-0.268
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	50%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

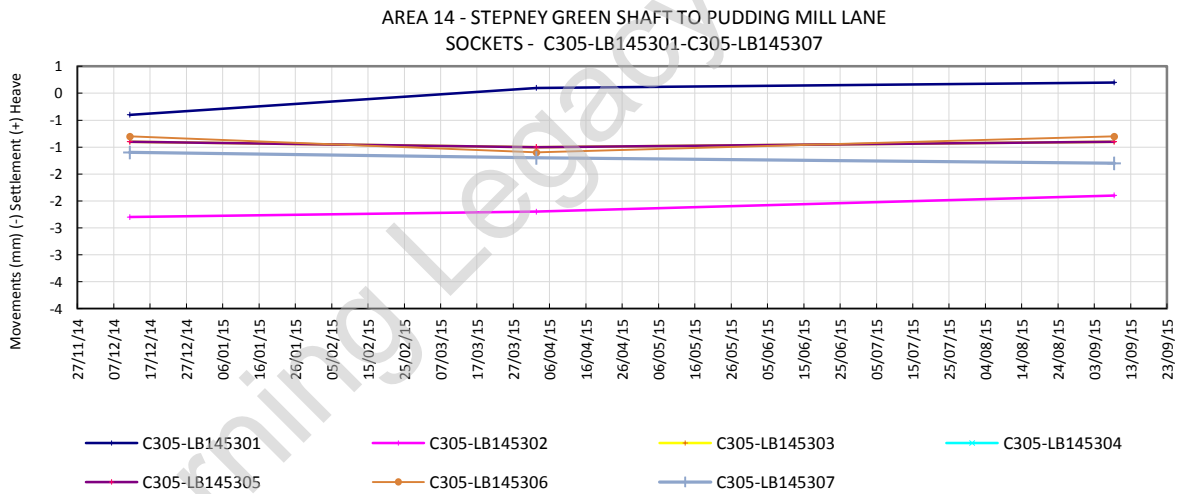
The percentage of the sockets with a settlement rate less than 3 mm/year is 100%.

**C305-LB145301 – C305-LP145307**

The graph presented below shows the readings from the socket readings from this array. No significant settlement was recorded after the Eastbound TBM transit and a total maximum settlement of -2.3 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



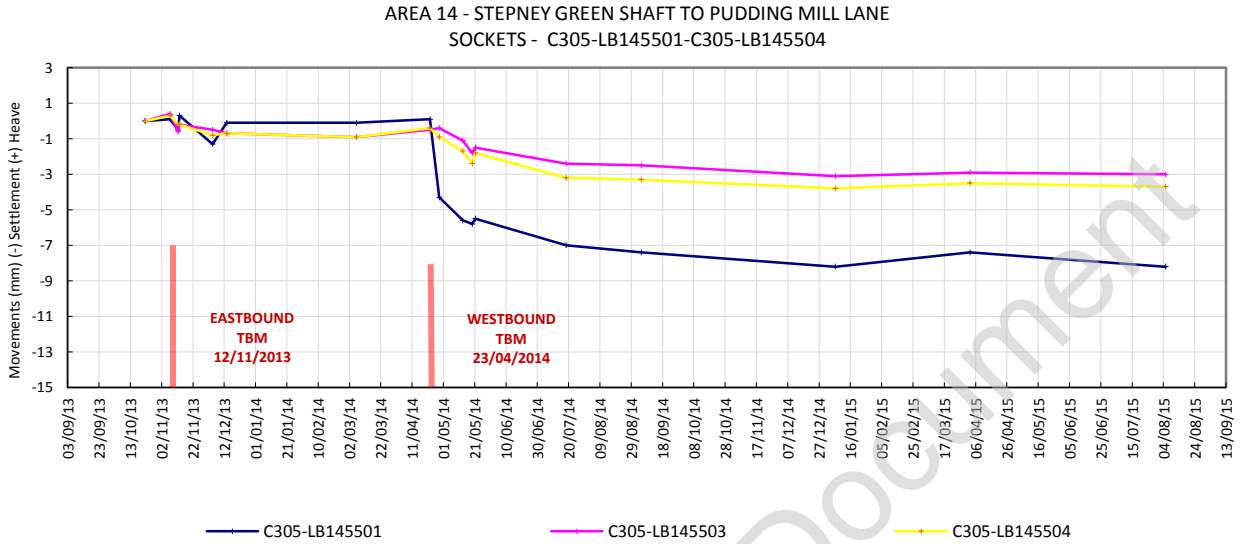
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)			mm/year
	11/12/2014	02/04/2015	08/09/2015	
C305-LB145301	-0.40	0.10	0.20	-1.164
C305-LB145302	-2.30	-2.20	-1.90	-2.370
C305-LB145303	-0.90	-1.00	-0.90	-1.712
C305-LB145304	#N/A	#N/A	#N/A	#N/A
C305-LB145305	-0.90	-1.00	-0.90	-1.803
C305-LB145306	-0.80	-1.10	-0.80	-1.343
C305-LB145307	-1.10	-1.20	-1.30	-1.275
			<b>% less 2 mm/ year</b>	100%
			<b>% less 3 mm/ year</b>	100%

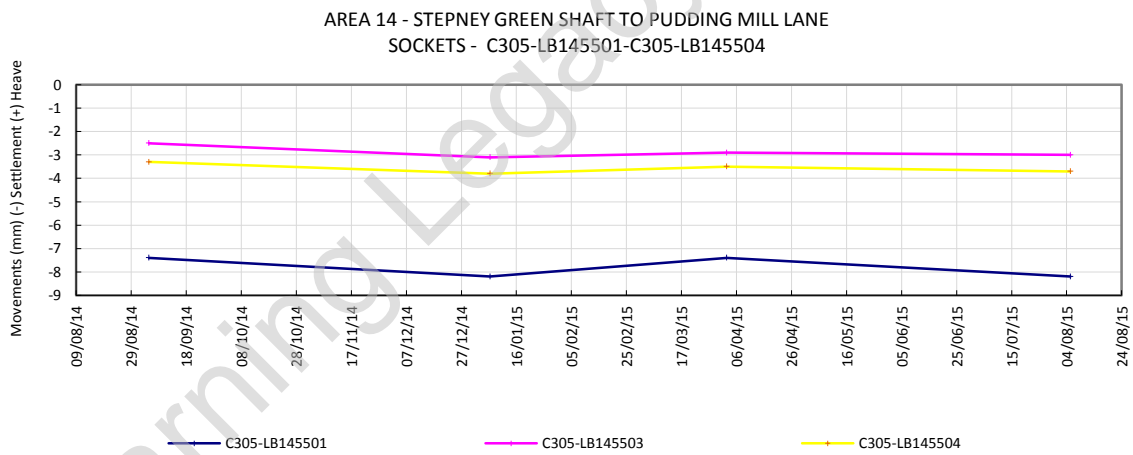
The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

**C305-LB145501 – C305-LP145504**

The graph presented below shows the readings from the socket readings from this array. A maximum settlement of -0.8 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.2 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



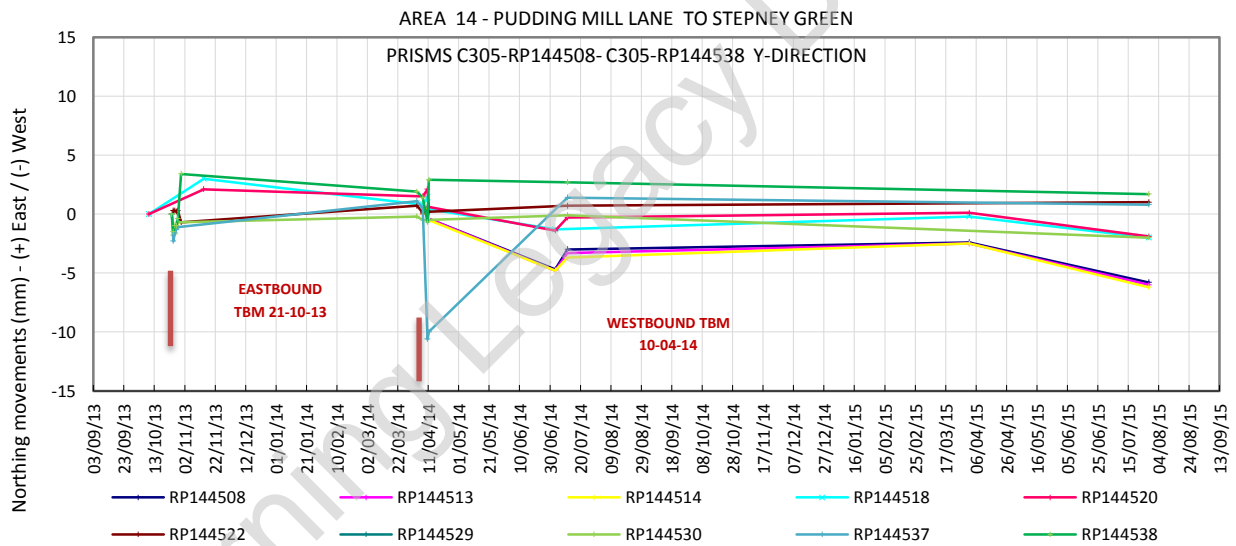
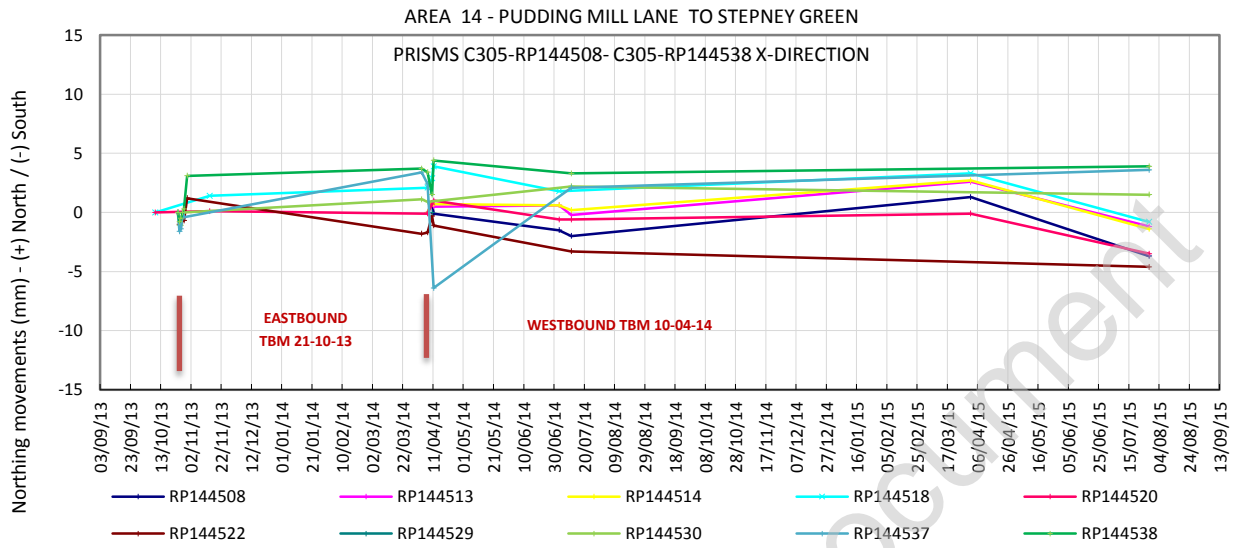
The table below lists the annual settlement rate for the sockets in this array.

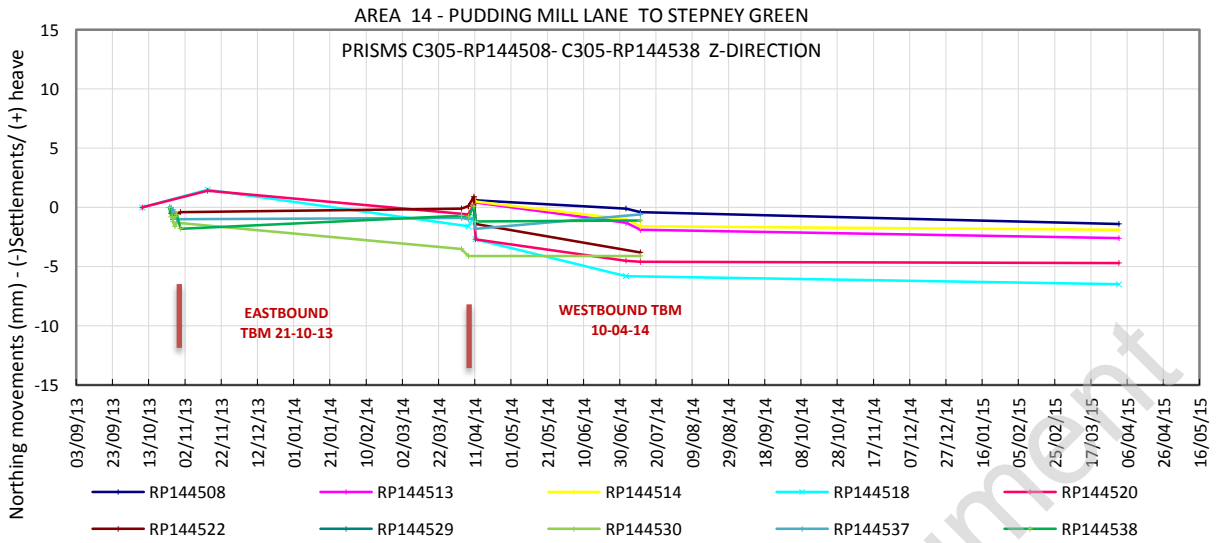
	Registered movement (mm)				mm/year
	04/09/2014	06/01/2015	02/04/2015	05/08/2015	
C305-LB145501	-7.40	-8.20	-7.40	-8.20	-0.608
C305-LB145503	-2.50	-3.10	-2.90	-3.00	-0.458
C305-LB145504	-3.30	-3.80	-3.50	-3.70	-0.330
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

3D PRISMS AND RETRO TARGETS

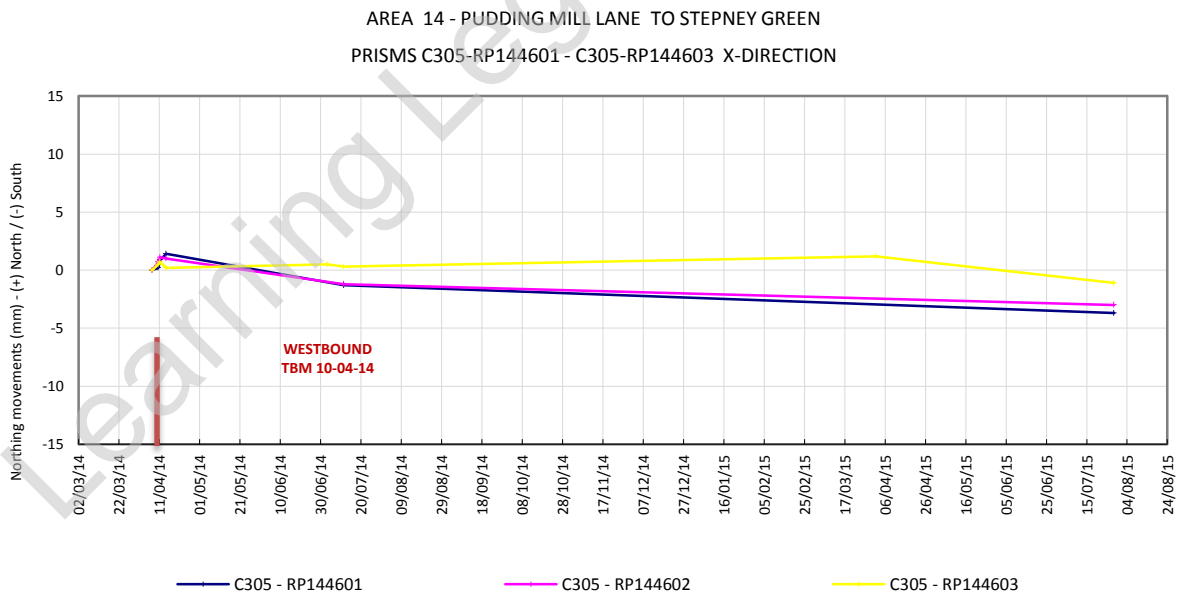
C305-RP144508 – C305-RP144538

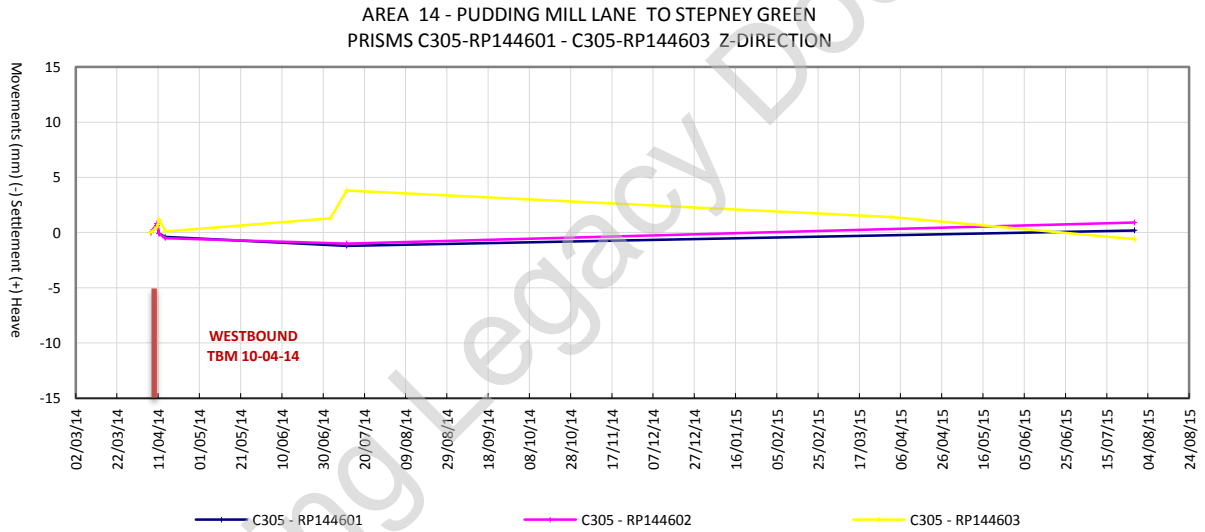
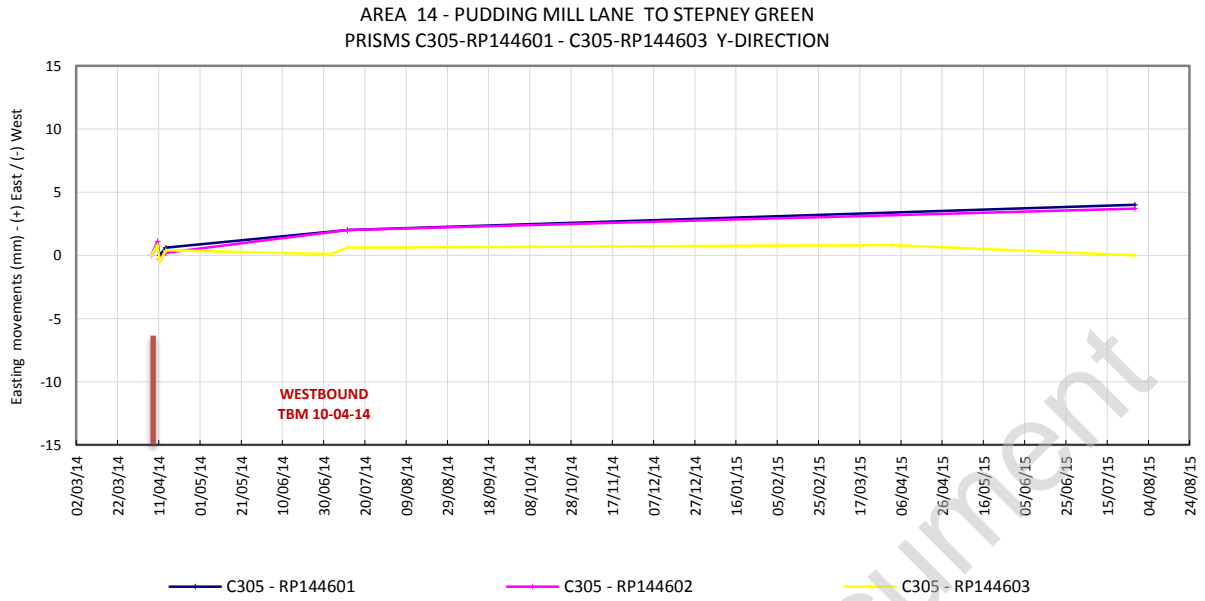




The X Axis shows a maximum movement of -6.3 mm after the Westbound TBM transit.  
 The Y Axis shows a maximum movement of -6.2 mm after the Westbound TBM transit.  
 The Z Axis shows a maximum settlement of -6.5 mm after the Westbound TBM transit.

**C305-RP144601 - C305-RP144603**



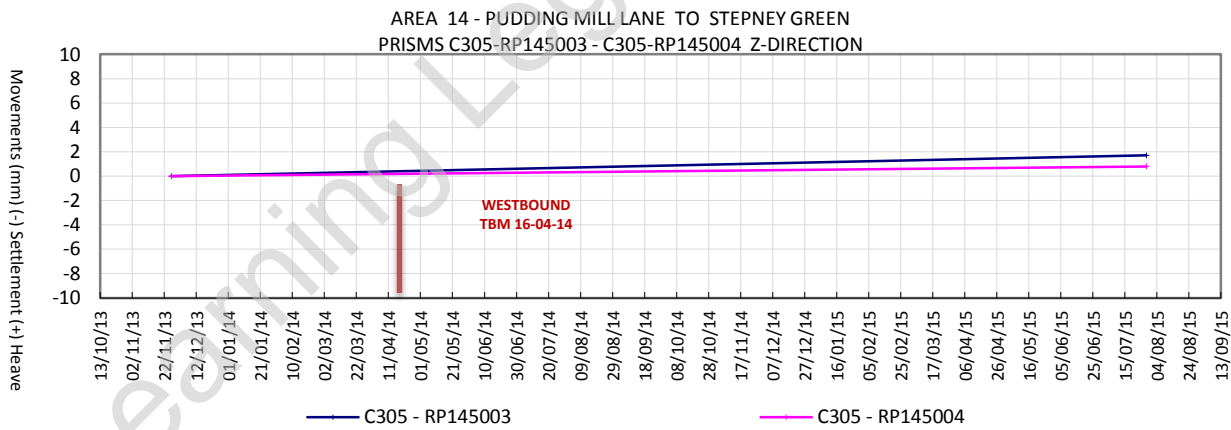
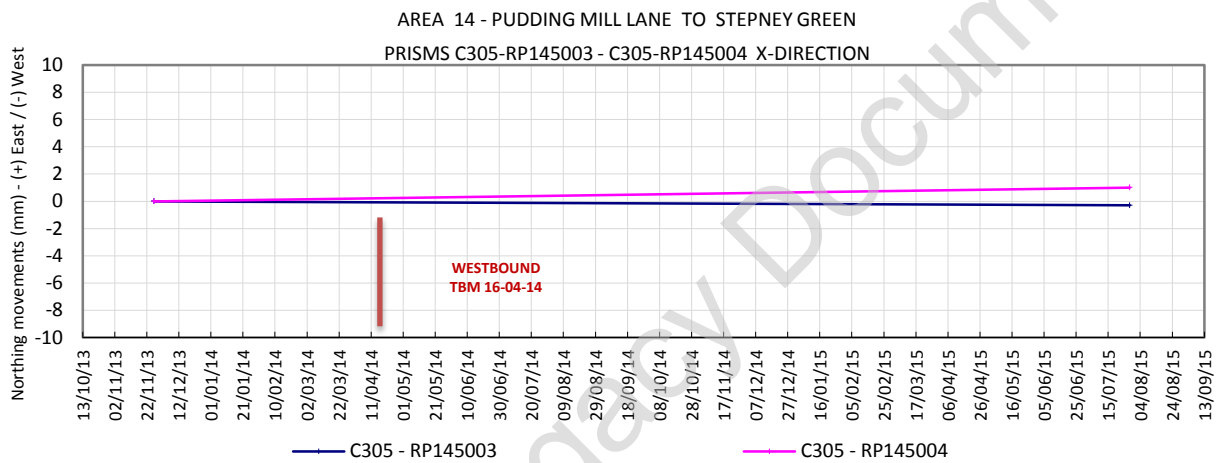
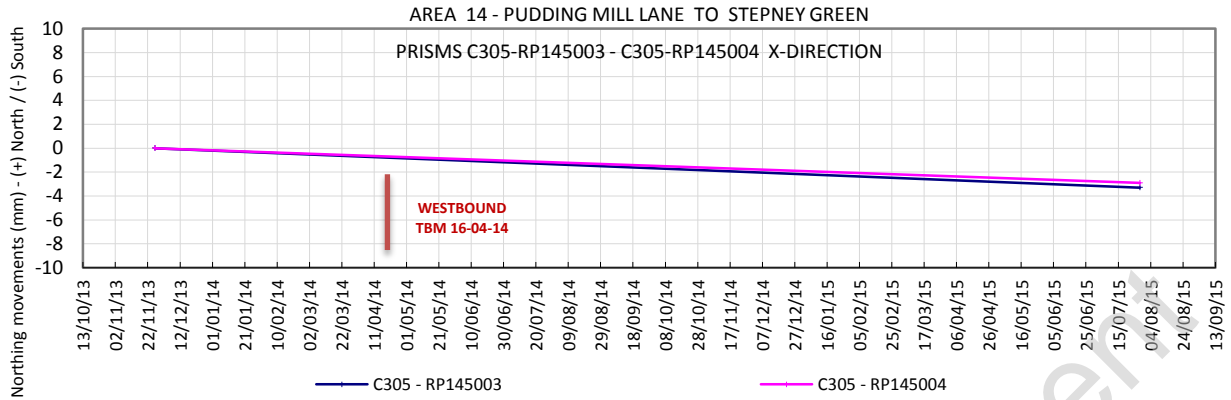


The X Axis shows a maximum movement of -3.7 mm after the Westbound TBM transit.

The Y Axis shows a maximum movement of 4 mm after the Westbound TBM transit.

The Z Axis shows a maximum movement of 3.8 mm after the Westbound TBM transit.

**C305-RP145003 - C305-RP145004**



The X Axis shows a maximum movement of -2.9 mm after the Westbound TBM transit.

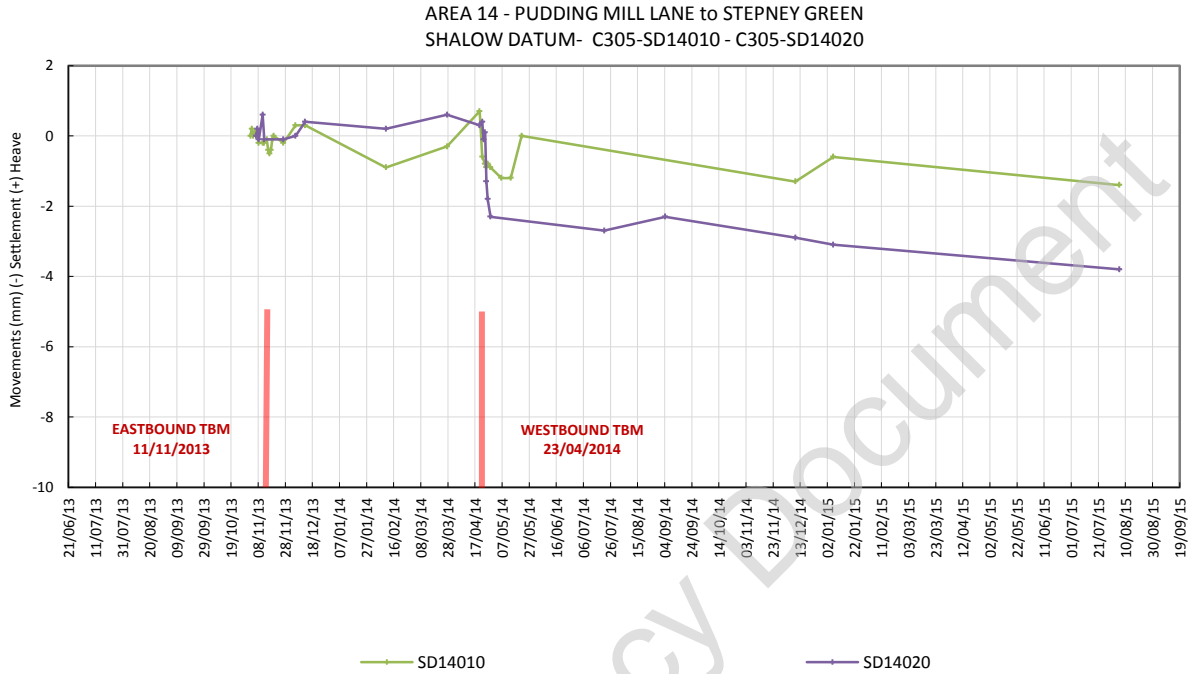
The Y Axis shows a maximum movement of 1 mm after the Westbound TBM transit.

The Z Axis shows a maximum movement of 2 mm after the Westbound TBM transit.

SHALLOW DATUM

C305-SD14010 and C305-SD14020

The graph below shows the data for shallow datum: C305-SD14010 and C305-SD14020; there was a maximum settlement of -1 mm after the Eastbound TBM transit and -3.8 mm after Westbound TBM transit.

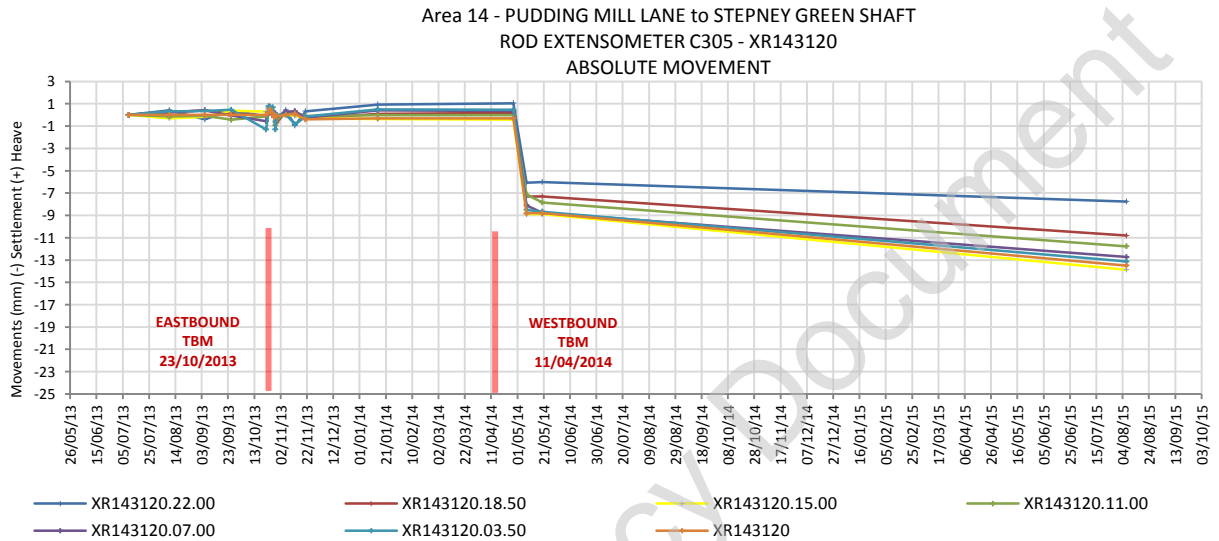




**ROD EXTENSOMETERS**

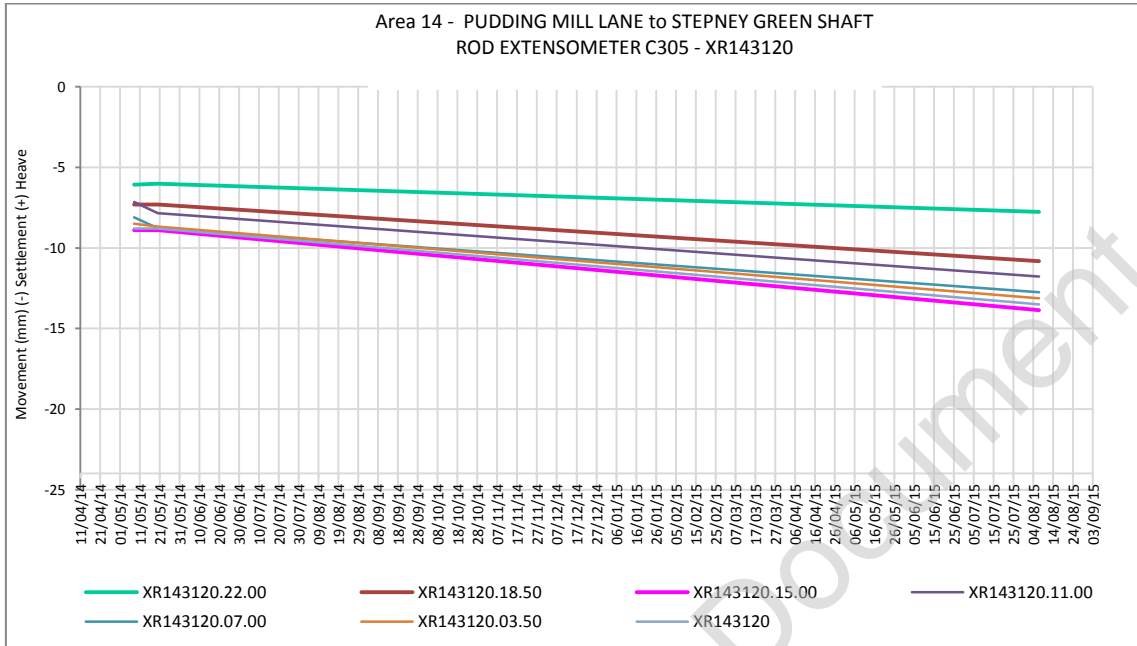
For each rod extensometer two graphs are displayed; showing relative and absolute movements. The graph for relative movement shows the movement of the rod extensometers without taking in account the head level elevation. The graph for absolute movement includes the levelling of the head level, adding the value to the relative movement of the rods.

**C305 - XR0143120**



The graphs above show an absolute settlement of -1 mm after the Eastbound TBM transit and an additional settlement of -13 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

	Registered Movement (mm)			Rate (mm/year)
	08/05/2014	20/05/2014	07/08/2015	
XR143120.22.00	-6.07	-6.01	-7.76	-1.393
XR143120.18.50	-7.31	-7.30	-10.82	-2.849
XR143120.15.00	-8.89	-8.89	-13.87	-4.037
XR143120.11.00	-7.15	-7.85	-11.77	-3.473
XR143120.07.00	-8.10	-8.78	-12.74	-3.497
XR143120.03.50	-8.50	-8.67	-13.13	-3.687
XR143120	-8.80	-8.80	-13.50	-3.810
	Rate less than -2.5 mm/year		% less 2 mm/ year	14.29%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	57.14%

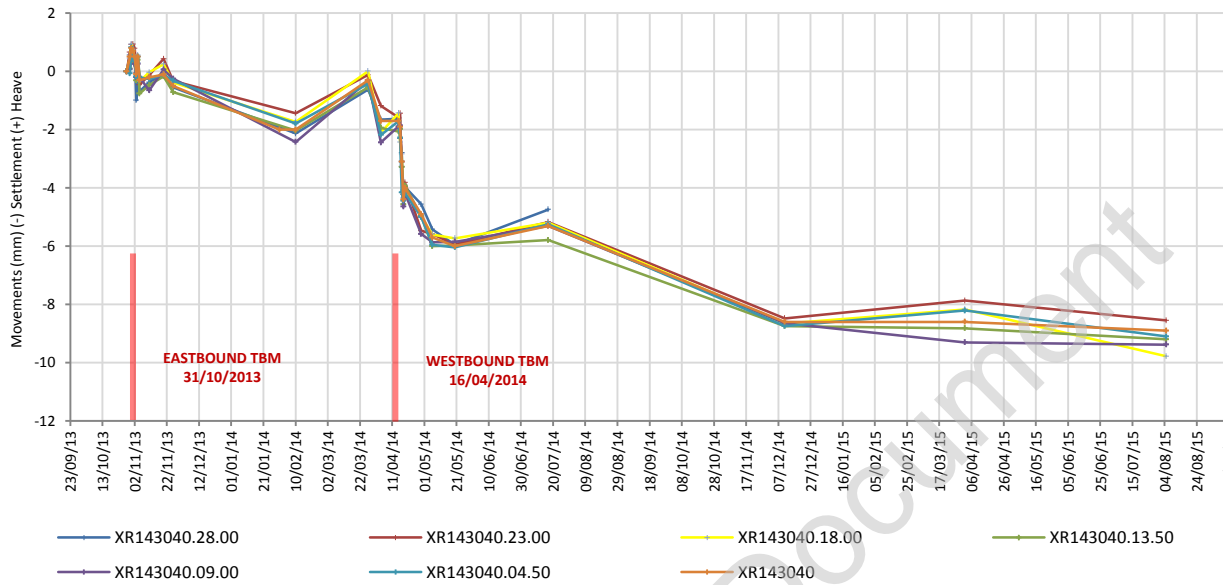
Note: All the movements are in mm. (-) Settlement / (+) Heave

#N/A: No readings

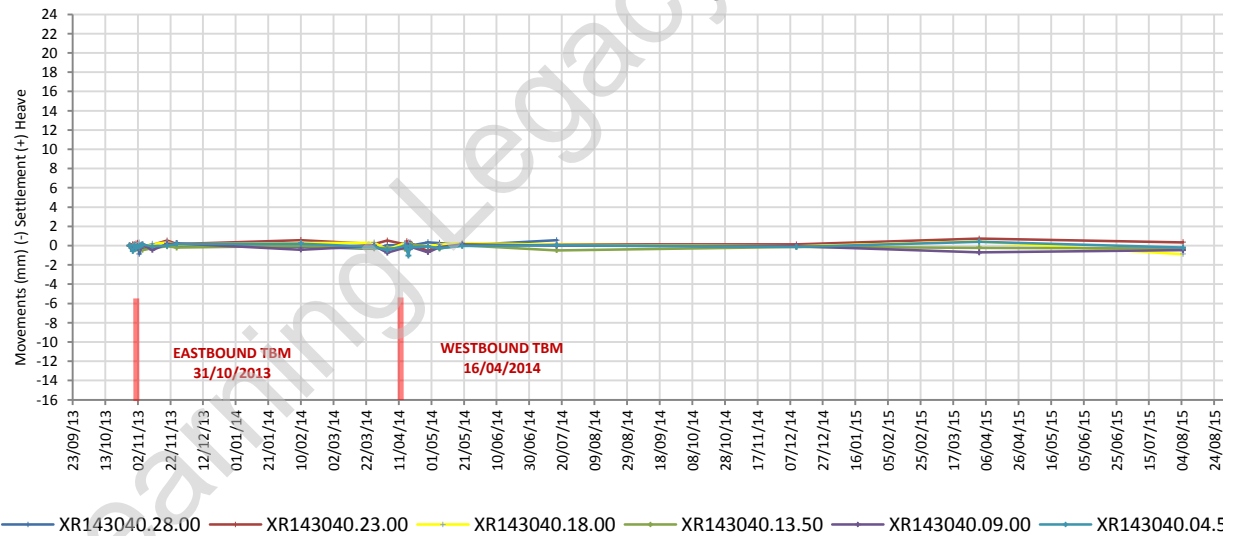
The percentage of the rods with a settlement rate less than 3 mm/year is 57 %

**C305 - XR0143040**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR143040  
 ABSOLUTE MOVEMENT

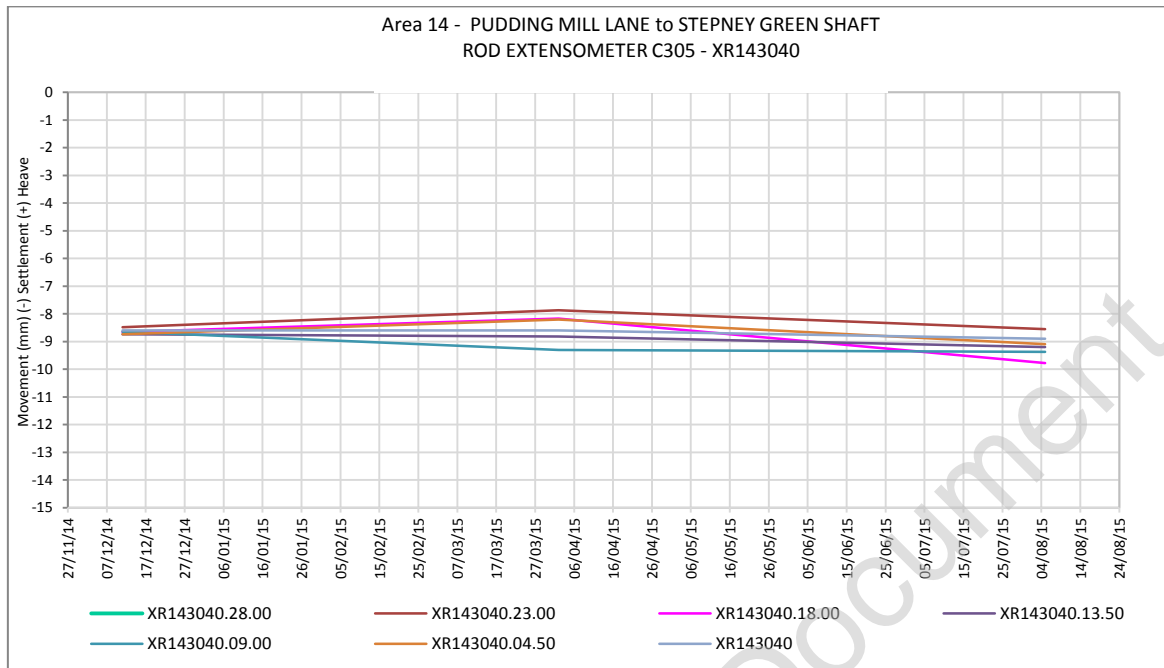


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR143040  
 RELATIVE MOVEMENT



The graphs above show an absolute settlement of -2 mm after the Eastbound TBM transit and an additional settlement of -9 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

	Registered Movement (mm)			Rate (mm/year)
	11/12/2014	02/04/2015	05/08/2015	
XR143040.28.00	#N/A	#N/A	#N/A	#N/A
XR143040.23.00	-8.48	-7.87	-8.55	-0.144
XR143040.18.00	-8.66	-8.17	-9.78	-1.782
XR143040.13.50	-8.74	-8.82	-9.20	-0.716
XR143040.09.00	-8.65	-9.30	-9.38	-1.107
XR143040.04.50	-8.74	-8.21	-9.10	-0.594
XR143040	-8.60	-8.60	-8.90	-0.470
	Rate less than -2.5 mm/year	% less 2 mm/ year		100.00%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		100.00%

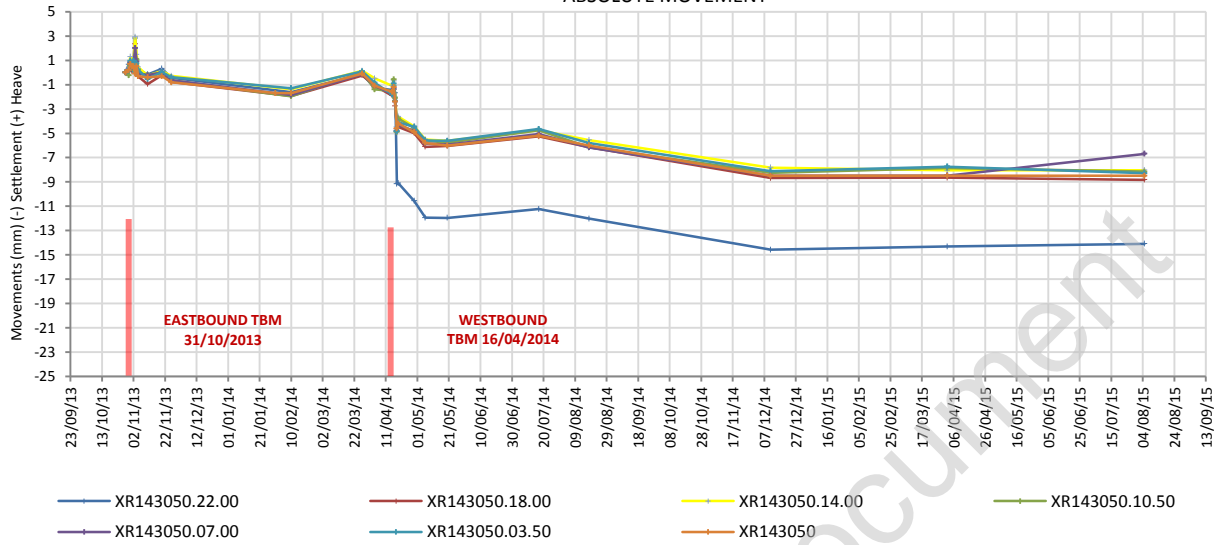
Note: All the movements are in mm. (-) Settlement / (+) Heave

#N/A: No readings

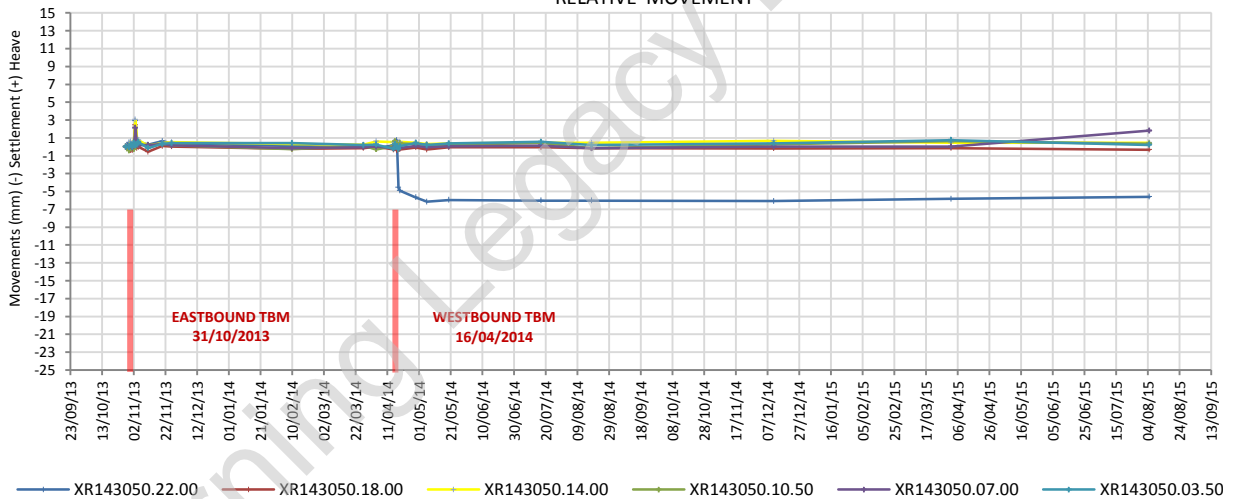
The percentage of the rods with a settlement rate less than 2 mm/year is 100 %

**C305 - XR0143050**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR143050  
 ABSOLUTE MOVEMENT

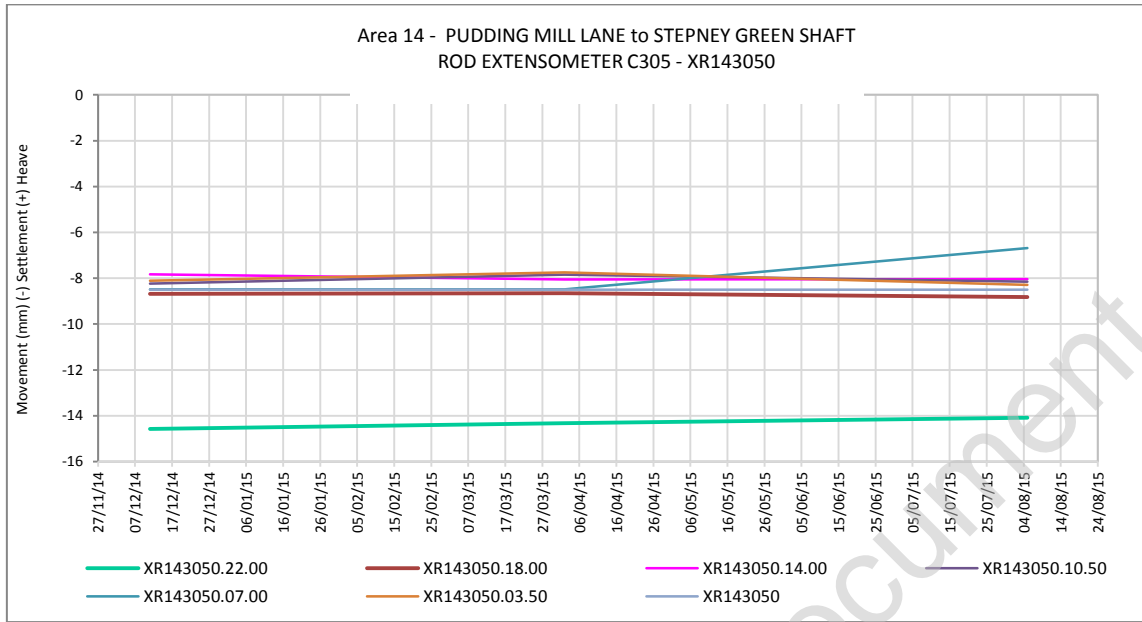


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR143050  
 RELATIVE MOVEMENT



The graphs above show an absolute settlement of -1.7 mm after the Eastbound TBM transit and an additional settlement of -14.5 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

	Registered Movement (mm)			Rate (mm/year)
	11/12/2014	02/04/2015	05/08/2015	
XR143050.22.00	-14.58	-14.32	-14.09	0.753
XR143050.18.00	-8.68	-8.65	-8.82	-0.221
XR143050.14.00	-7.83	-8.05	-8.04	-0.317
XR143050.10.50	-8.24	-7.85	-8.15	0.119
XR143050.07.00	-8.48	-8.48	-6.69	2.804
XR143050.03.50	-8.11	-7.75	-8.29	-0.302
XR143050	-8.50	-8.50	-8.50	0.000
	Rate less than -2.5 mm/year		% less 2 mm/ year	100.00%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	100.00%

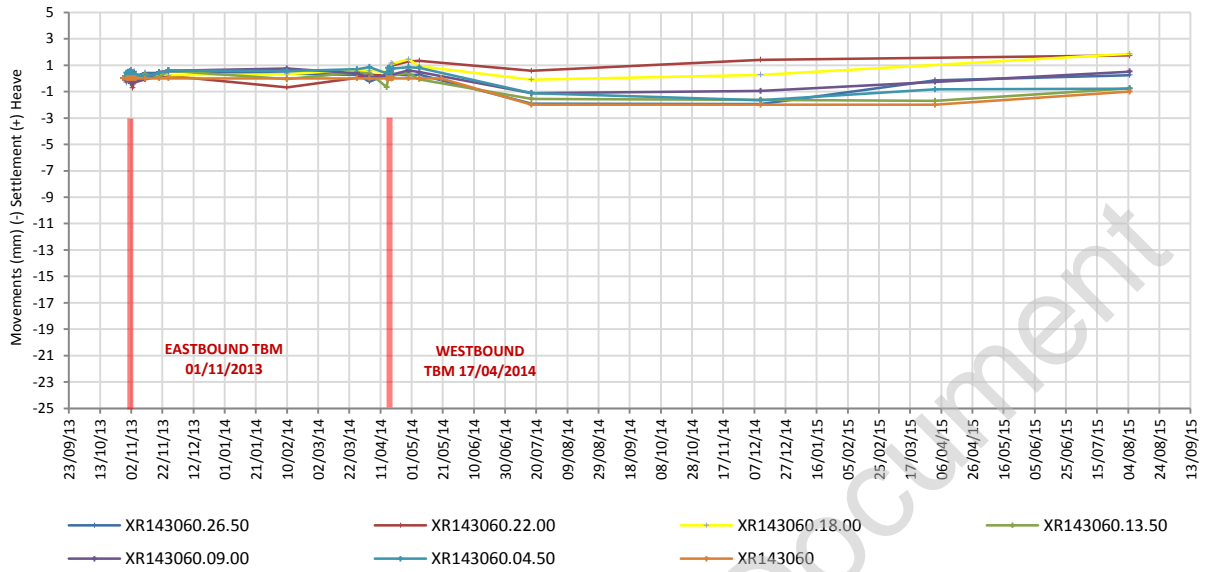
Note: All the movements are in mm. (-) Settlement / (+) Heave

#N/A: No readings

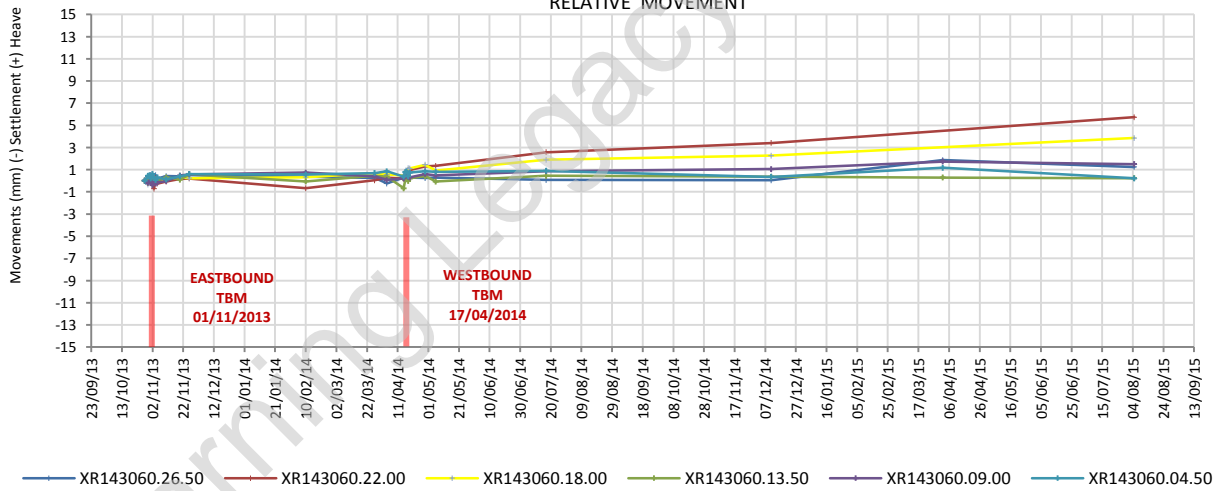
The percentage of the rods with a settlement rate less than 2 mm/year is 100 %

**C305 - XR0143060**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR143060  
 ABSOLUTE MOVEMENT

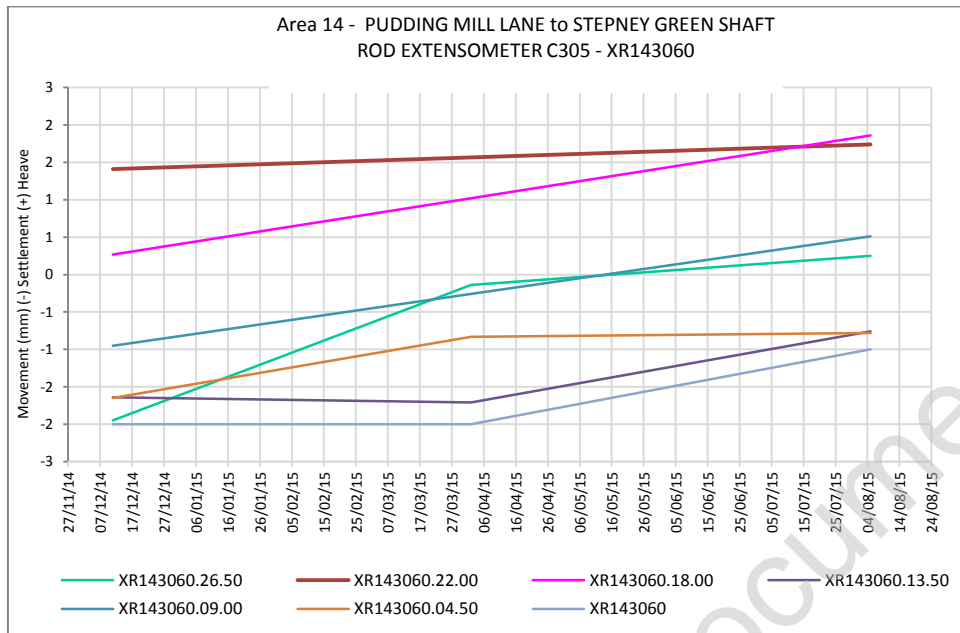


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR143060  
 RELATIVE MOVEMENT



The graphs above show no significant settlement after the Eastbound TBM transit and an absolute settlement of -2 mm after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

	Registered Movement (mm)			Rate (mm/year)
	11/12/2014	02/04/2015	05/08/2015	
XR143060.26.50	-1.95	-0.14	0.25	3.345
XR143060.22.00	1.41	#N/A	1.74	0.508
XR143060.18.00	0.27	#N/A	1.86	2.449
XR143060.13.50	-1.64	-1.71	-0.76	1.383
XR143060.09.00	-0.95	-0.26	0.51	2.249
XR143060.04.50	-1.65	-0.83	-0.78	1.317
XR143060	-2.00	-2.00	-1.00	1.567
	Rate less than -2.5 mm/year	% less 2 mm/ year		100.00%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		100.00%

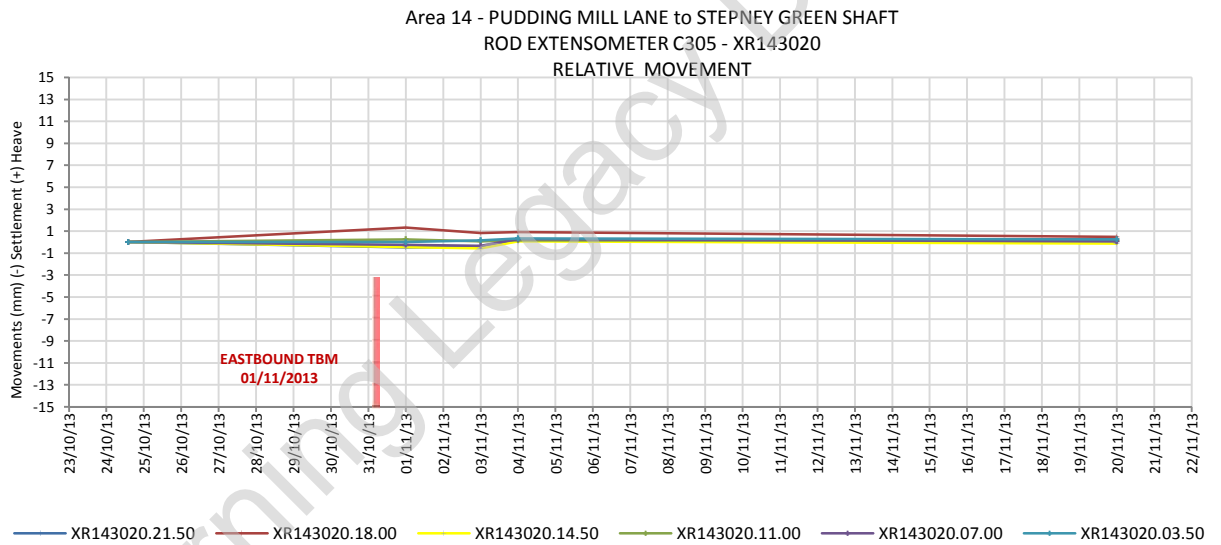
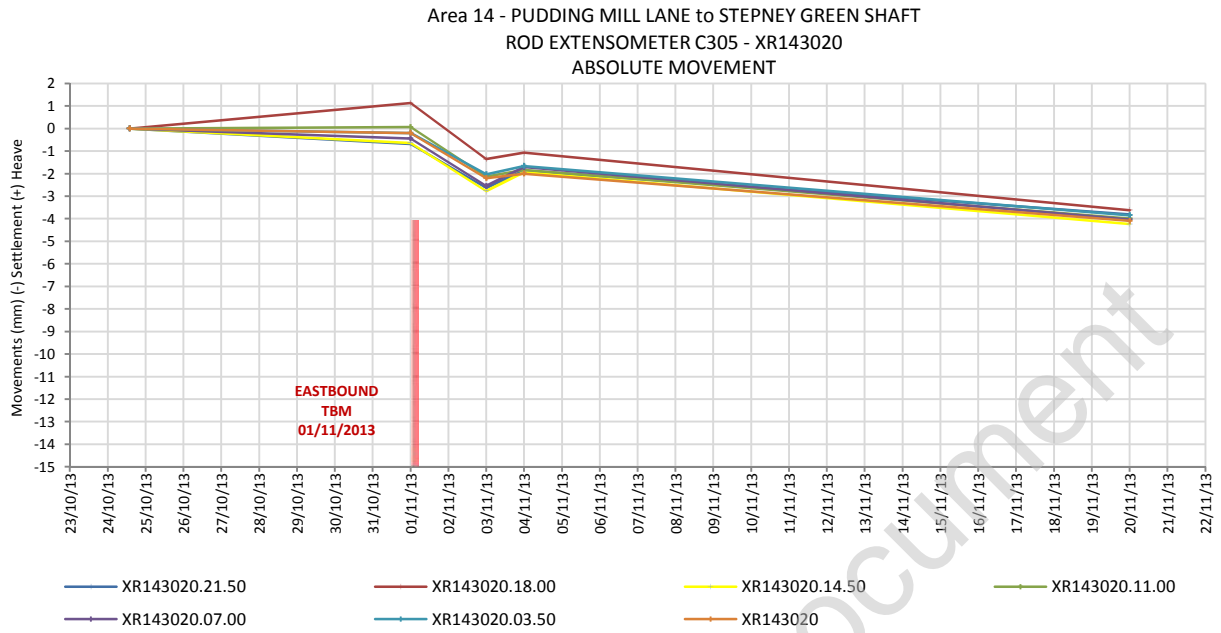
Note: All the movements are in mm. (-) Settlement / (+) Heave

#N/A: No readings

The percentage of the rods with a settlement rate less than 2 mm/year is 100 %



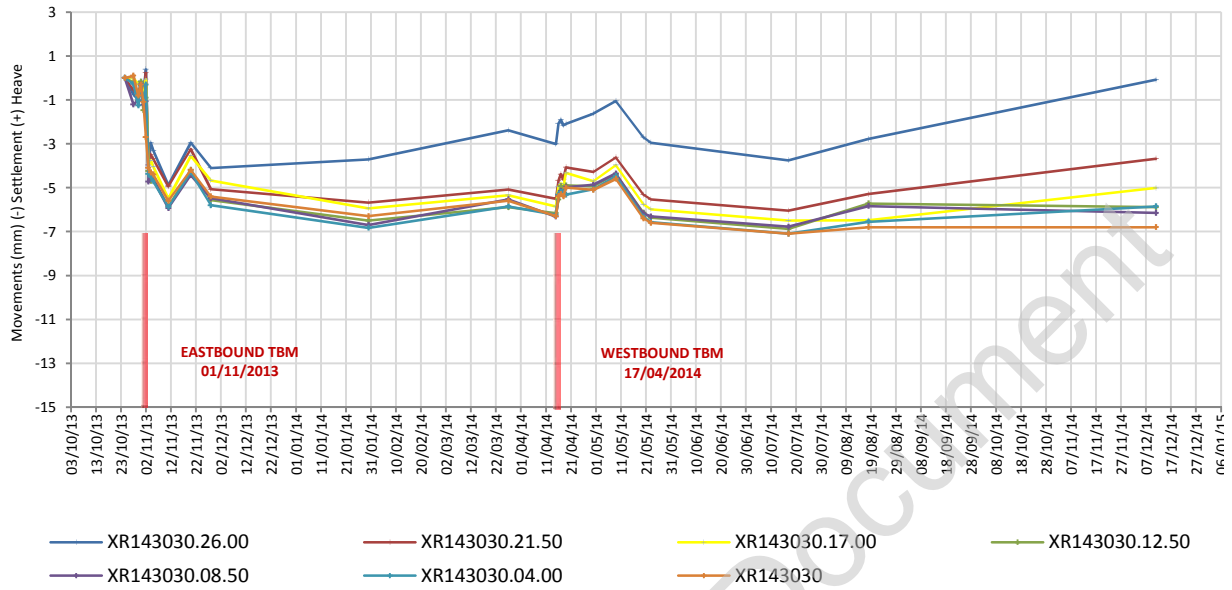
**C305 - XR0143020**



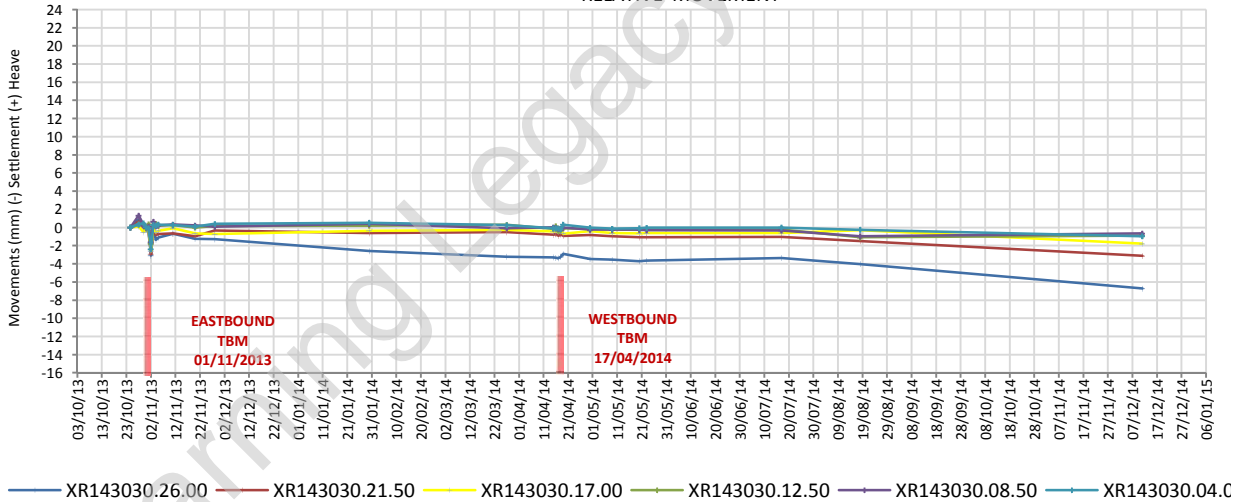
The graphs above show an absolute settlement of -2.5 mm after the Eastbound TBM transit. The instrument was not read during and after the WB TBM passage.

**C305 - XR0143030**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR143030  
 ABSOLUTE MOVEMENT

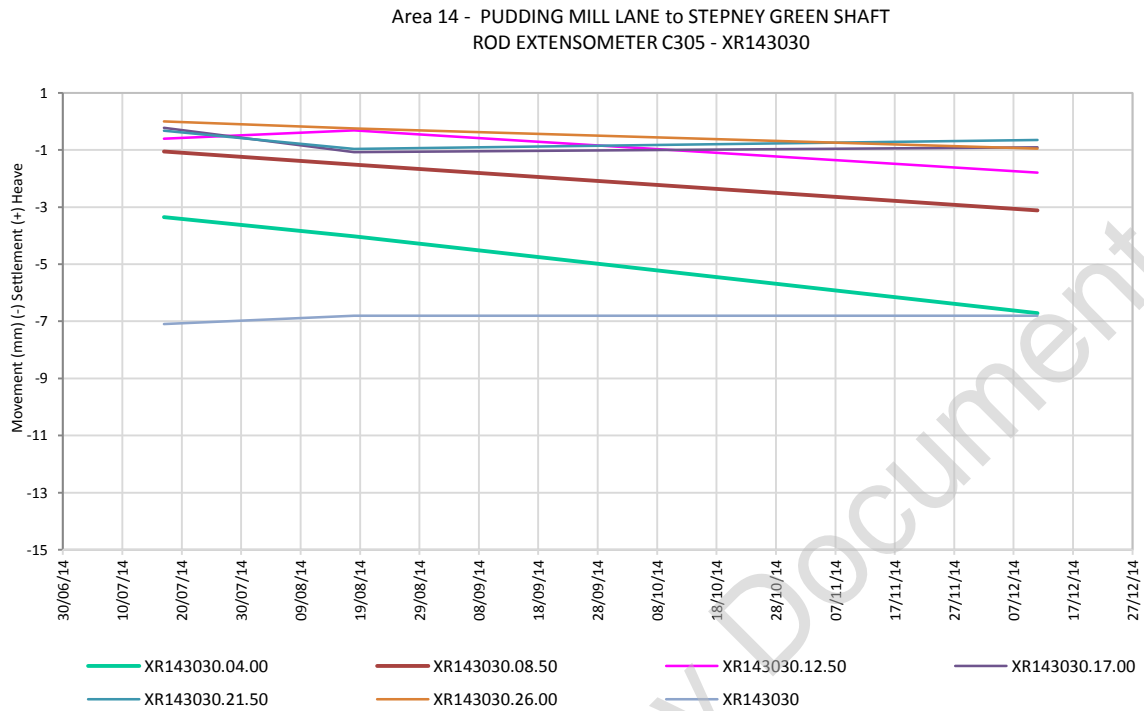


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR143030  
 RELATIVE MOVEMENT



The graphs above show an absolute settlement of -3 mm after the Eastbound TBM transit and an additional settlement of -7 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

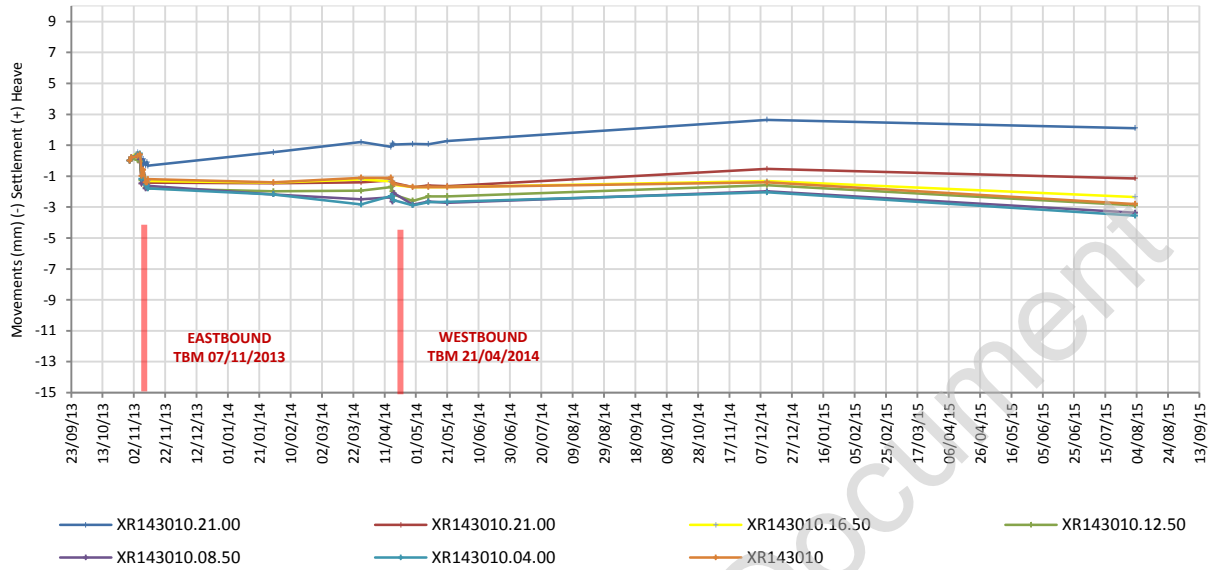
	Registered Movement (mm)			Rate (mm/year)
	17/07/2014	18/08/2014	11/12/2014	
XR143030.26.00	-3.35	-4.02	-6.72	-8.421
XR143030.21.50	-1.05	-1.51	-3.12	-5.132
XR143030.17.00	-0.60	-0.31	-1.79	-3.419
XR143030.12.50	-0.22	-1.08	-0.91	-1.114
XR143030.08.50	-0.32	-0.96	-0.65	-0.339
XR143030.04.00	0.00	-0.25	-0.95	-2.322
XR143030	-7.10	-6.80	-6.80	0.547
	Rate less than -2.5 mm/year	% less 2 mm/ year		57.14%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		71.43%

Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

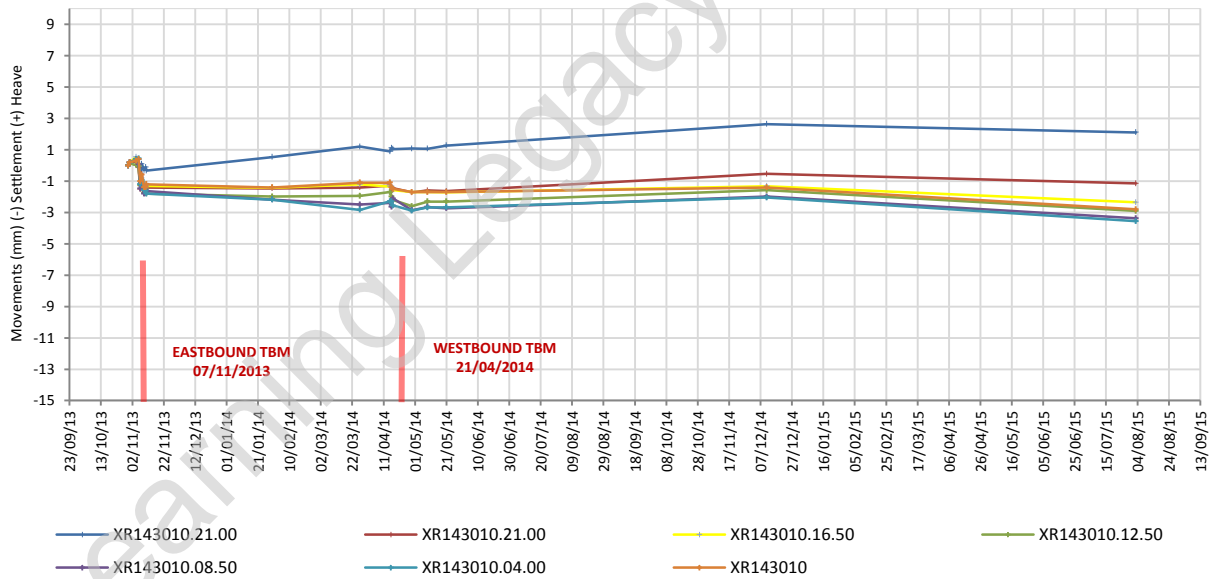
The percentage of the rods with a settlement rate less than 3 mm/year is 71.43 %

**C305 - XR0143010**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR143010  
 ABSOLUTE MOVEMENT

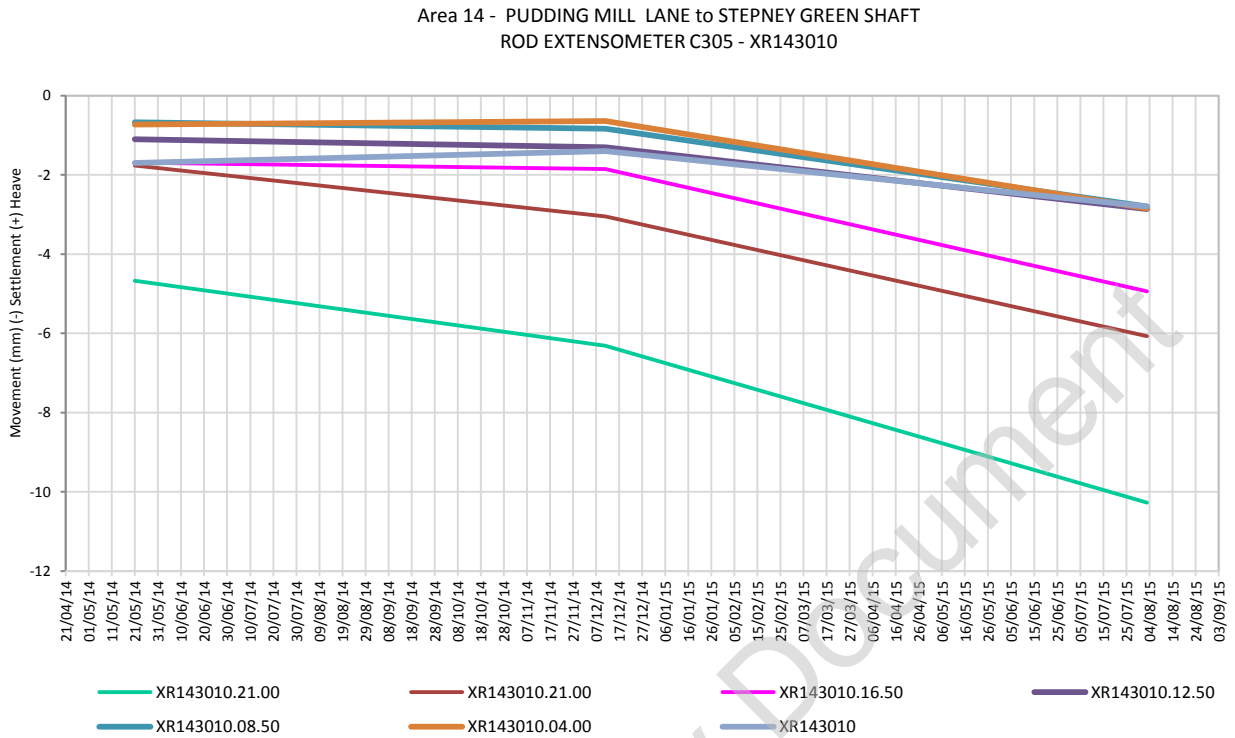


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR143010  
 ABSOLUTE MOVEMENT



The graphs above show an absolute settlement of -2.8 mm after the Eastbound TBM transit and an additional settlement of -2.8 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

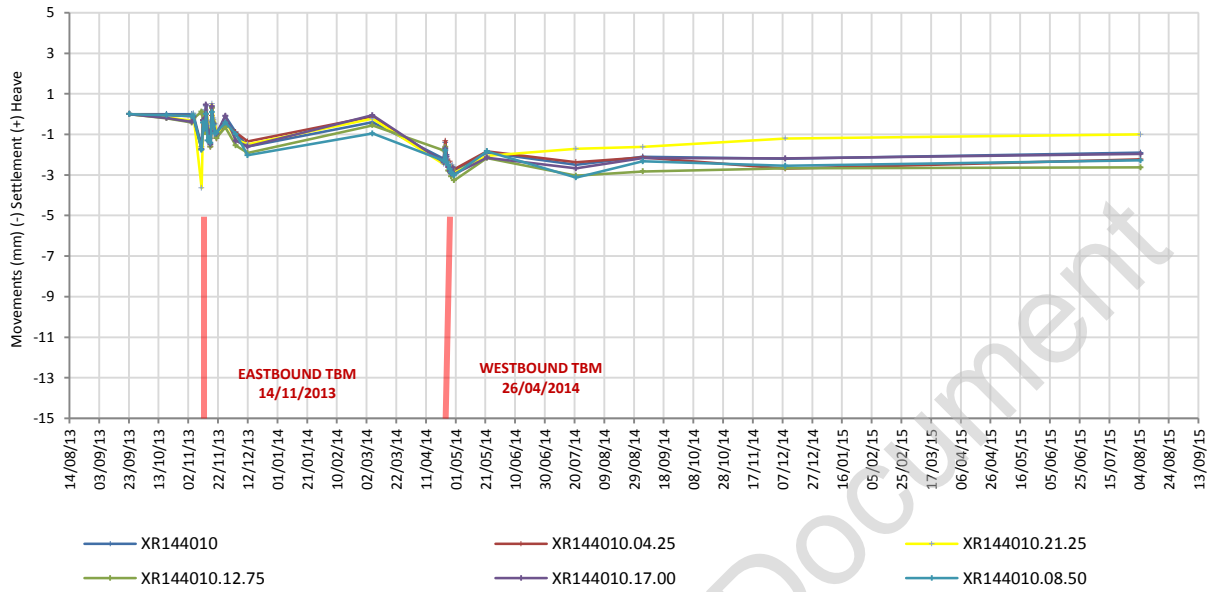
	Registered Movement (mm)			Rate (mm/year)
	21/05/2014	11/12/2014	03/08/2015	
XR143010.21.00	-4.67	-6.31	-10.27	-4.694
XR143010.21.00	-1.76	-3.05	-6.07	-3.611
XR143010.16.50	-1.69	-1.85	-4.94	-2.755
XR143010.12.50	-1.10	-1.30	-2.86	-1.487
XR143010.08.50	-0.67	-0.83	-2.80	-1.803
XR143010.04.00	-0.73	-0.64	-2.85	-1.805
XR143010	-1.70	-1.40	-2.80	-0.946
	Rate less than -2.5 mm/year	% less 2 mm/ year		57.14%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		71.43%

Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

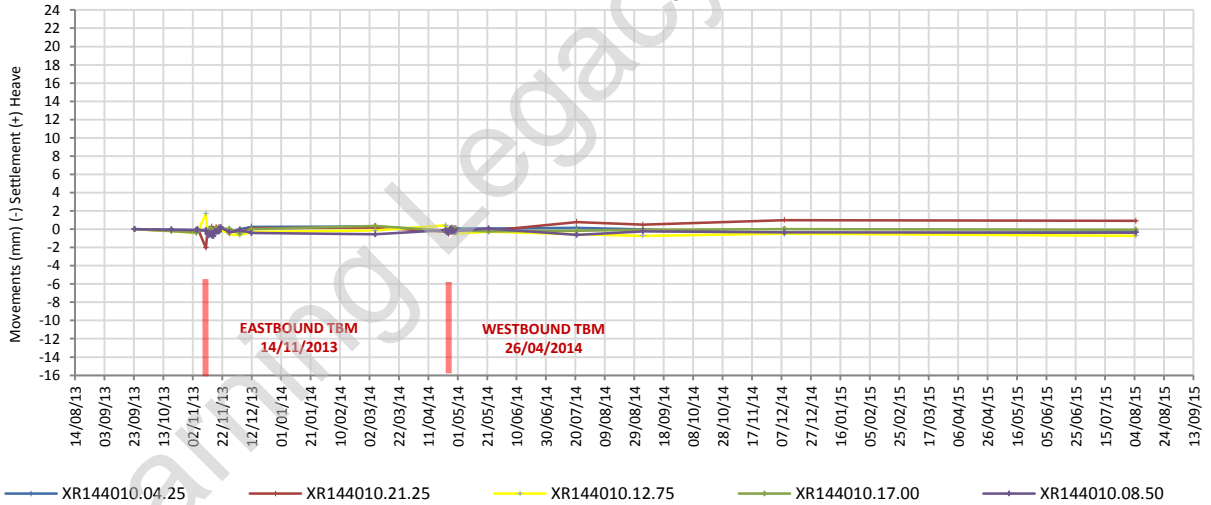
The percentage of the rods with a settlement rate less than 2 mm/year is 57 %

C305 - XR0144010

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR144010  
 ABSOLUTE MOVEMENT

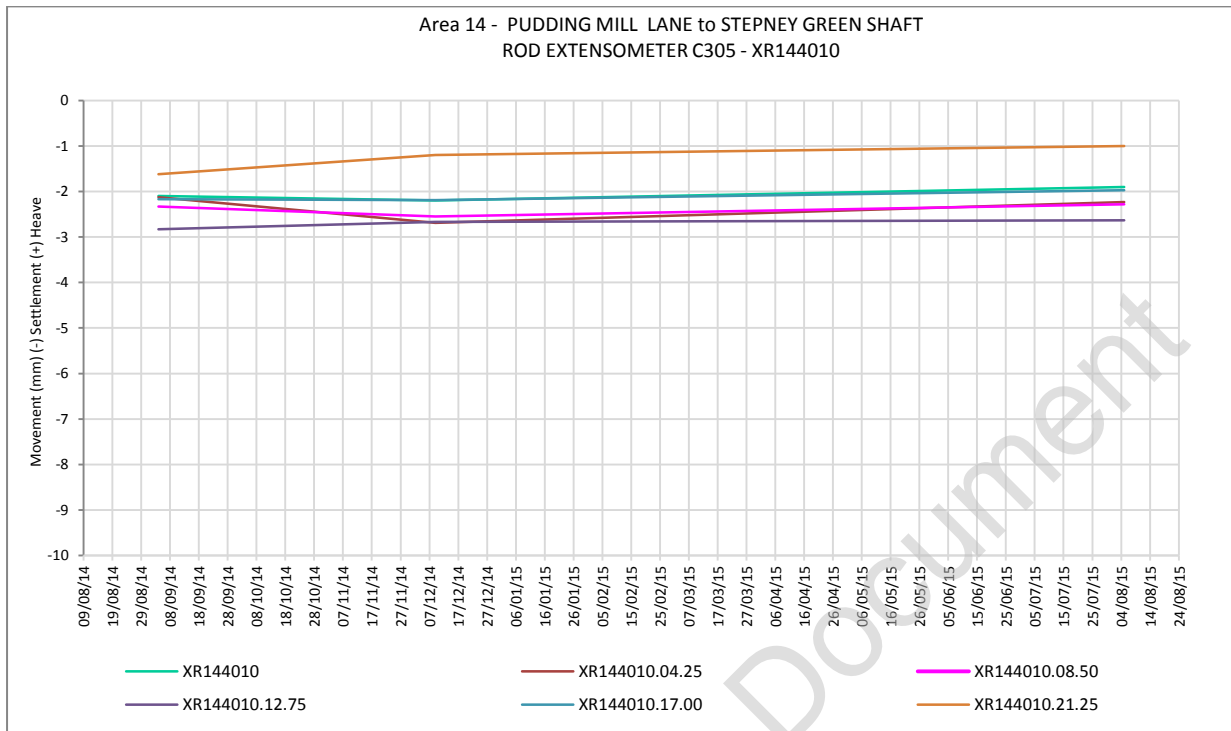


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR144010  
 RELATIVE MOVEMENT



The graphs above show an absolute settlement of -3 mm after the Eastbound TBM transit and an additional settlement of -3 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

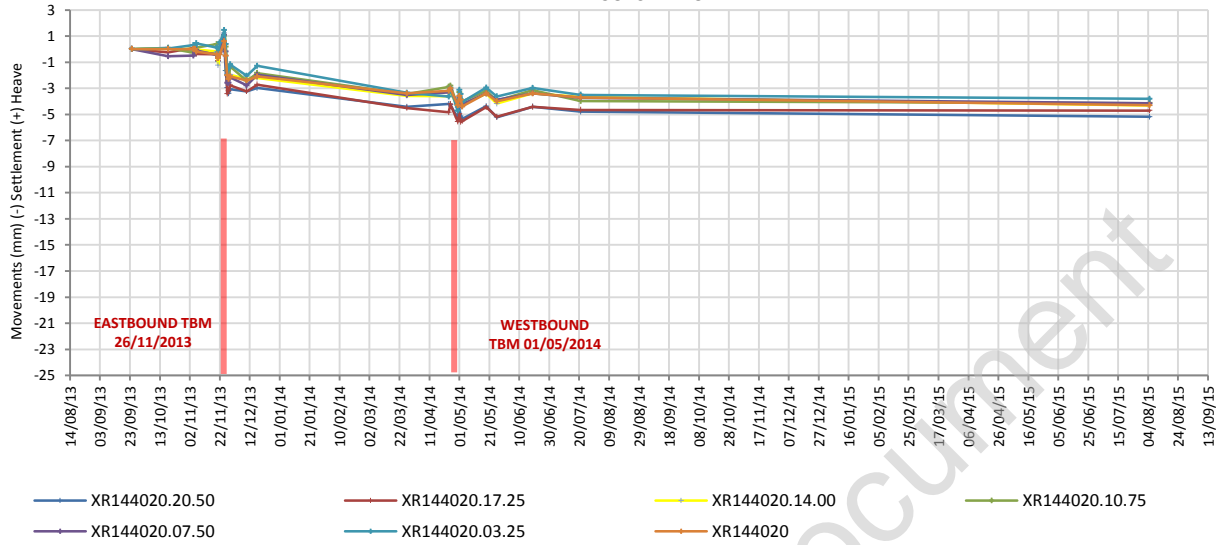
	Registered Movement (mm)			Rate (mm/year)
	04/09/2014	09/12/2014	05/08/2015	
XR144010	-2.10	-2.20	-1.90	0.264
XR144010.04.25	-2.13	-2.69	-2.23	0.046
XR144010.08.50	-2.33	-2.55	-2.28	0.123
XR144010.12.75	-2.83	-2.67	-2.63	0.188
XR144010.17.00	-2.17	-2.19	-1.97	0.241
XR144010.21.25	-1.62	-1.20	-1.00	0.605
	Rate less than -2.5 mm/year	% less 2 mm/ year		100.00%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		100.00%

Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

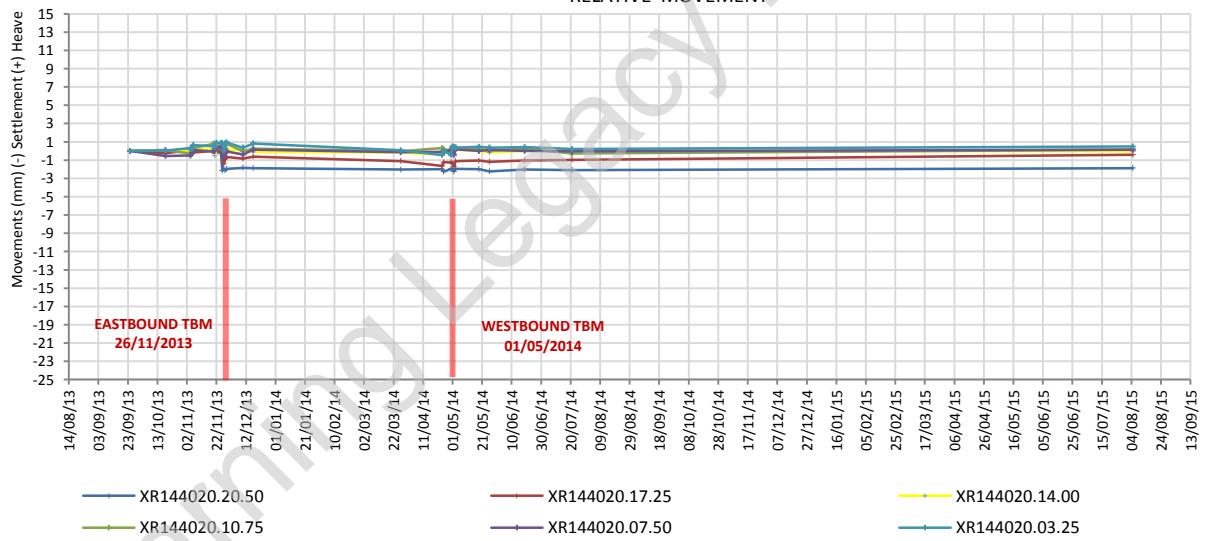
The percentage of the rods with a settlement rate less than 2 mm/year is 100 %

**C305 - XR0144020**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR144020  
 ABSOLUTE MOVEMENT



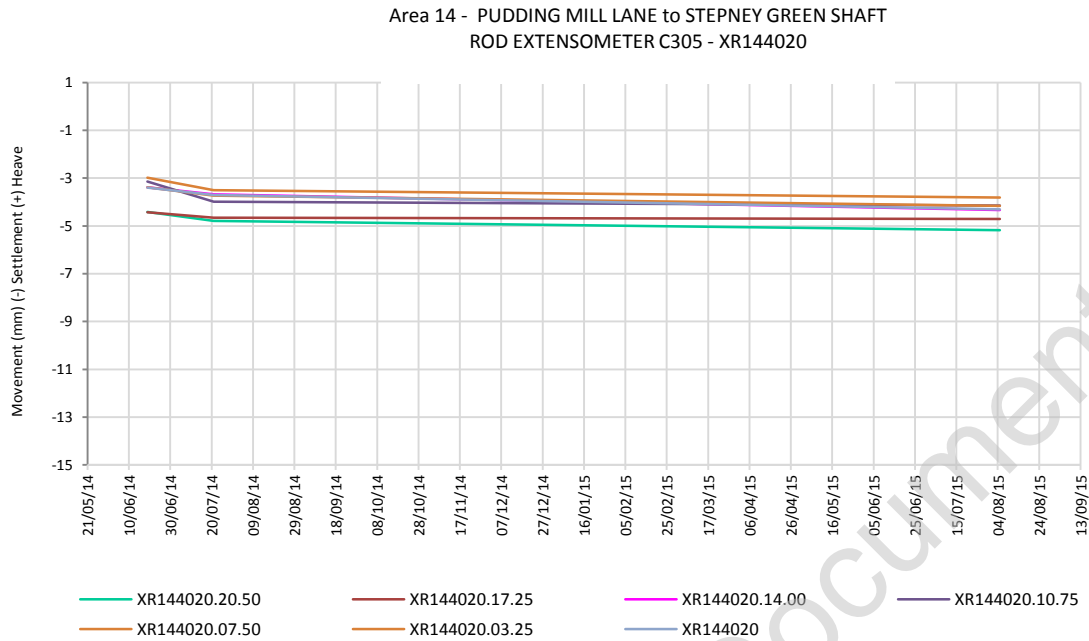
Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR144020  
 RELATIVE MOVEMENT



The graphs above show an absolute settlement of -3.5 mm after the Eastbound TBM transit and an additional settlement of -5.5 mm settlement after the Westbound TBM transit.



The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

	Registered Movement (mm)			Rate (mm/year)
	19/06/2014	21/07/2014	05/08/2015	
XR144020.20.50	-4.41	-4.79	-5.18	-0.553
XR144020.17.25	-4.43	-4.66	-4.71	-0.164
XR144020.14.00	-3.38	-3.67	-4.33	-0.754
XR144020.10.75	-3.14	-3.98	-4.14	-0.579
XR144020.07.50	-3.38	-3.73	-4.16	-0.574
XR144020.03.25	-2.98	-3.50	-3.81	-0.552
XR144020	-3.40	-3.70	-4.30	-0.705
	Rate less than -2.5 mm/year	% less 2 mm/ year		100.00%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		100.00%

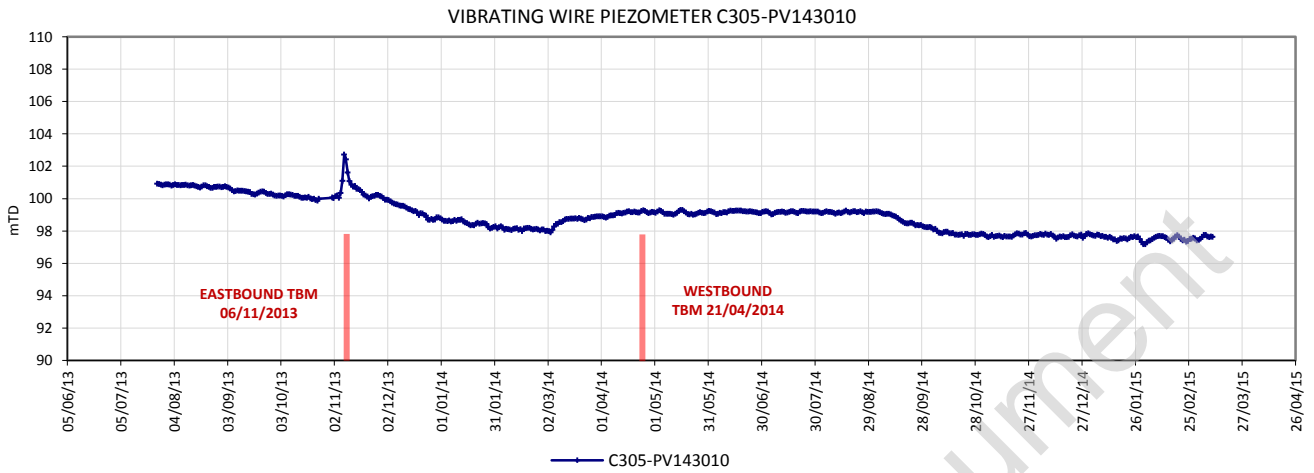
Note: All the movements are in mm. (-) Settlement / (+) Heave

#N/A: No readings

The percentage of the rods with a settlement rate less than 2 mm/year is 100 %

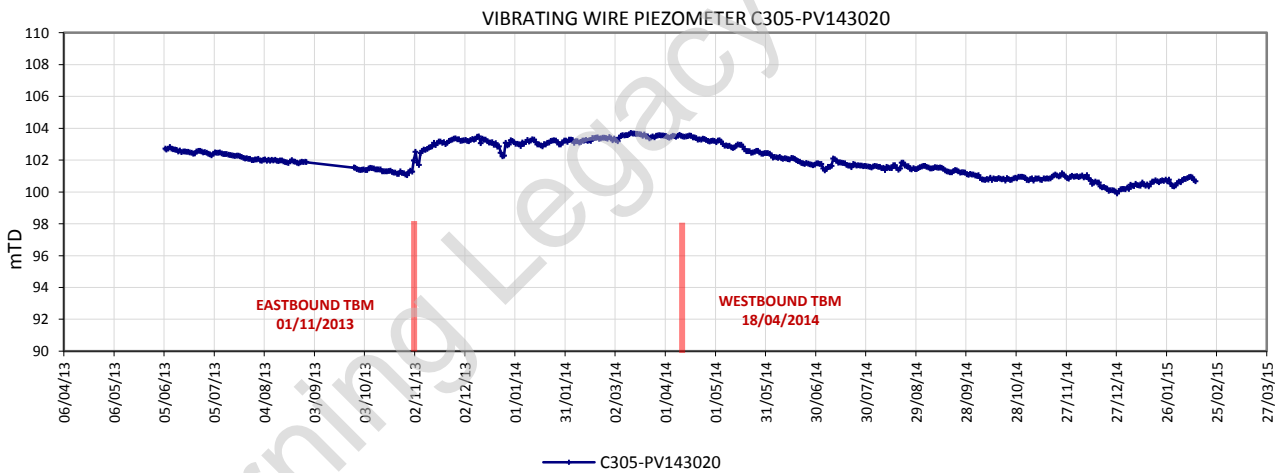
PIEZOMETERS

C305 – PV143010



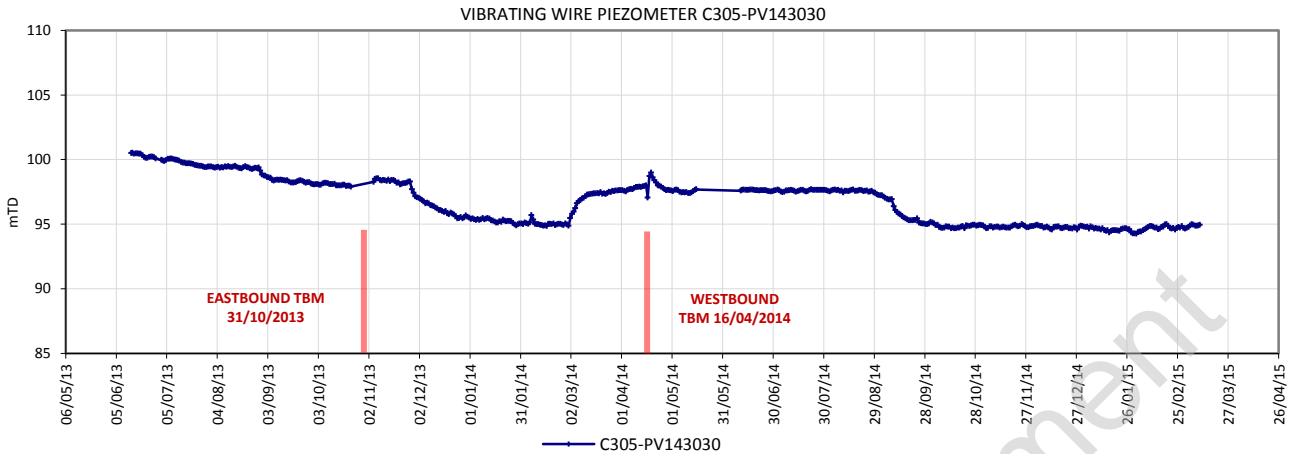
There was a rise in the water level (+2 m) during Eastbound TMB transit and subsequently water recovered level to 99 m. There was no significant variation during Westbound TMB transit.

C305 – PV143020



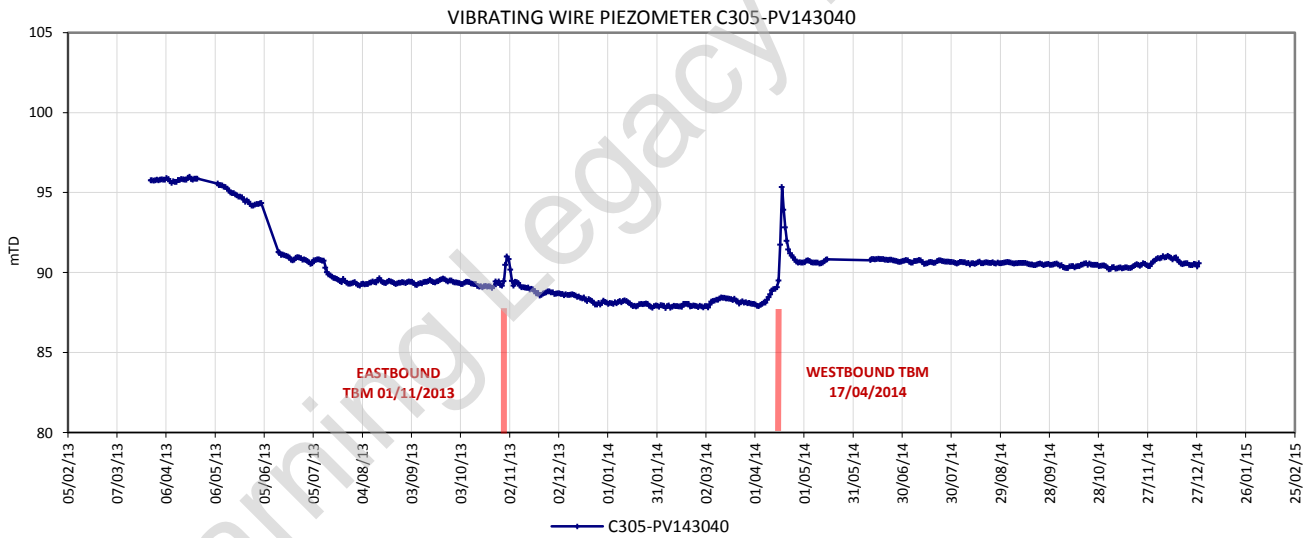
There was a rise in the water level (+2 m) during Eastbound TMB transit and subsequently water recovered level to 101 m. There was no significant variation during Westbound TMB transit.

**C305 – PV143030**



There was no significant variation in the water level during TMBs transit, although there was a lowering tendency from 100 m to 95 m and a subsequently stabilization at 94.7 m.

**C305 – PV143040**



Initially, there was a lowering tendency from 96 m to 89 m. there was a rise in the water level (+2 m) during Eastbound TBM transit and another rise (+7 m) during Westbound TBM transit. Subsequently water recovered level to 88 m and 90 m, respectively.

## INCLINOMETERS

- Instrument Type: Inclinerometers
- Quantity: 5

Four Inclinerometers have been installed. The figures below show the orientation of "A" and "B" AXIS and the distance of the instrument from the nearest tunnel drive.

Movements in A+ AXIS are always towards the expected AXIS, ie: towards the tunnel AXIS, and the B+ AXIS is clockwise +90° from the A+ axis (see orientation sketch, below right).

Orientation of the probe and casing:

A AXIS: the AXIS of the anticipated movement

A+ = the orientation of the casing groove into which the leading wheel of the inclinometer probe is located on the first run of a set of readings. This is also the orientation of the primary sensor

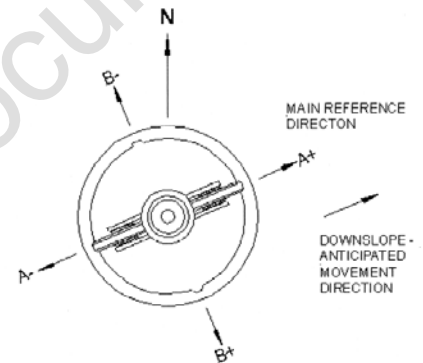
A- = the orientation of the casing groove into which the leading wheel of the inclinometer probe is located on the second run of a set of readings. This is also the orientation of the primary sensor

B+ = the orientation of the secondary sensor during the first run of a set of readings

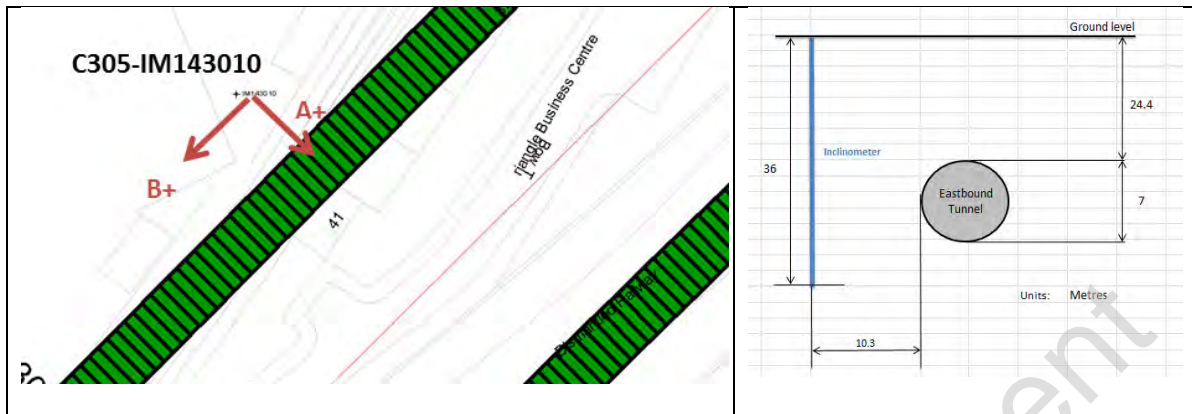
B- = the orientation of the secondary sensor during the second run of a set of readings

The first reading of the baseline is an average of the three commissioning readings taken prior baseline readings.

Corrections, due to the change of the different probes along the time when the readings were taken, have been applied when using different probes on the raw data. This correction is calculated as the following way. An average of the raw readings along the inclinometer is obtained in each case. Then the difference between the average values before and after the change of the probes is calculated. This difference is applied to the readings taken with the different probe in each direction.



C305-IM143010



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 677 (Project chainage – 13064)	06/11/2013
Westbound Drive-Z	Ring 692 (Project chainage – 13214)	21/04/2014

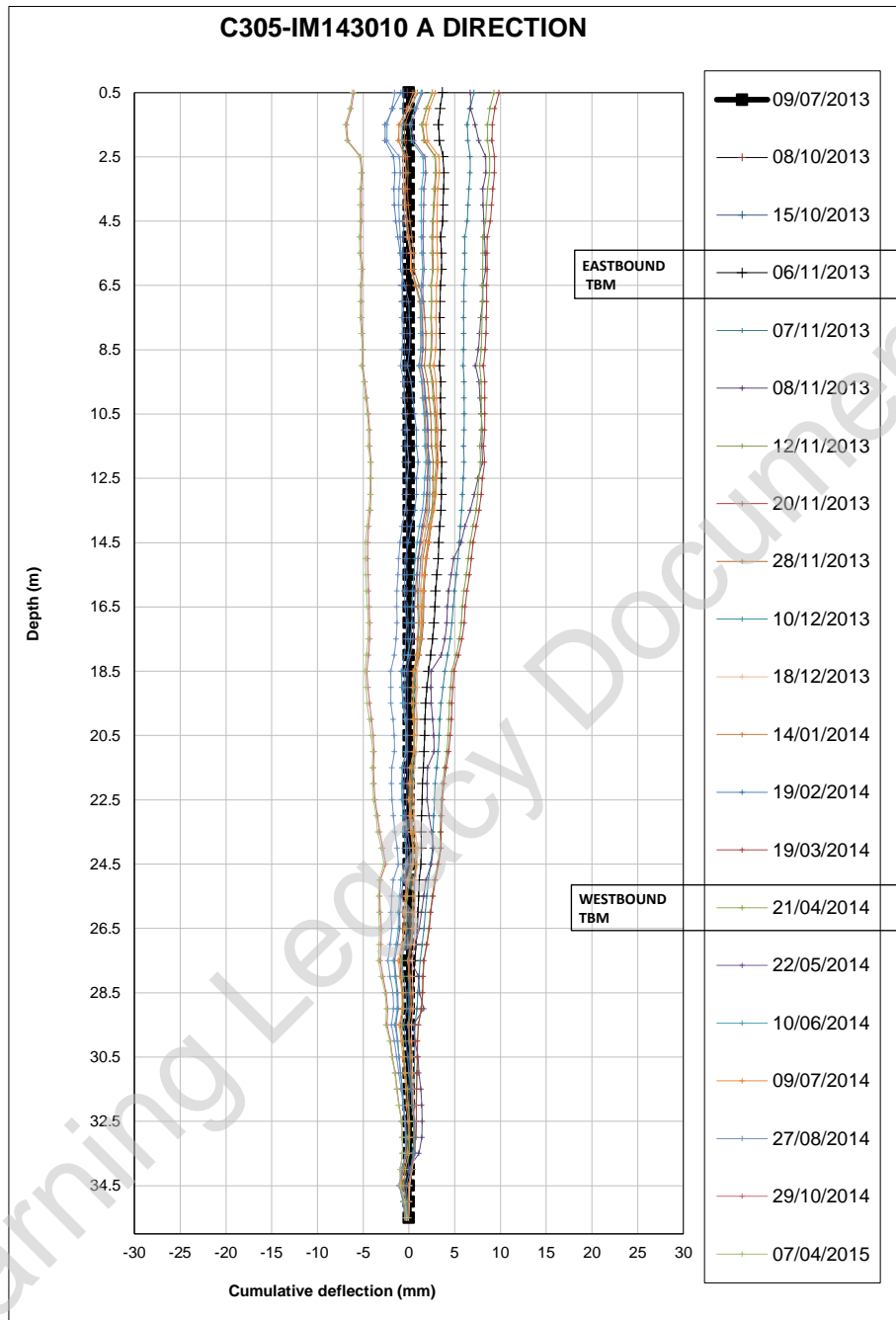
No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

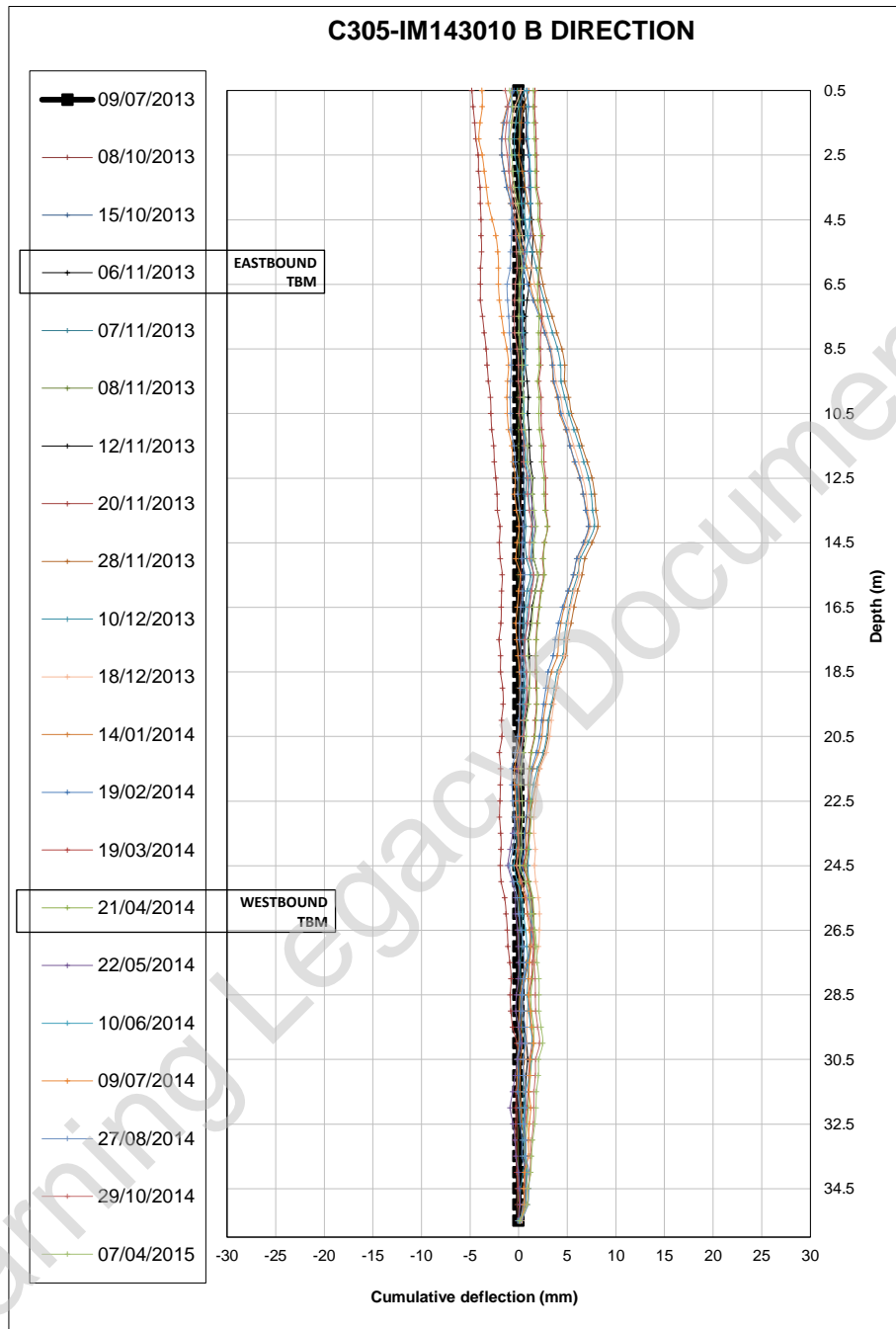
For the inclinometer C305-IM143010 different probes have been used. Related correction factors are presented in the table below:

ID Sensor	C305-IM143010	
Serial number	DI1244/DI1217	DI1217/1144940
Date	28/11/2013	19/03/2014
A+	159	-158
A-	165	-179
B+	-142	153
B-	-115	142

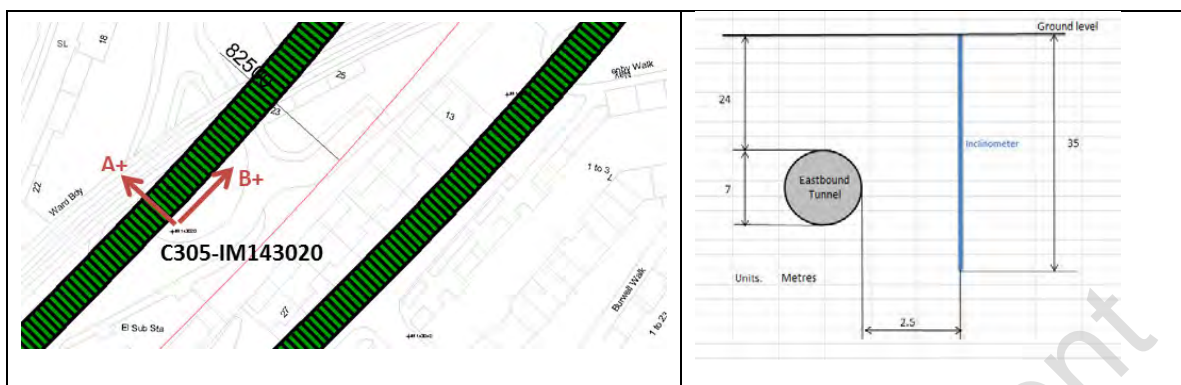
An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey. There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM143010.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”





C305-IM143020



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 607 (Project chainage – 13176)	01/11/2013
Westbound Drive-Z	Ring 619 (Project chainage – 13331)	18/04/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

For the inclinometer C305-IM143020 different probes have been used. Related correction factors are presented in the table below:

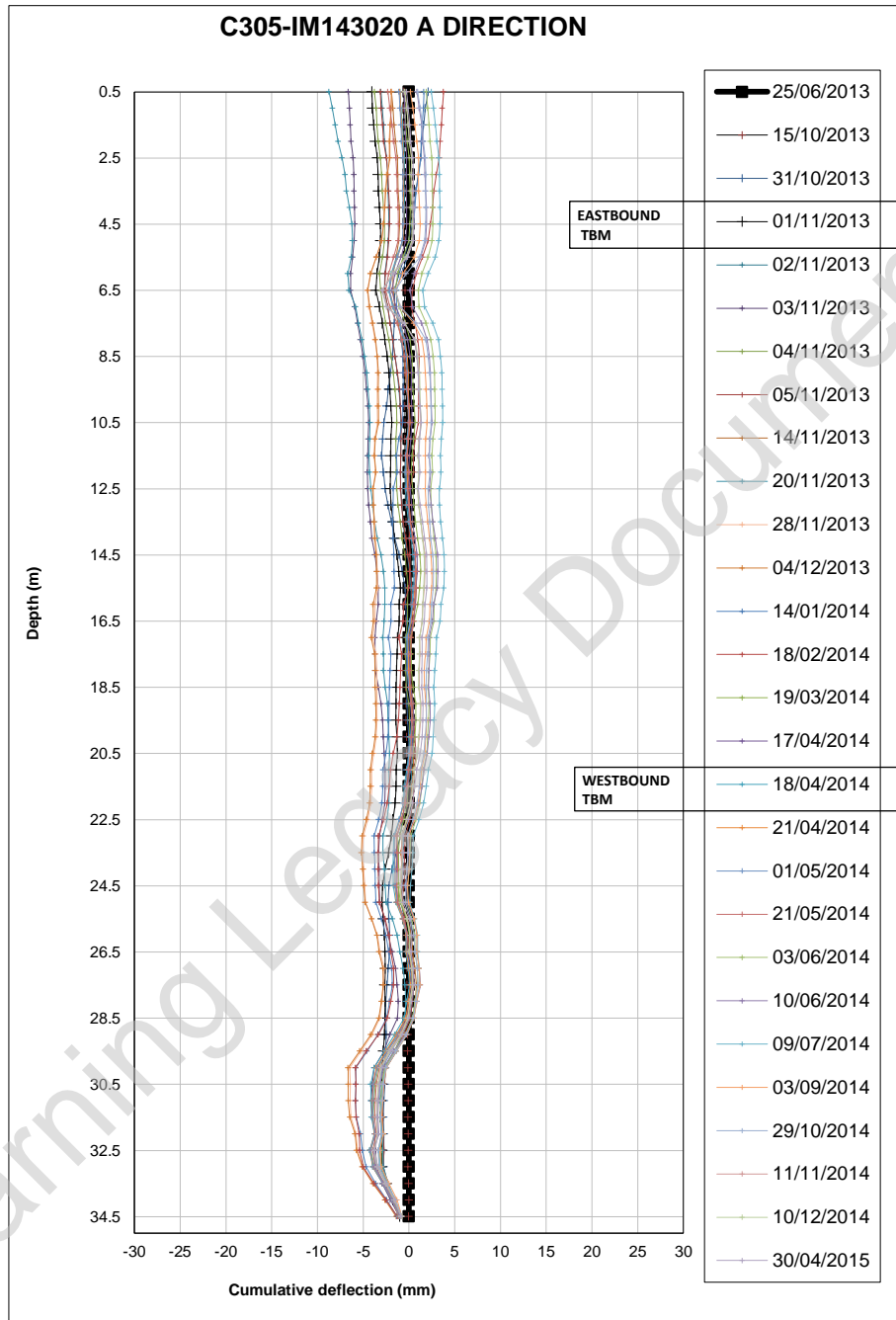
ID Sensor	C305-IM143020	
Serial number	DI1244/DI1217	DI1244/1144940
Date	28/11/2013	19/03/2014
A+	159	-175
A-	171	-191
B+	-140	153
B-	-114	151

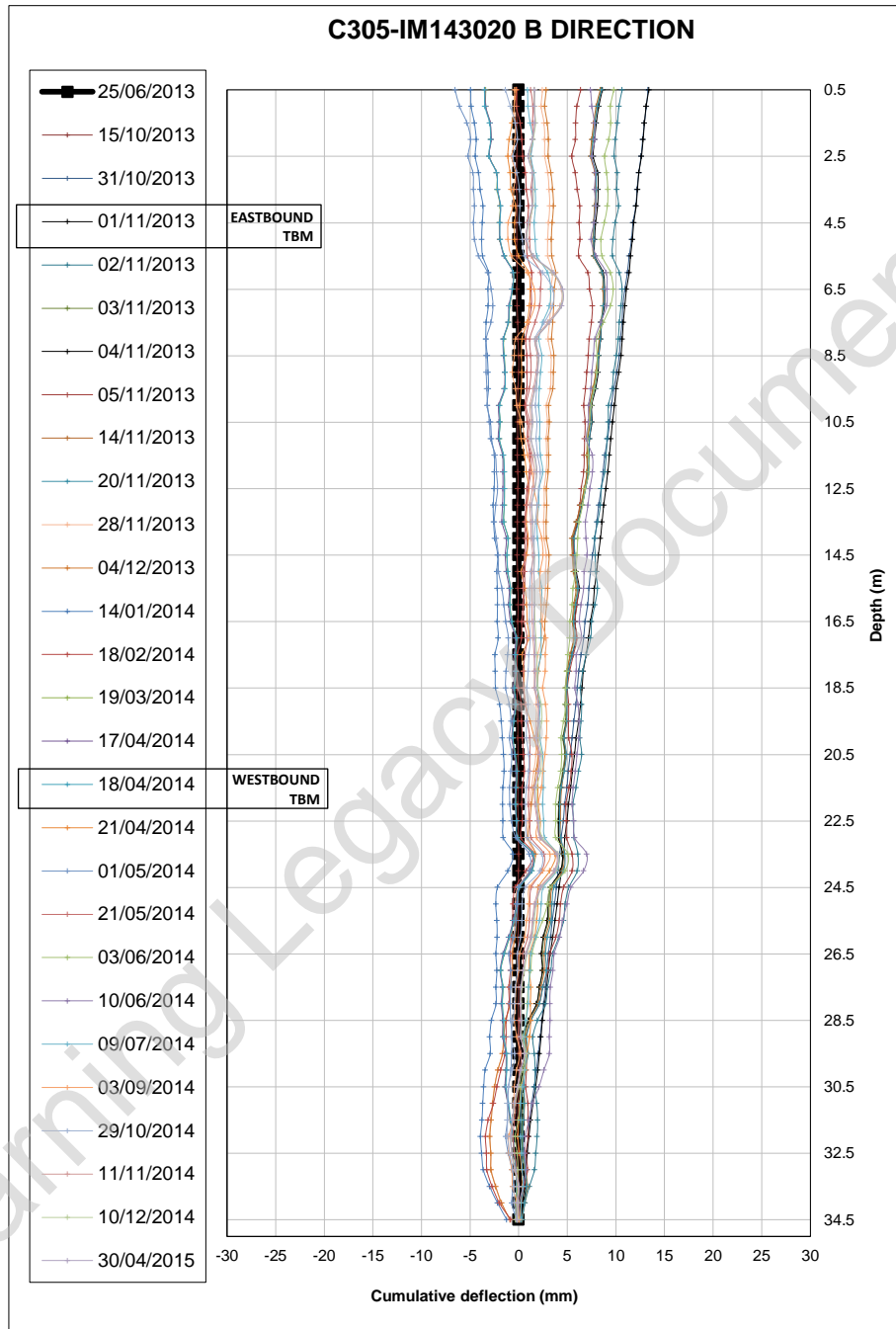
An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM143020.

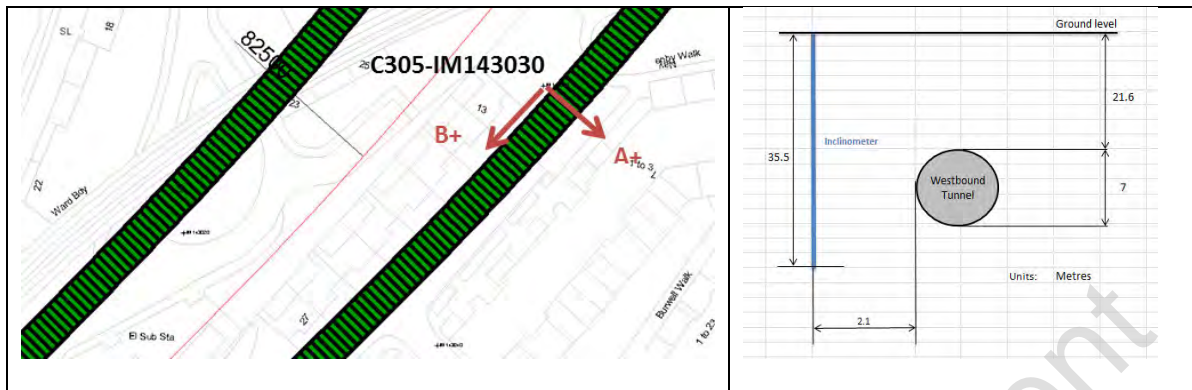
Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”







C305-IM143030



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 568 (Project chainage – 13239)	31/10/2013
Westbound Drive-Z	Ring 576 (Project chainage – 13400)	16/04/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

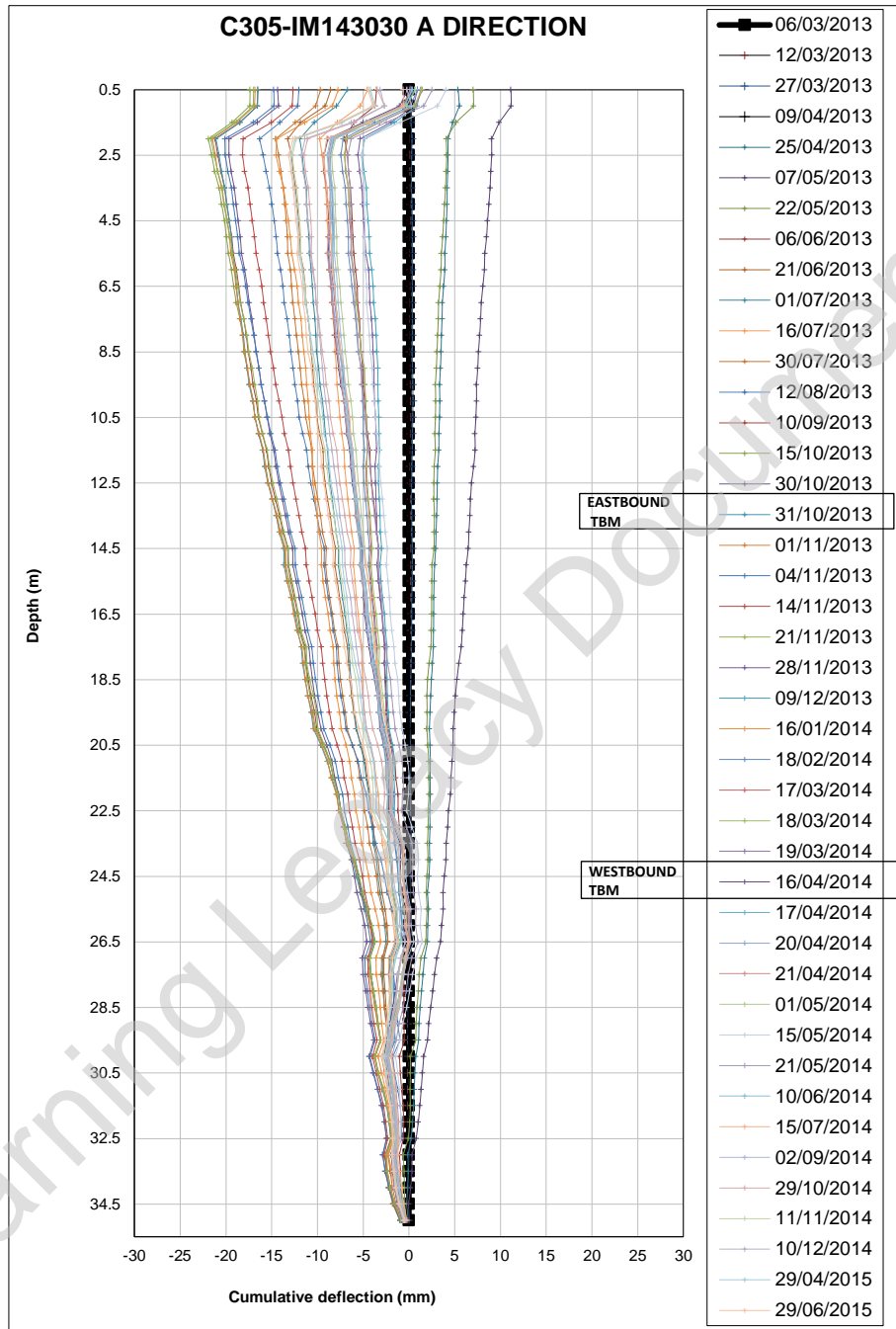
For the inclinometer C305-IM142030 different probes have been used. Related correction factors are presented in the table below:

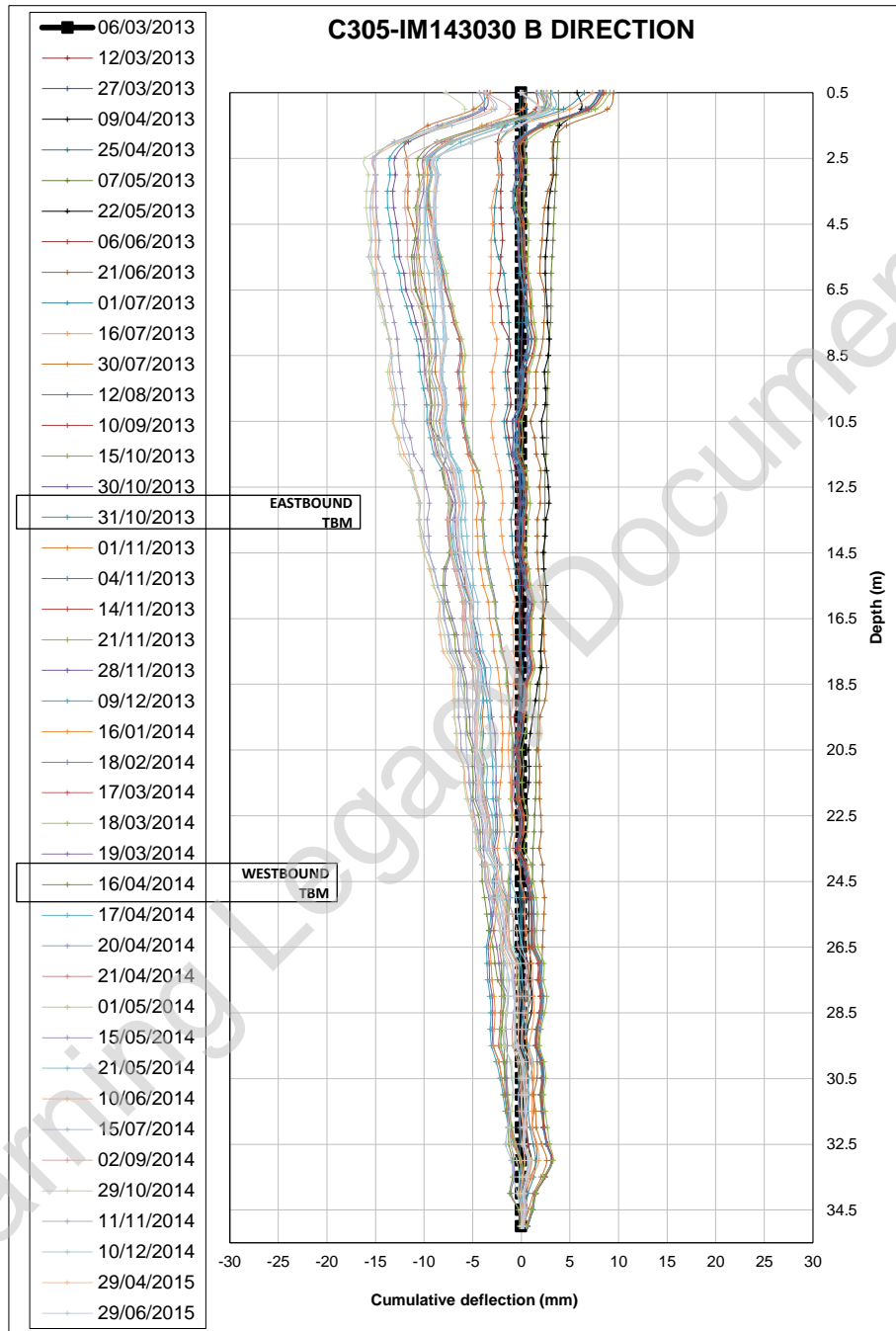
ID Sensor	C305-IM143030	
Serial number	DI1244/DI1217	DI1217/1144940
Date	28/11/2013	19/03/2014
A+	150	-159
A-	173	-181
B+	-146	153
B-	-107	153

An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

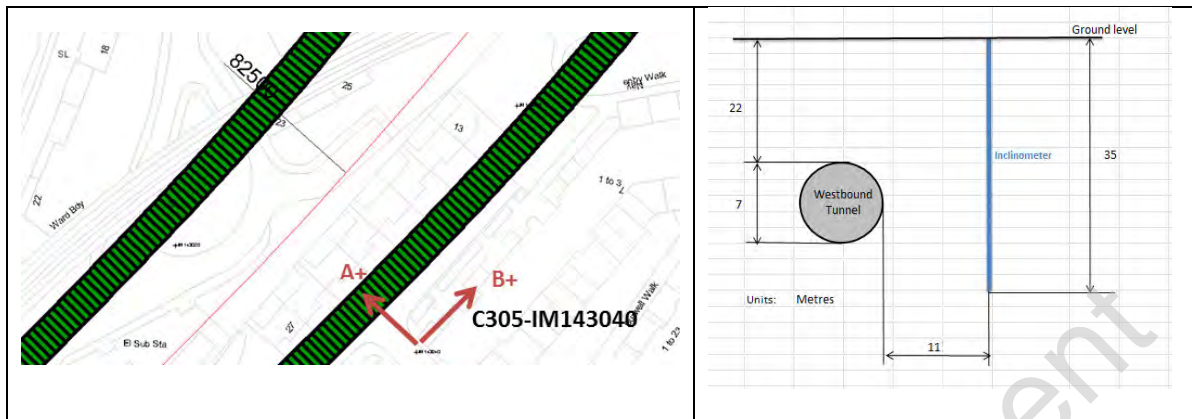
There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM143030.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”





C305-IM143040



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

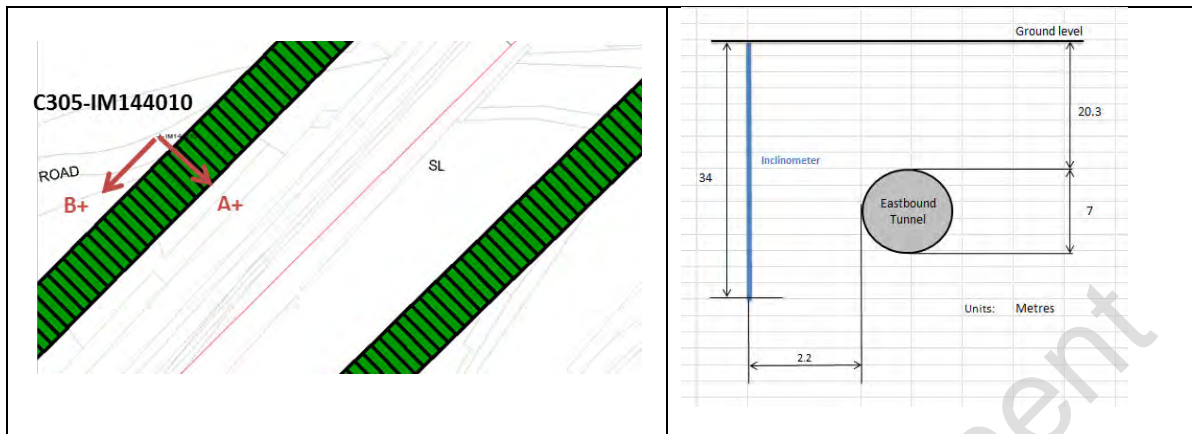
Eastbound Drive-Z	Ring 601 (Project chainage – 13186)	01/11/2013
Westbound Drive-Z	Ring 611 (Project chainage – 13344)	17/04/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

It was not possible to take readings for this inclinometer due to parked vehicles preventing access.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (*"INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373"*), which will include all raw data on excel sheet with dates of different probes used etc."

C305-IM144010



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 797 (Project chainage – 12872)	14/11/2013
Westbound Drive-Z	Ring 809 (Project chainage – 13027)	25/04/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

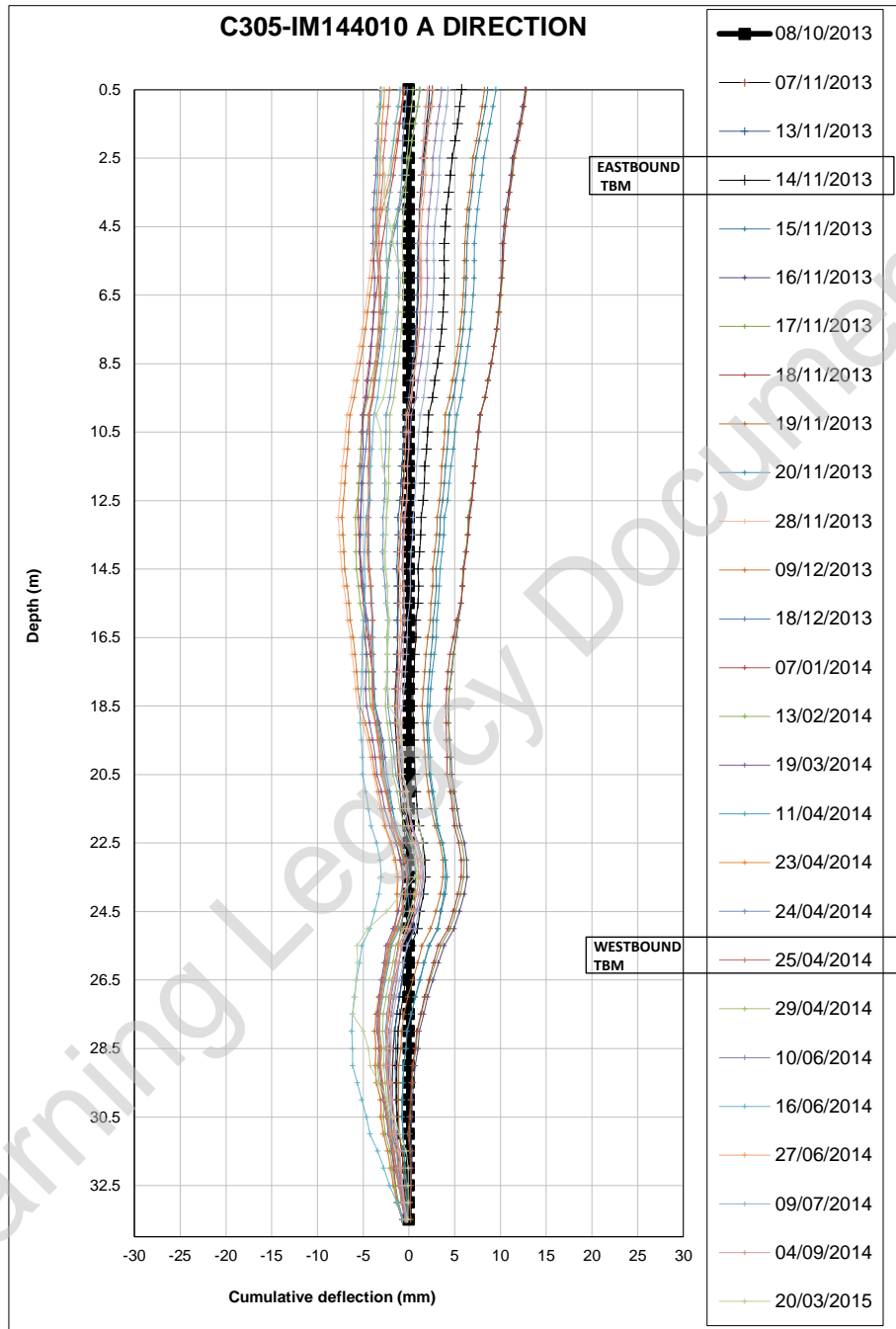
For the inclinometer C305-IM144010 different probes have been used. Related correction factors are presented in the table below:

ID Sensor	C305-IM144010	
Serial number	DI1244/DI1217	DI1217/1144940
Date	28/11/2013	19/03/2014
A+	143	-157
A-	163	-183
B+	-138	172
B-	-118	128

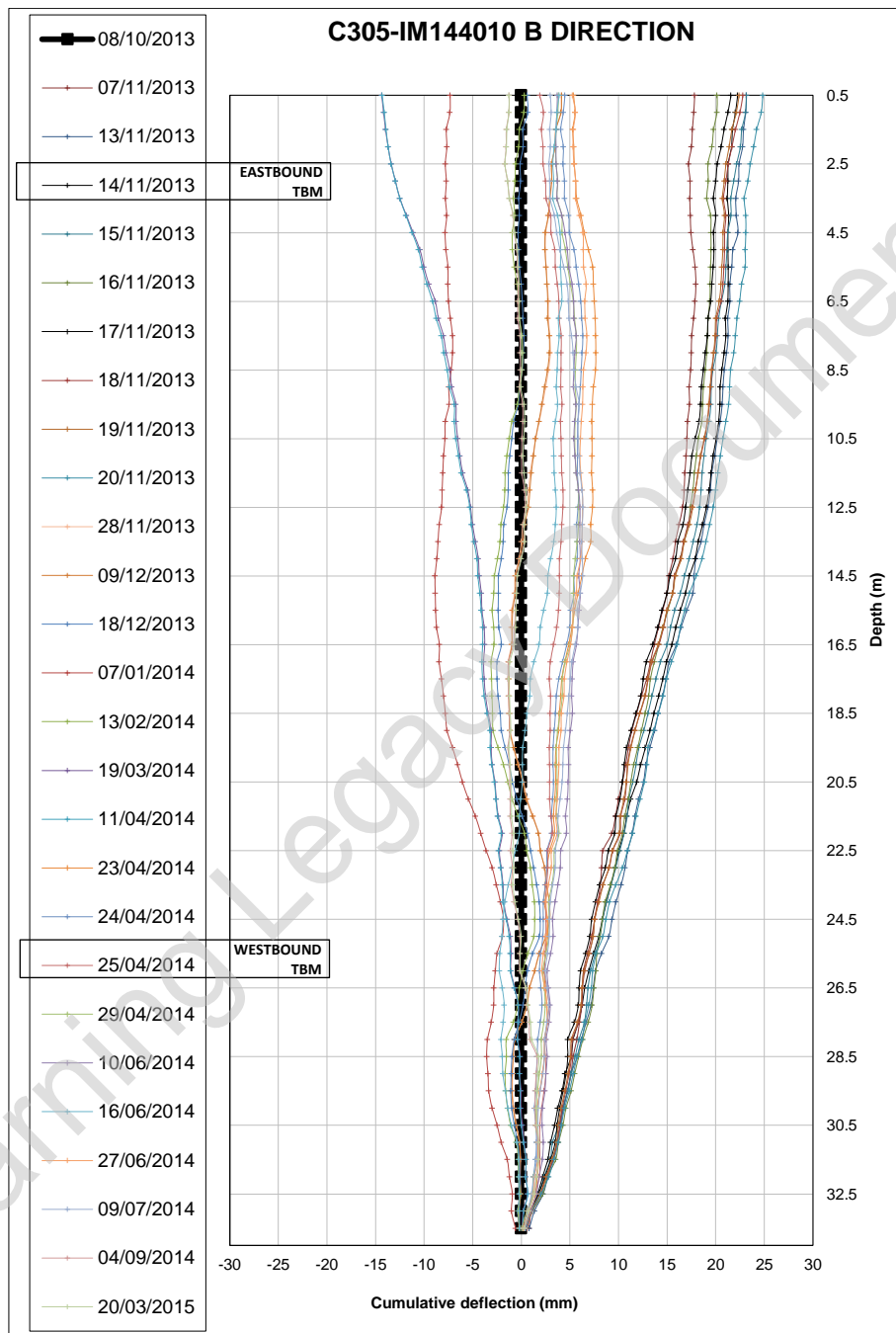
An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM144010.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”



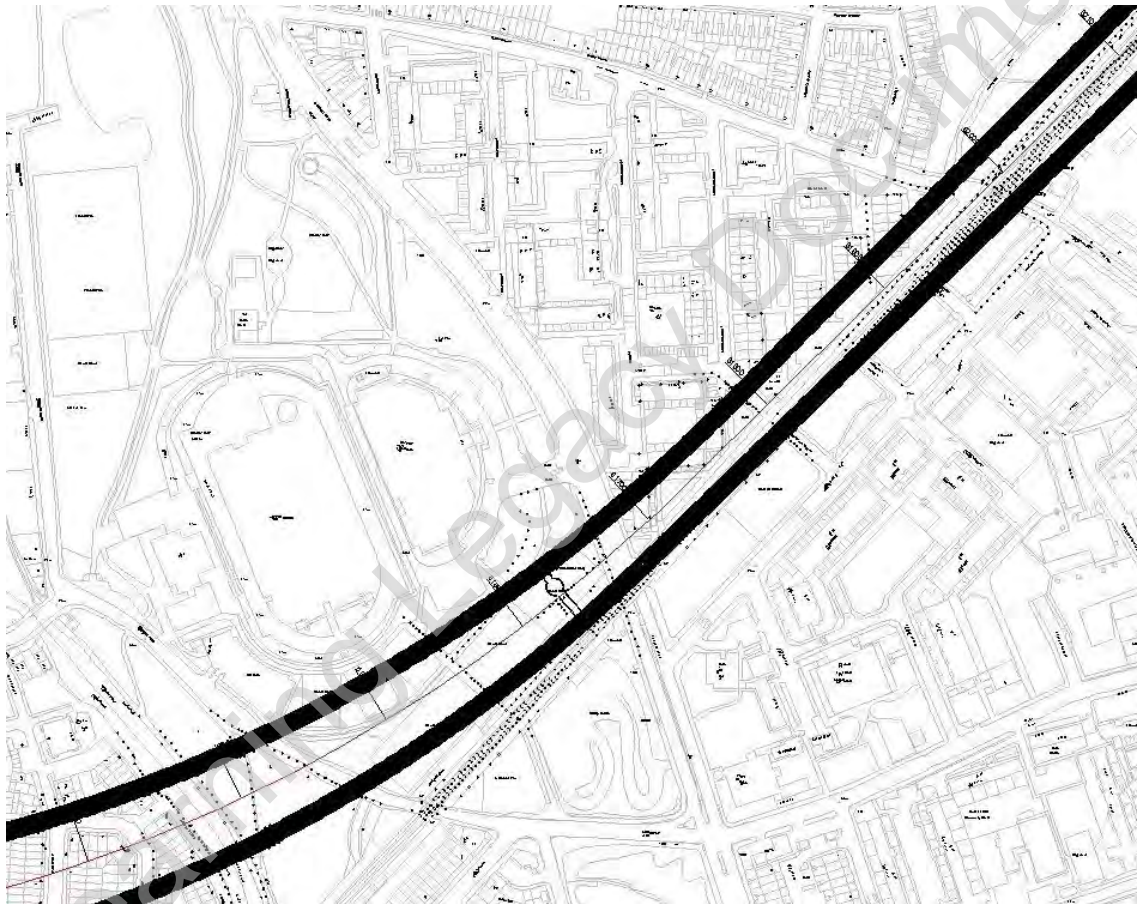




## SUB-AREA 5

The instrumentation is located between Bow Common Lane and Grand Union Canal (Regent's Canal), as shown in the figure below, and comprises the following:

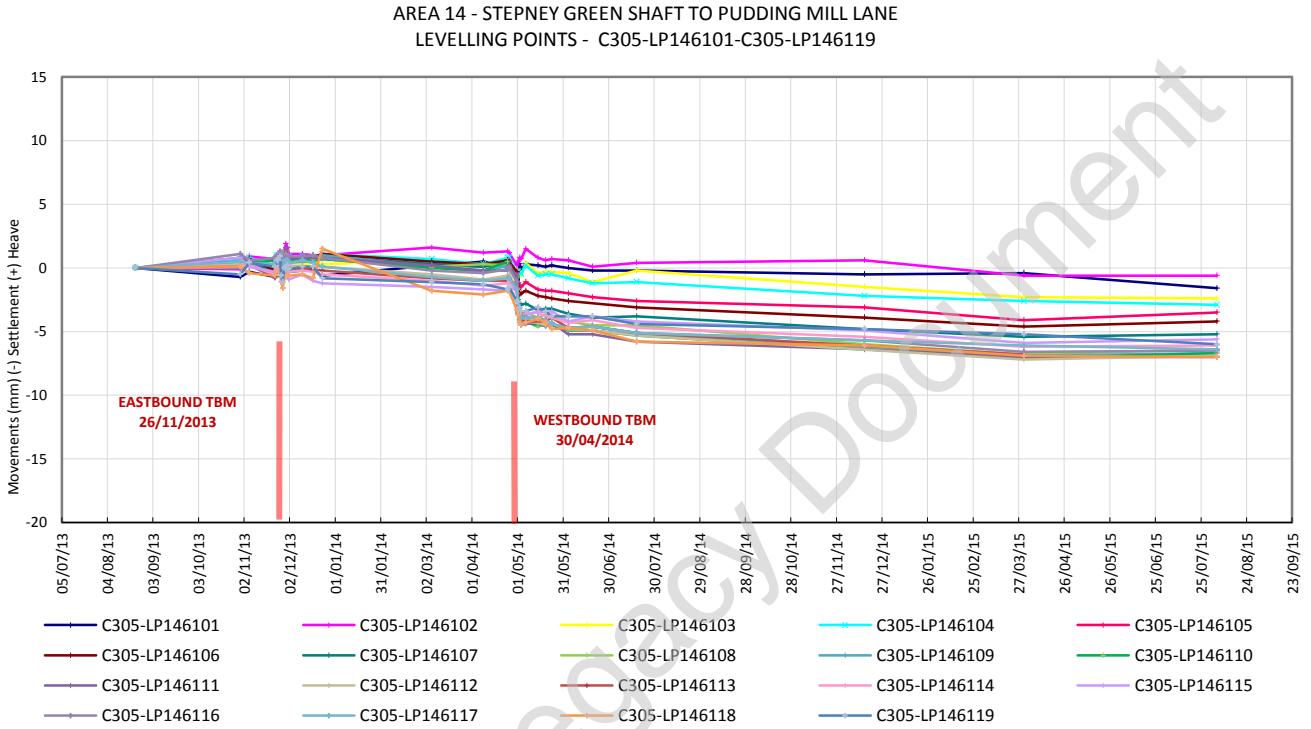
- 263 Levelling points
- 42 Sockets
- 18 3D prisms and Retro Targets
- 5 Shallow datum
- 9 Rod Extensometers
- 6 Piezometers
- 6 Inclinerometers



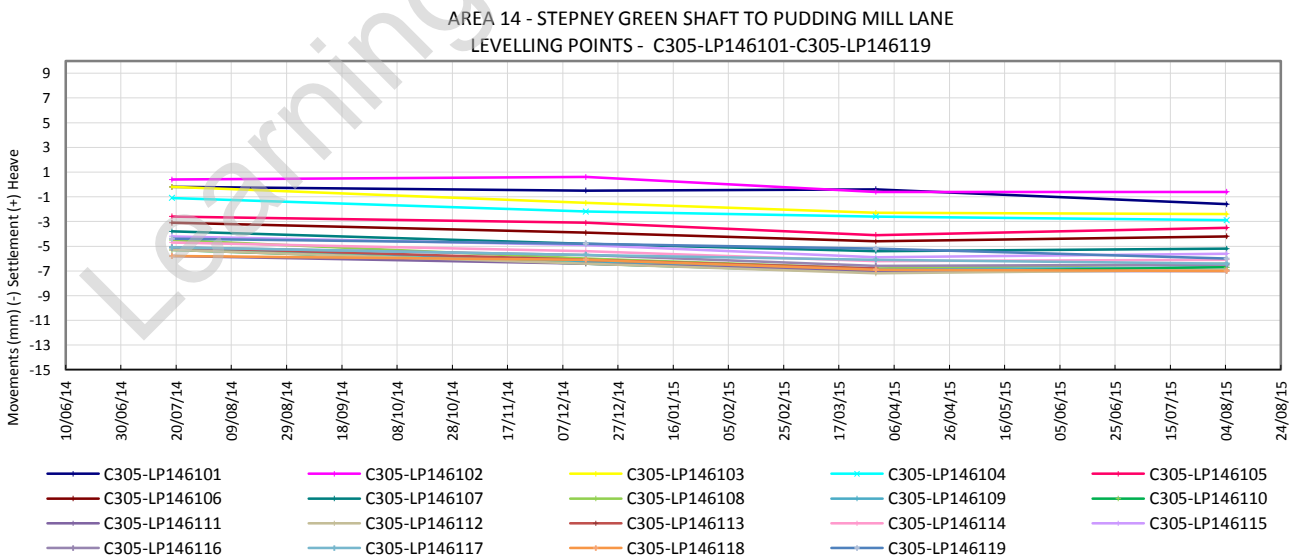
**LEVELLING POINTS**

**C305-LP146101 – C305-LP146119**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



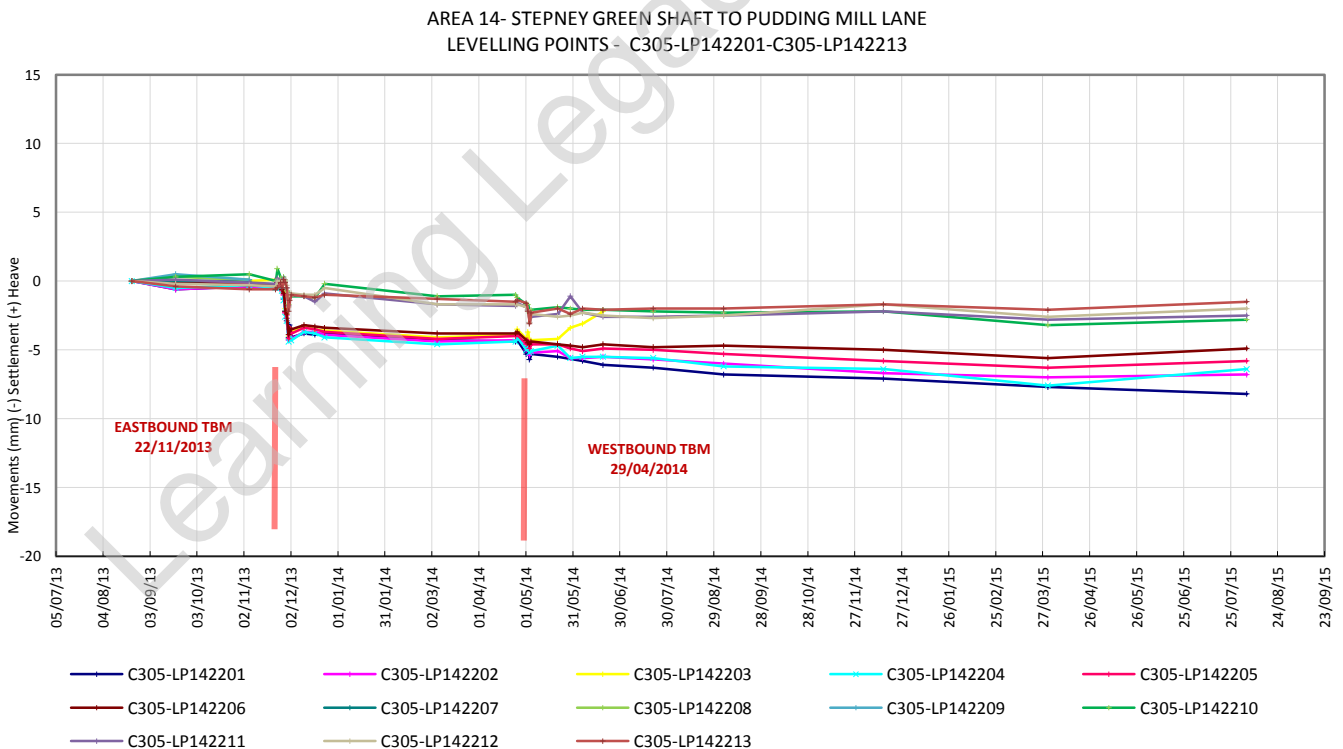
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	18/07/2014	15/12/2014	30/03/2015	04/08/2015	
C305-LP146101	-0.20	-0.50	-0.40	-1.60	-1.193
C305-LP146102	0.40	0.60	-0.60	-0.60	-1.174
C305-LP146103	-0.20	-1.50	-2.30	-2.40	-2.178
C305-LP146104	-1.10	-2.20	-2.60	-2.90	-1.715
C305-LP146105	-2.60	-3.10	-4.10	-3.50	-1.071
C305-LP146106	-3.10	-3.90	-4.60	-4.20	-1.178
C305-LP146107	-3.80	-4.80	-5.40	-5.20	-1.420
C305-LP146108	-4.50	-6.00	-6.80	-6.40	-1.931
C305-LP146109	-5.10	-6.20	-6.90	-6.70	-1.624
C305-LP146110	-5.30	-6.40	-7.10	-6.70	-1.452
C305-LP146111	-5.80	-6.40	-7.00	-7.00	-1.227
C305-LP146112	-5.30	#N/A	-7.20	-6.90	-1.700
C305-LP146113	-5.10	#N/A	-6.80	#N/A	#N/A
C305-LP146114	-4.70	-5.40	-6.20	-6.10	-1.458
C305-LP146115	-4.20	-4.90	-5.90	-5.60	-1.512
C305-LP146116	-5.10	-5.70	-6.60	-6.50	-1.480
C305-LP146117	-5.10	-5.70	-6.10	-6.40	-1.258
C305-LP146118	-5.80	-6.10	-6.90	-7.00	-1.265
C305-LP146119	-4.40	-4.80	-5.20	-6.00	-1.506
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

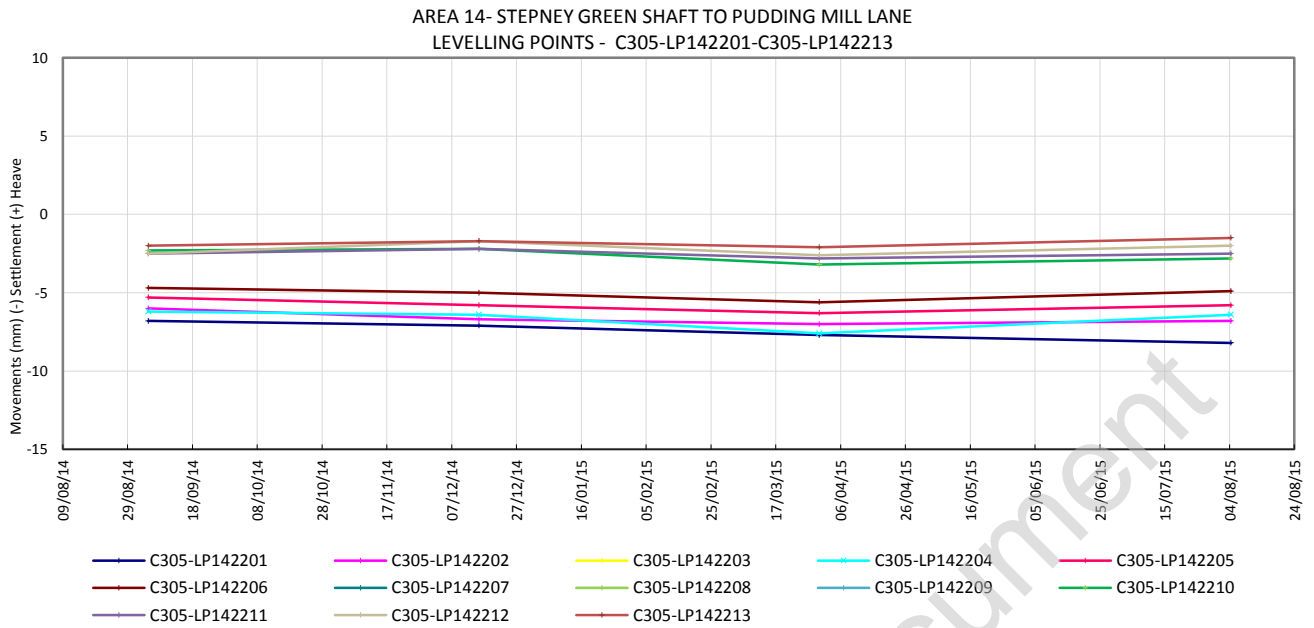
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%

**C305-LP142201 – C305-LP142213**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -4.2 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7.6 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



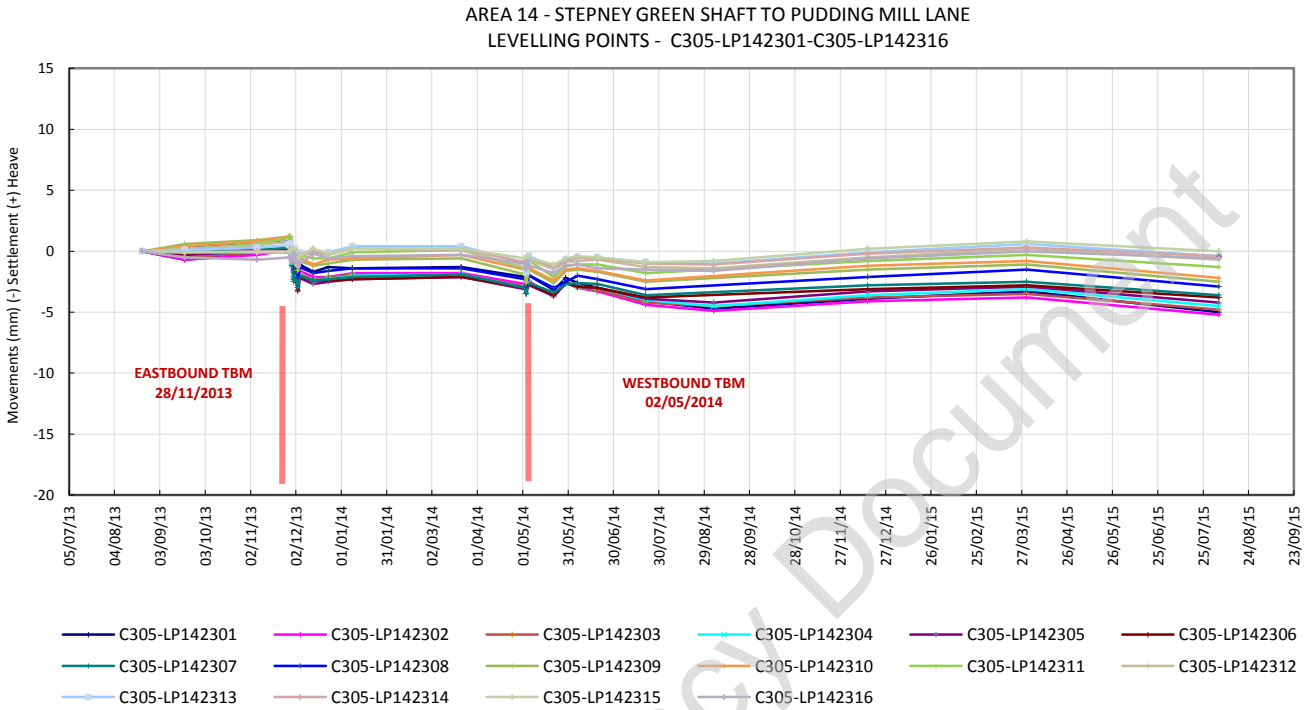
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	04/09/2014	15/12/2014	30/03/2015	04/08/2015	
C305-LP142201	-6.80	-7.10	-7.70	-8.20	-1.583
C305-LP142202	-6.00	-6.70	-7.00	-6.80	-0.854
C305-LP142203	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142204	-6.20	-6.40	-7.60	-6.40	-0.520
C305-LP142205	-5.30	-5.80	-6.30	-5.80	-0.615
C305-LP142206	-4.70	-5.00	-5.60	-4.90	-0.348
C305-LP142207	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142208	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142209	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142210	-2.30	-2.20	-3.20	-2.80	-0.797
C305-LP142211	-2.50	-2.20	-2.80	-2.50	-0.187
C305-LP142212	-2.50	-1.70	-2.60	-2.00	0.208
C305-LP142213	-2.00	-1.70	-2.10	-1.50	0.382
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

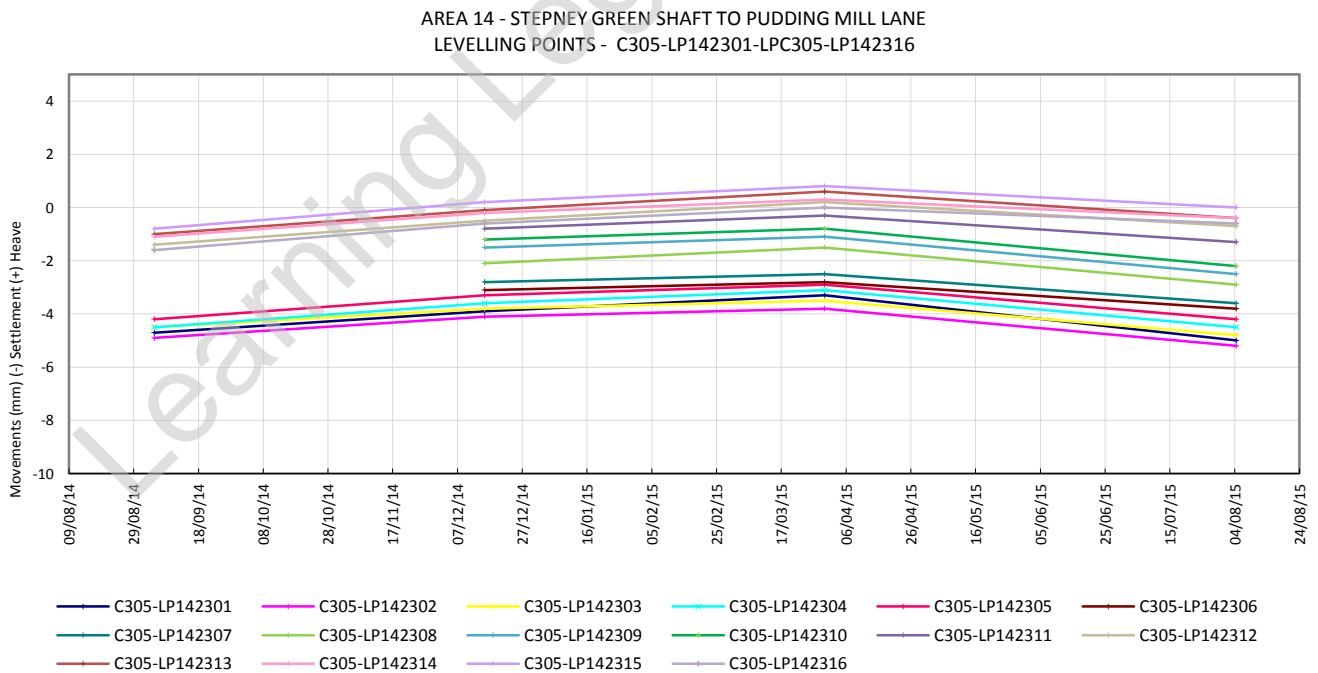
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP142301 – C305-LP142316**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -3 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -5 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



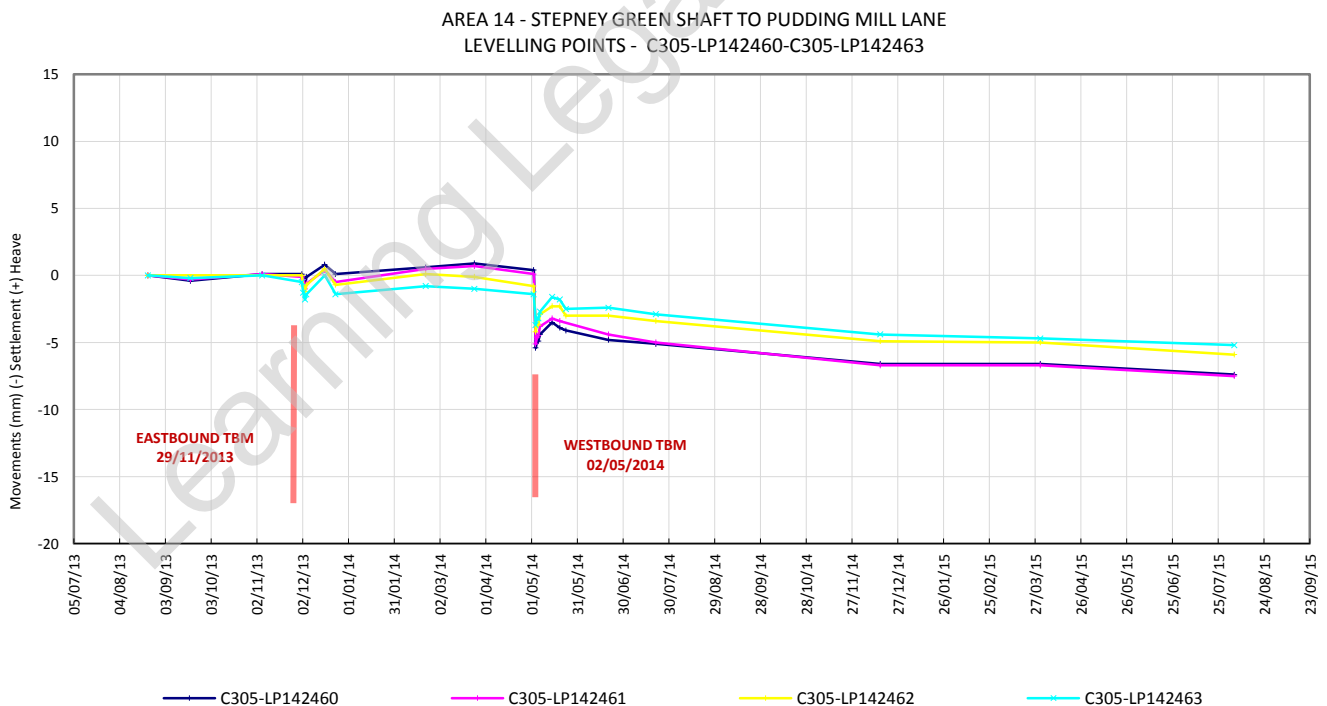
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	04/09/2014	15/12/2014	30/03/2015	04/08/2015	
C305-LP142301	-4.70	-3.90	-3.30	-5.00	-0.204
C305-LP142302	-4.90	-4.10	-3.80	-5.20	-0.286
C305-LP142303	-4.50	-3.80	-3.50	-4.80	-0.278
C305-LP142304	-4.50	-3.60	-3.10	-4.50	0.070
C305-LP142305	-4.20	-3.30	-2.90	-4.20	0.043
C305-LP142306	#N/A	-3.10	-2.80	-3.80	-1.162
C305-LP142307	#N/A	-2.80	-2.50	-3.60	-1.324
C305-LP142308	#N/A	-2.10	-1.50	-2.90	-1.354
C305-LP142309	#N/A	-1.50	-1.10	-2.50	-1.657
C305-LP142310	#N/A	-1.20	-0.80	-2.20	-1.657
C305-LP142311	#N/A	-0.80	-0.30	-1.30	-0.859
C305-LP142312	-1.40	-0.50	0.20	-0.70	0.845
C305-LP142313	-1.00	-0.10	0.60	-0.40	0.743
C305-LP142314	-1.10	-0.20	0.30	-0.40	0.791
C305-LP142315	-0.80	0.20	0.80	0.00	0.913
C305-LP142316	-1.60	-0.60	0.00	-0.60	1.119
Rate less than -2.5 mm/year				% less 2 mm/ year	100%
Rate greater than -3.5 mm/year				% less 3 mm/ year	100%

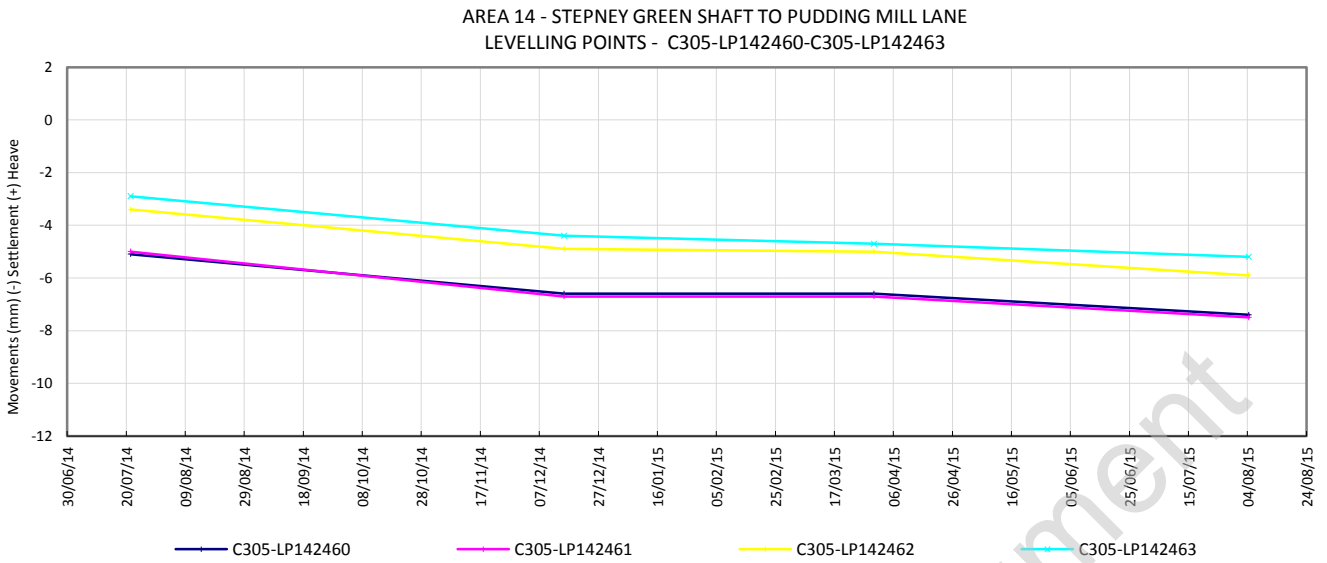
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP142460 – C305-LP142463**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -1.8 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7.5 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	21/07/2014	15/12/2014	30/03/2015	04/08/2015	
C305-LP142460	-5.10	-6.60	-6.60	-7.40	-2.071
C305-LP142461	-5.00	-6.70	-6.70	-7.50	-2.255
C305-LP142462	-3.40	-4.90	-5.00	-5.90	-2.272
C305-LP142463	-2.90	-4.40	-4.70	-5.20	-2.153
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

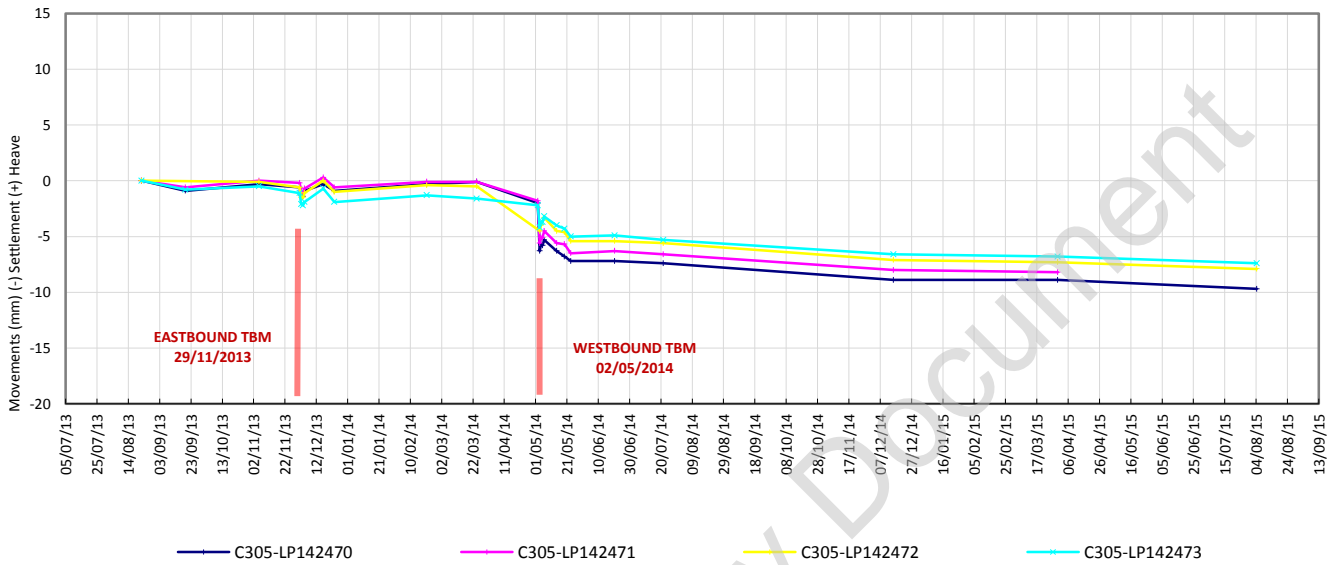
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.



**C305-LP142470 – C305-LP142473**

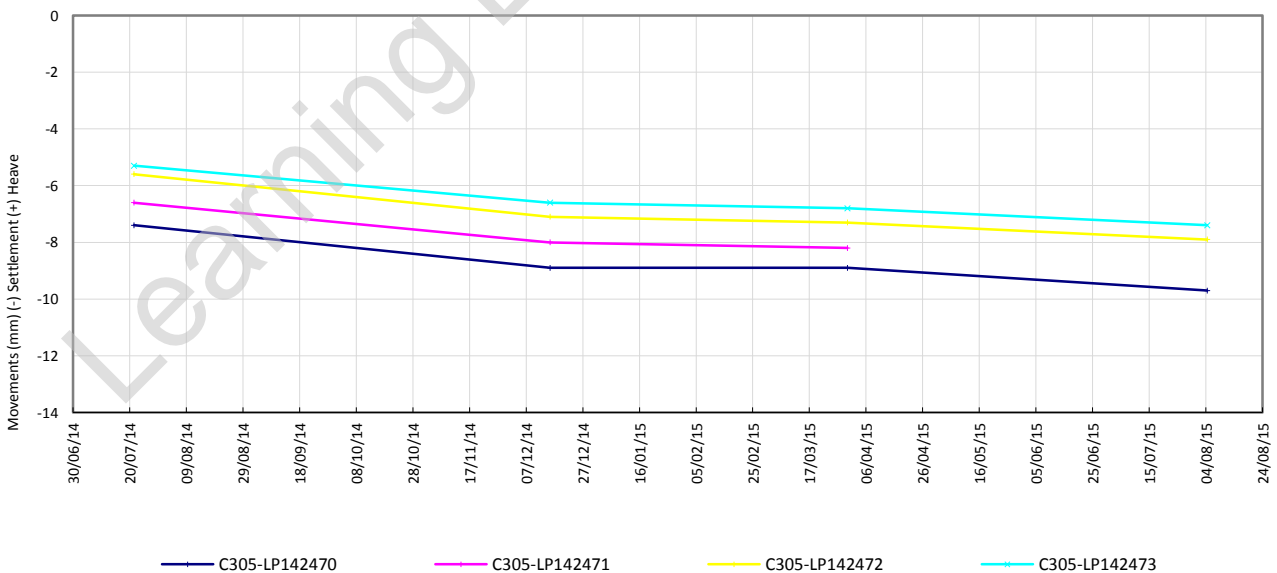
The graph presented below shows the levelling point readings from this array. A maximum settlement of -2.2 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -9.7 mm after the Westbound TBM transit.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142470-C305-LP142473



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142470-C305-LP142473



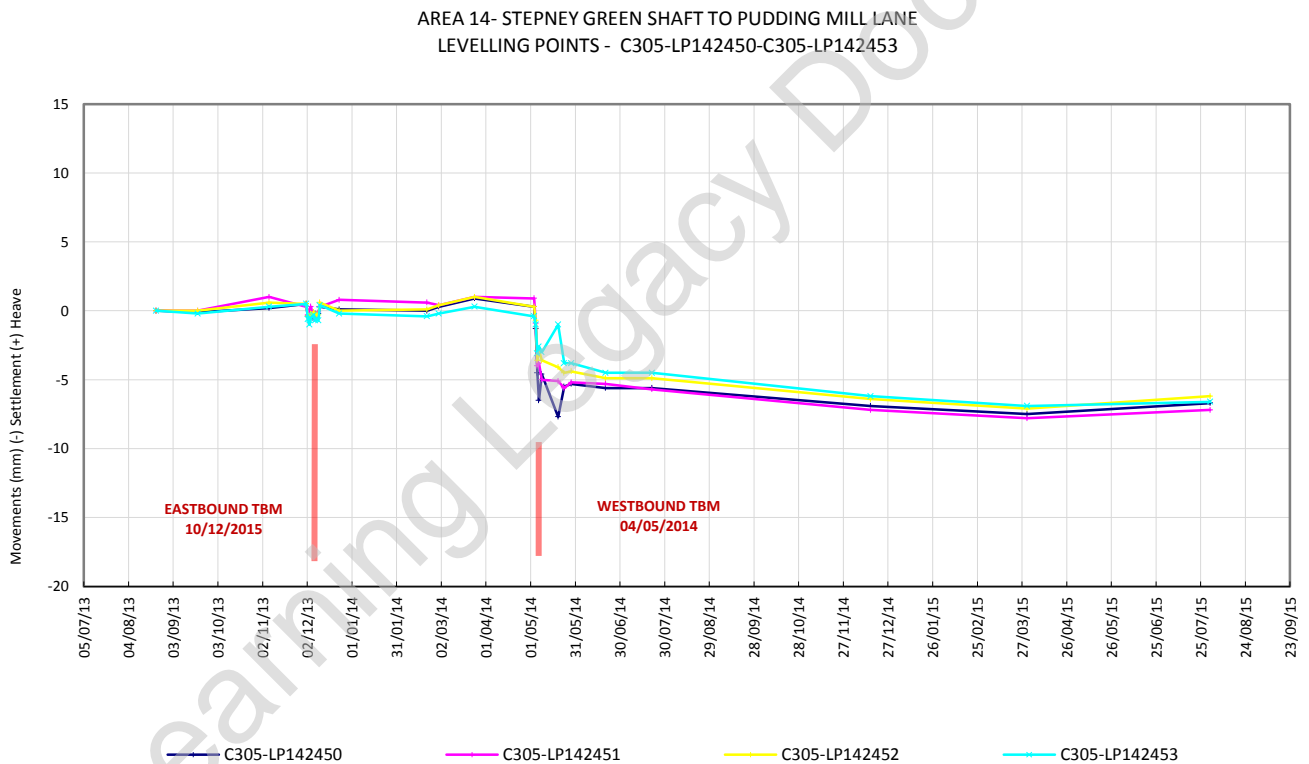
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	21/07/2014	15/12/2014	30/03/2015	04/08/2015	
C305-LP142470	-7.40	-8.90	-8.90	-9.70	-2.071
C305-LP142471	-6.60	-8.00	-8.20	#N/A	-2.393
C305-LP142472	-5.60	-7.10	-7.30	-7.90	-2.125
C305-LP142473	-5.30	-6.60	-6.80	-7.40	-1.942
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

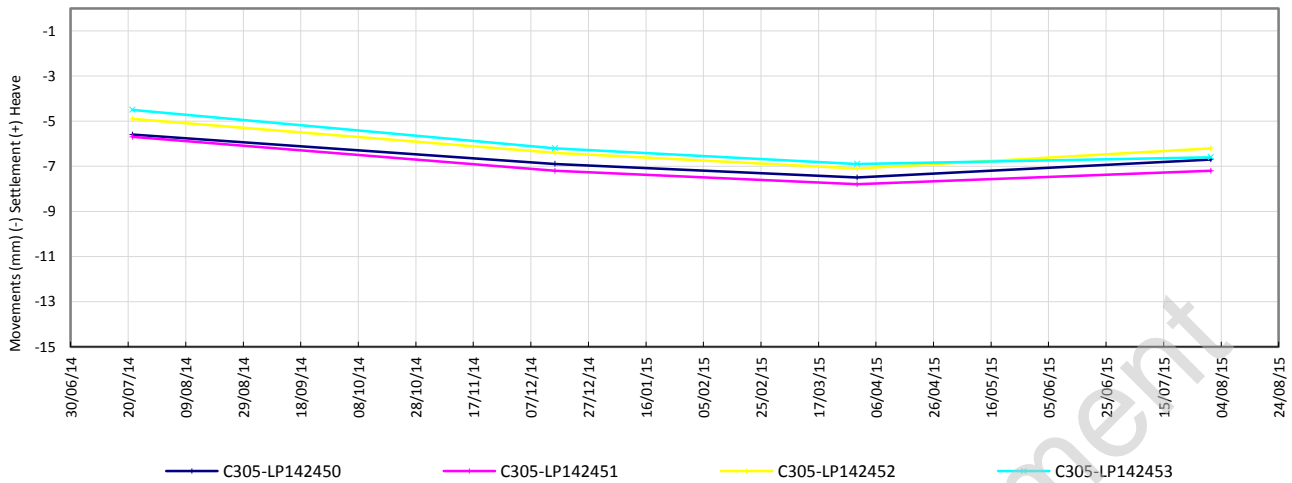
### C305-LP142450 – C305-LP142453

The graph presented below shows the levelling point readings from this array. A maximum settlement of -1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142450-C305-LP142453



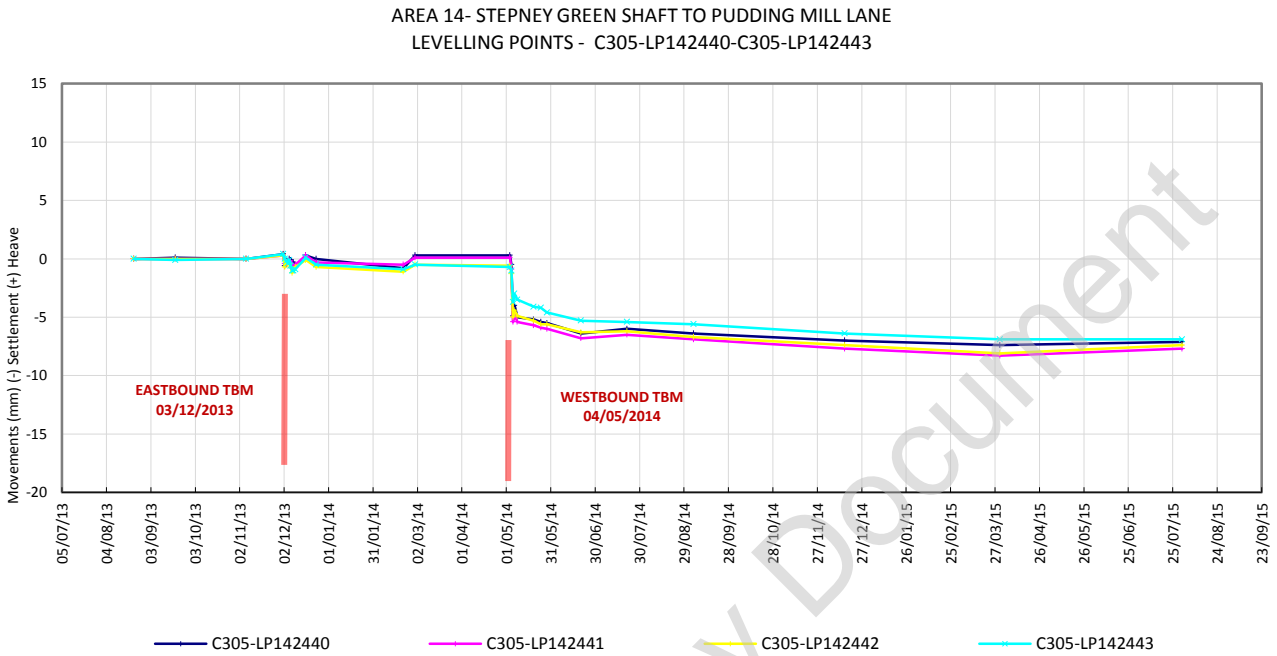
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	21/07/2014	15/12/2014	30/03/2015	31/07/2015	
C305-LP142450	-5.60	-6.90	-7.50	-6.70	-1.203
C305-LP142451	-5.70	-7.20	-7.80	-7.20	-1.563
C305-LP142452	-4.90	-6.40	-7.10	-6.20	-1.417
C305-LP142453	-4.50	-6.20	-6.90	-6.60	-2.126
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

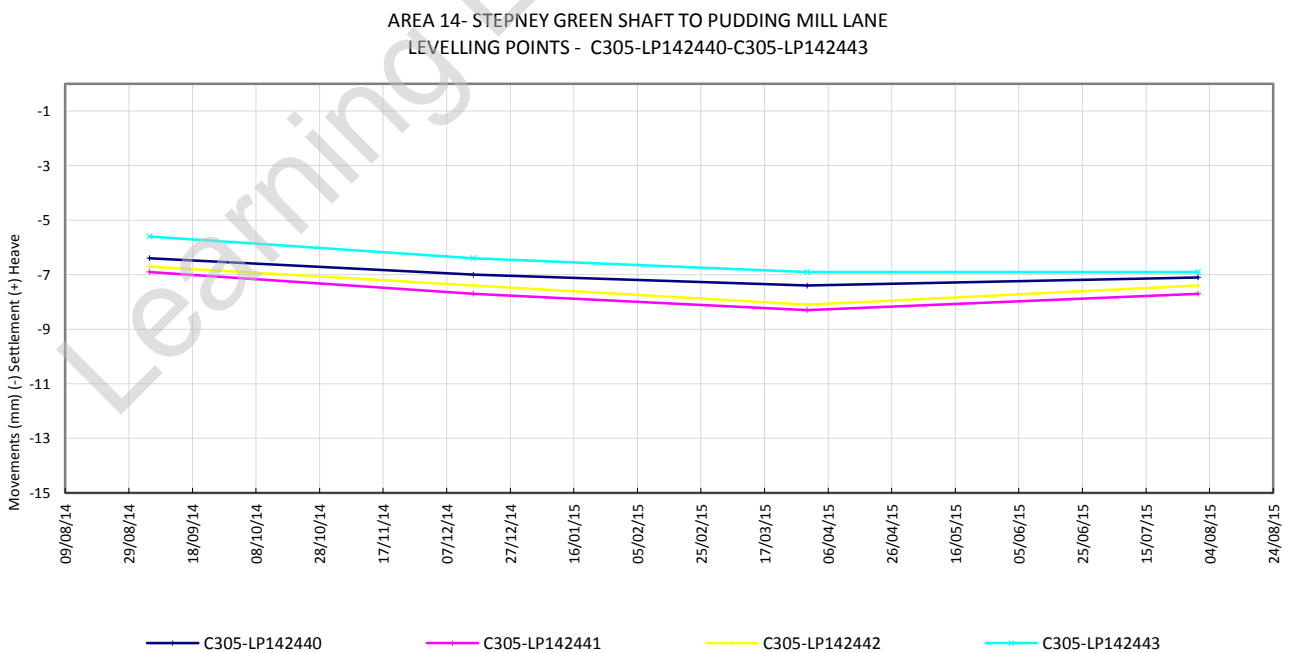
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP142440 – C305-LP142443**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



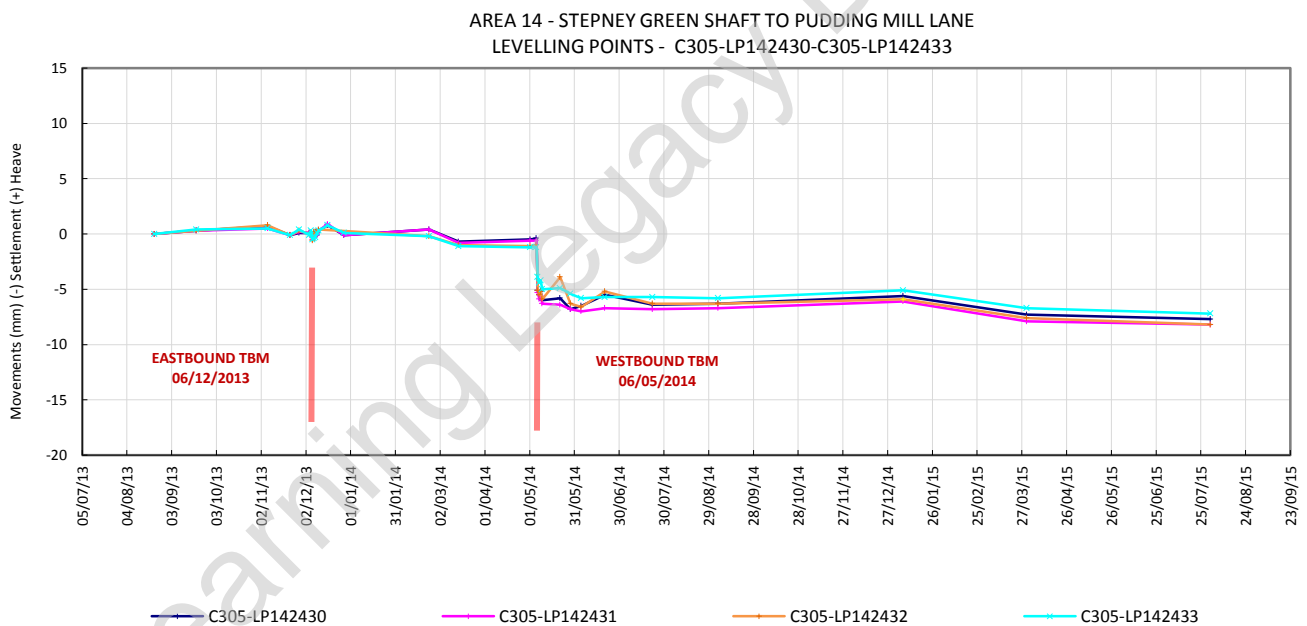
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	04/09/2014	15/12/2014	30/03/2015	31/07/2015	
C305-LP142440	-6.40	-7.00	-7.40	-7.10	-0.801
C305-LP142441	-6.90	-7.70	-8.30	-7.70	-0.949
C305-LP142442	-6.70	-7.40	-8.10	-7.40	-0.880
C305-LP142443	-5.60	-6.40	-6.90	-6.90	-1.438
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

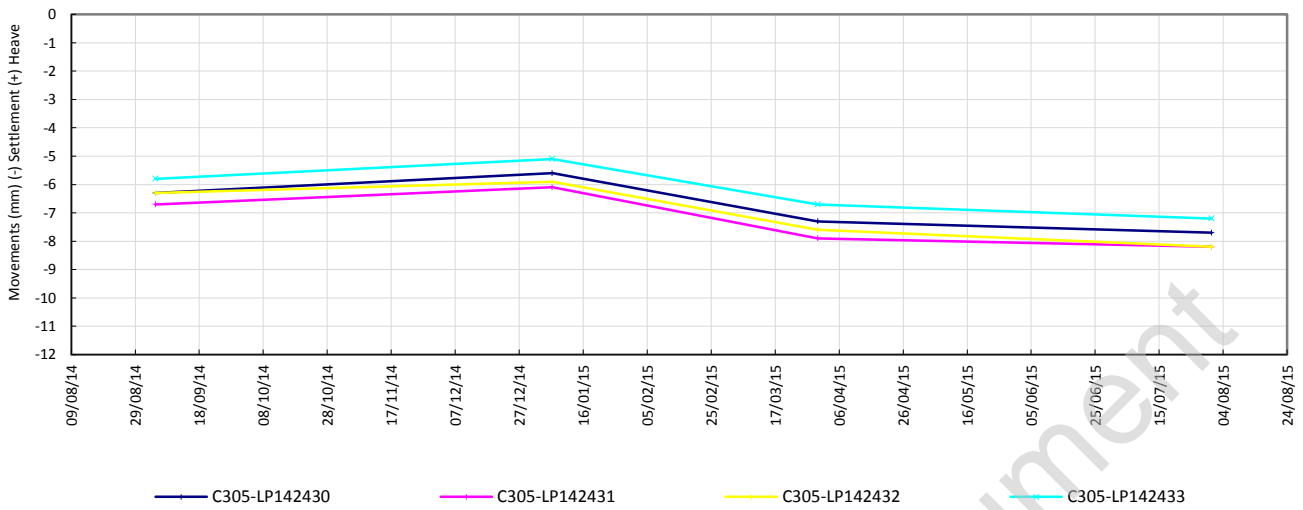
### C305-LP142430 – C305-LP142433

The graph presented below shows the levelling point readings from this array. A maximum settlement of - mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.2 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142430-C305-LP142433



The table below lists the annual settlement rate for the levelling points in this array.

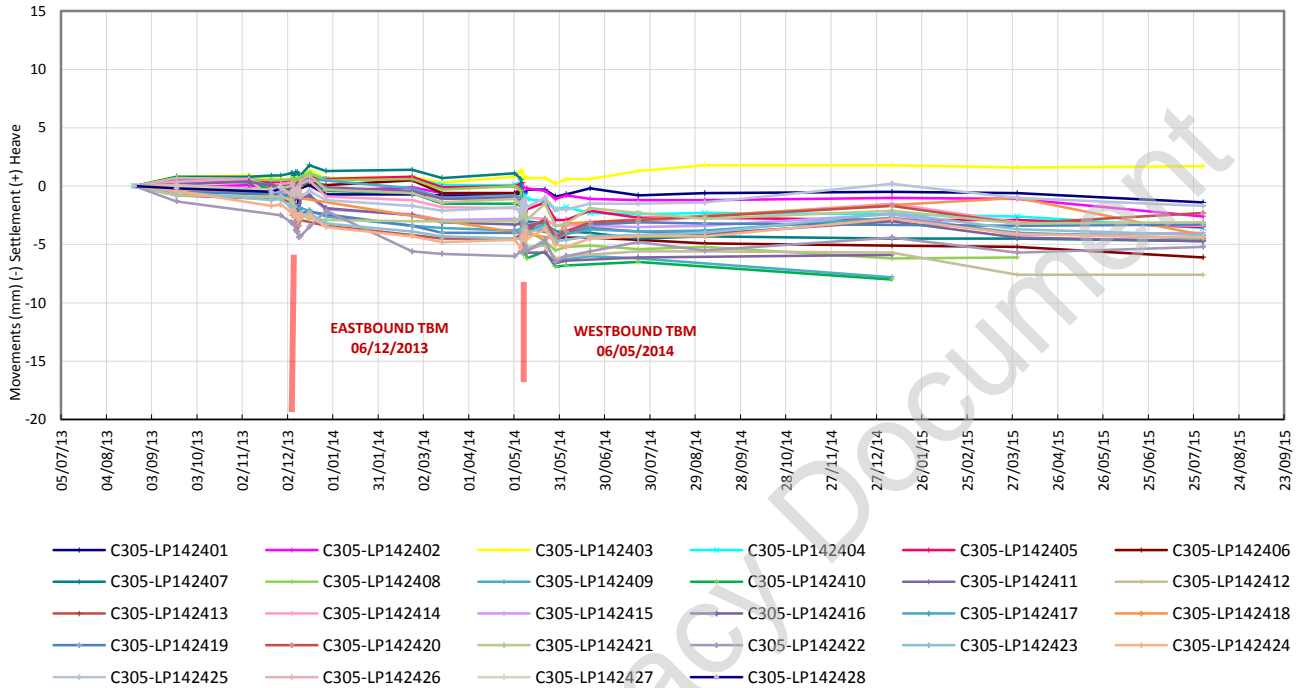
	Registered movement (mm)				mm/year
	04/09/2014	06/01/2015	30/03/2015	31/07/2015	
C305-LP142430	-6.30	-5.60	-7.30	-7.70	-1.899
C305-LP142431	-6.70	-6.10	-7.90	-8.20	-2.030
C305-LP142432	-6.30	-5.90	-7.60	-8.20	-2.419
C305-LP142433	-5.80	-5.10	-6.70	-7.20	-1.873
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP142401 – C305-LP142428**

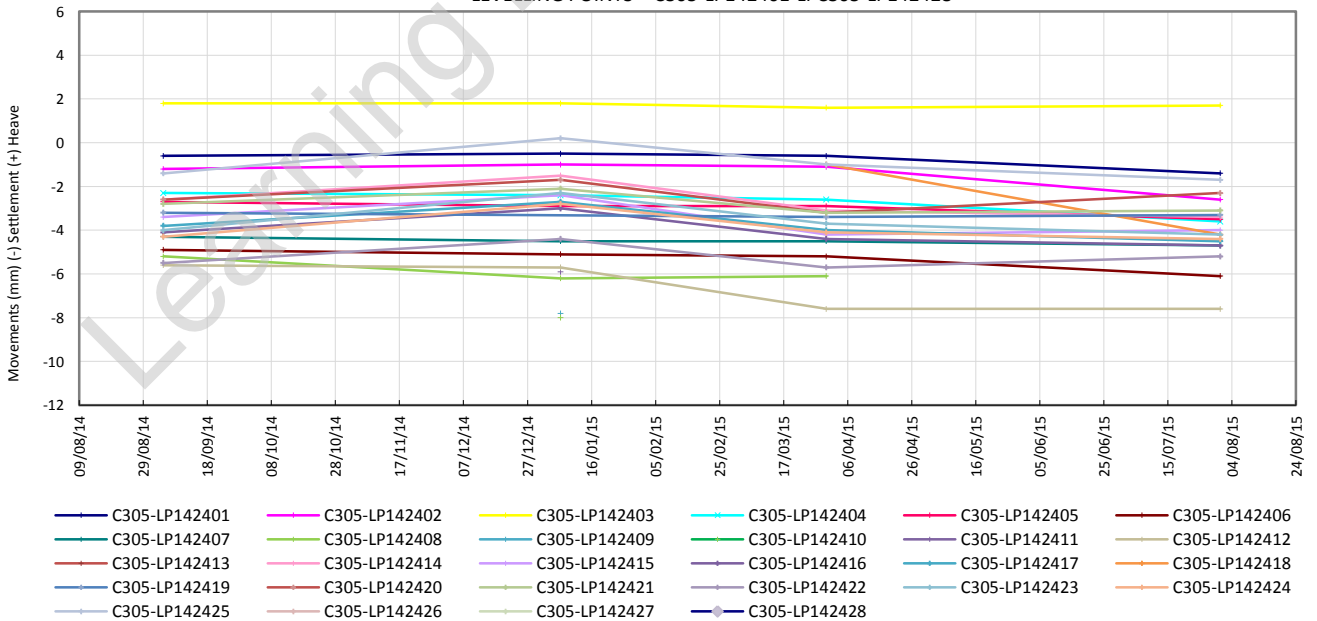
The graph presented below shows the levelling point readings from this array. A maximum settlement of -5.8 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8 mm after the Westbound TBM transit.

AREA 14- STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142401-LPC305-LP142428



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14- STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142401-LPC305-LP142428



The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	04/09/2014	06/01/2015	30/03/2015	31/07/2015	
C305-LP142401	-0.60	-0.50	-0.60	-1.40	-0.857
C305-LP142402	-1.20	-1.00	-1.10	-2.60	-1.480
C305-LP142403	1.80	1.80	1.60	1.70	-0.156
C305-LP142404	-2.30	-2.40	-2.60	-3.60	-1.403
C305-LP142405	-2.70	-2.90	-2.90	-3.50	-0.832
C305-LP142406	-4.90	-5.10	-5.20	-6.10	-1.273
C305-LP142407	-4.30	-4.50	-4.50	-4.70	-0.416
C305-LP142408	-5.20	-6.20	-6.10	#N/A	-1.693
C305-LP142409	#N/A	-7.80	#N/A	#N/A	#N/A
C305-LP142410	#N/A	-8.00	#N/A	#N/A	#N/A
C305-LP142411	#N/A	-5.90	#N/A	#N/A	#N/A
C305-LP142412	-5.60	-5.70	-7.60	-7.60	-2.577
C305-LP142413	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142414	-2.60	-1.50	-3.10	-3.40	-1.249
C305-LP142415	-3.40	-2.40	-4.20	-4.00	-1.094
C305-LP142416	-4.10	-3.00	-4.40	-4.70	-0.988
C305-LP142417	-3.80	-2.70	-4.00	-4.50	-1.066
C305-LP142418	#N/A	#N/A	-1.00	-4.20	#N/A
C305-LP142419	-3.20	#N/A	-3.40	-3.30	-0.136
C305-LP142420	-2.60	-1.70	-3.20	-2.30	-0.080
C305-LP142421	-2.80	-2.10	-3.20	-3.10	-0.599
C305-LP142422	-5.50	-4.40	-5.70	-5.20	-0.027
C305-LP142423	-4.00	-2.30	-3.70	-4.20	-0.571
C305-LP142424	-4.30	-2.80	-4.10	-4.40	-0.441
C305-LP142425	-1.40	0.20	-1.00	-1.70	-0.622
C305-LP142426	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142427	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142428	#N/A	#N/A	#N/A	#N/A	#N/A
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	95%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

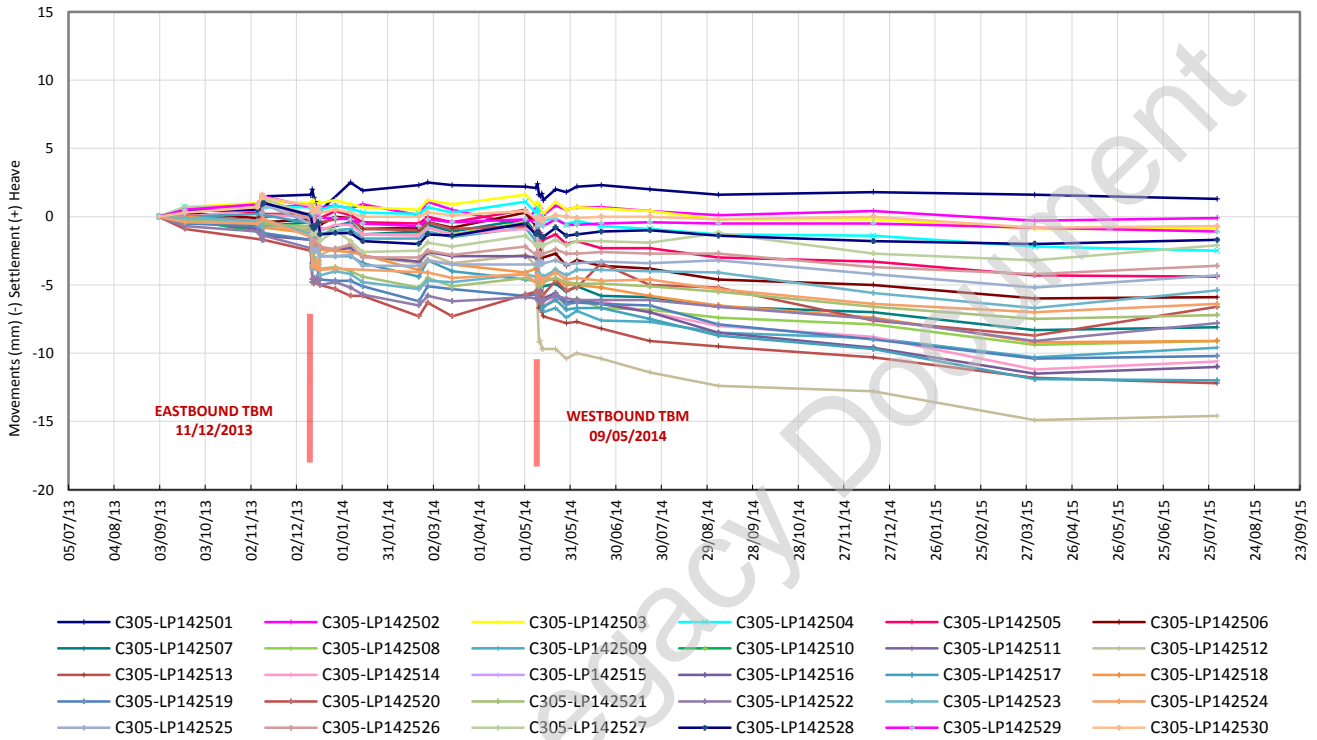
The percentage of the levelling points with a settlement rate less than 2 mm/year is 95%.



**C305-LP142501 – C305-LP142530**

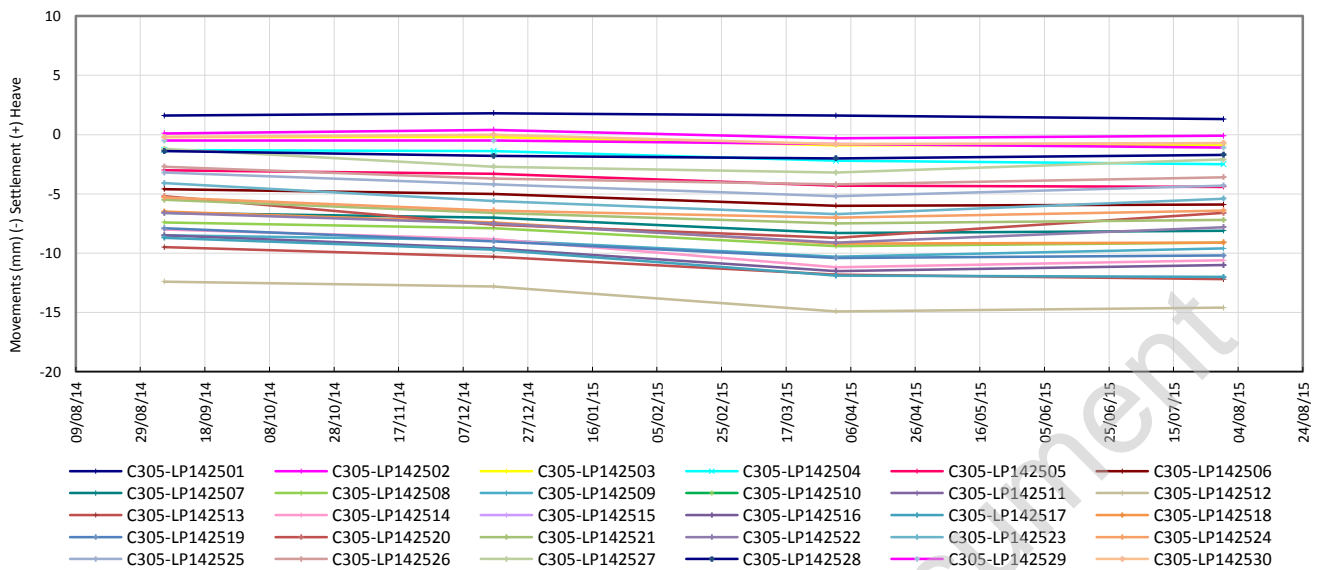
The graph presented below shows the levelling point readings from this array. A maximum settlement of -7.3 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -14.9 mm after the Westbound TBM transit.

AREA 14- STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142501-C305-LP142530



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14- STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142501-C305-LP142530



The table below lists the annual settlement rate for the levelling points in this array.

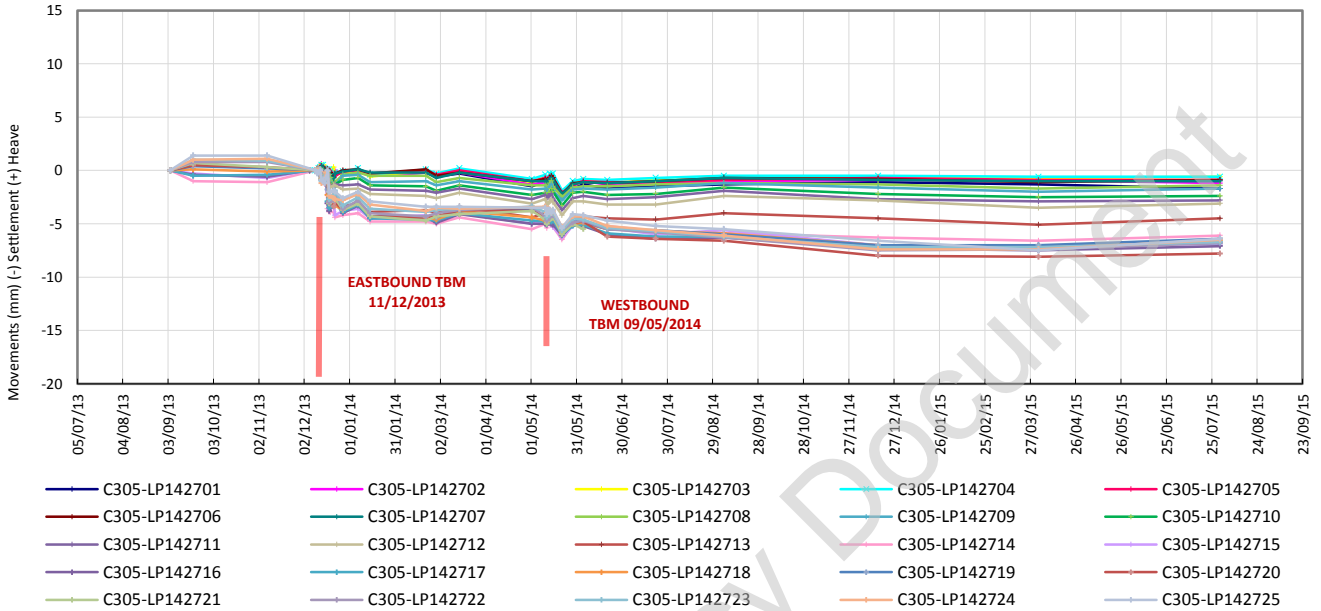
	Registered movement (mm)				mm/year
	05/09/2014	16/12/2014	01/04/2015	30/07/2015	
C305-LP142501	1.60	1.80	1.60	1.30	-0.381
C305-LP142502	0.10	0.40	-0.30	-0.10	-0.432
C305-LP142503	-0.20	-0.20	-0.90	-0.90	-0.932
C305-LP142504	-1.30	-1.40	-2.20	-2.50	-1.473
C305-LP142505	-3.00	-3.30	-4.30	-4.40	-1.728
C305-LP142506	-4.60	-5.00	-6.00	-5.90	-1.619
C305-LP142507	-6.60	-7.00	-8.30	-8.10	-1.915
C305-LP142508	-7.40	-7.90	-9.40	-9.10	-2.176
C305-LP142509	-8.50	-8.90	-10.30	-9.60	-1.531
C305-LP142510	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142511	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142512	-12.40	-12.80	-14.90	-14.60	-2.877
C305-LP142513	-9.50	-10.30	-11.80	-12.20	-3.193
C305-LP142514	-8.00	-8.80	-11.20	-10.60	-3.358
C305-LP142515	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142516	-8.50	-9.60	-11.50	-11.00	-3.089
C305-LP142517	-8.70	-9.70	-11.90	-12.00	-4.011
C305-LP142518	-6.50	-7.40	-9.20	-9.10	-3.174
C305-LP142519	-7.90	-9.00	-10.40	-10.20	-2.733
C305-LP142520	-5.20	-7.60	-8.70	-6.60	-1.642
C305-LP142521	-5.50	-6.60	-7.50	-7.20	-1.964
C305-LP142522	-6.60	-7.50	-9.10	-7.80	-1.667
C305-LP142523	-4.10	-5.60	-6.70	-5.40	-1.588
C305-LP142524	-5.30	-6.40	-7.00	-6.40	-1.255
C305-LP142525	-3.20	-4.20	-5.20	-4.30	-1.379
C305-LP142526	-2.70	-3.70	-4.20	-3.60	-1.024
C305-LP142527	-1.20	-2.70	-3.20	-2.10	-0.996
C305-LP142528	-1.40	-1.80	-2.00	-1.70	-0.347
C305-LP142529	-0.50	-0.50	-0.80	-1.10	-0.710
C305-LP142530	-0.20	0.00	-0.80	-0.70	-0.766
	Rate less than -2.5 mm/year			% less 2 mm/ year	74%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	96%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 74%.

**C305-LP142701 – C305-LP142725**

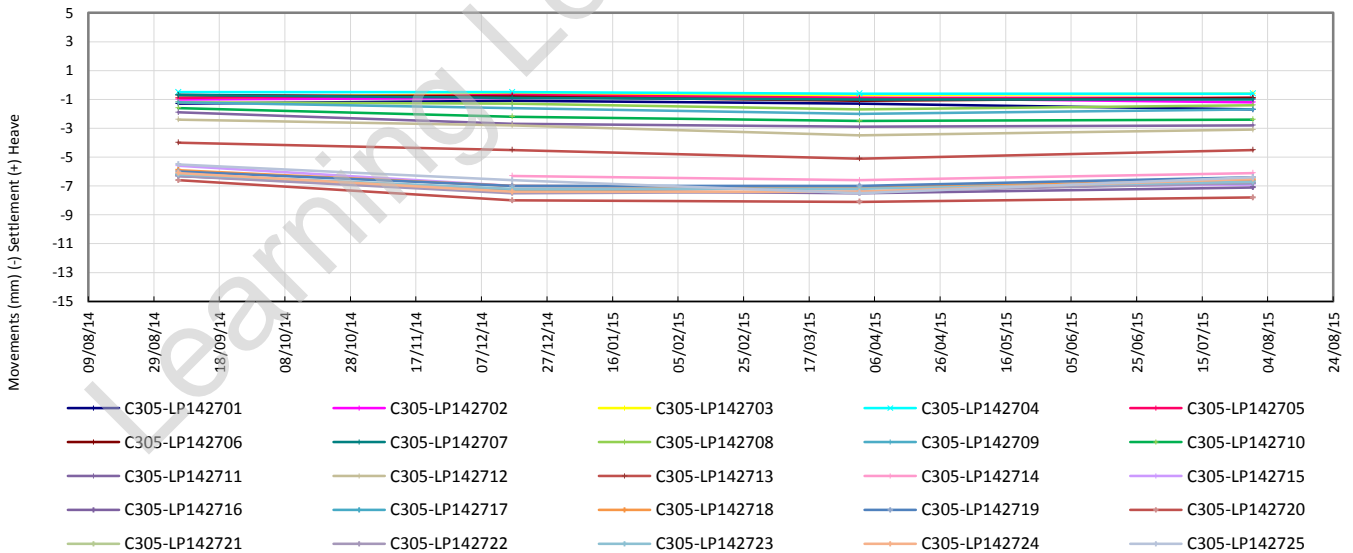
The graph presented below shows the levelling point readings from this array. A maximum settlement of -4.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.1 mm after the Westbound TBM transit.

AREA 14- STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142701-C305-LP142725



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14- STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142701-C305-LP142725



The table below lists the annual settlement rate for the levelling points in this array.

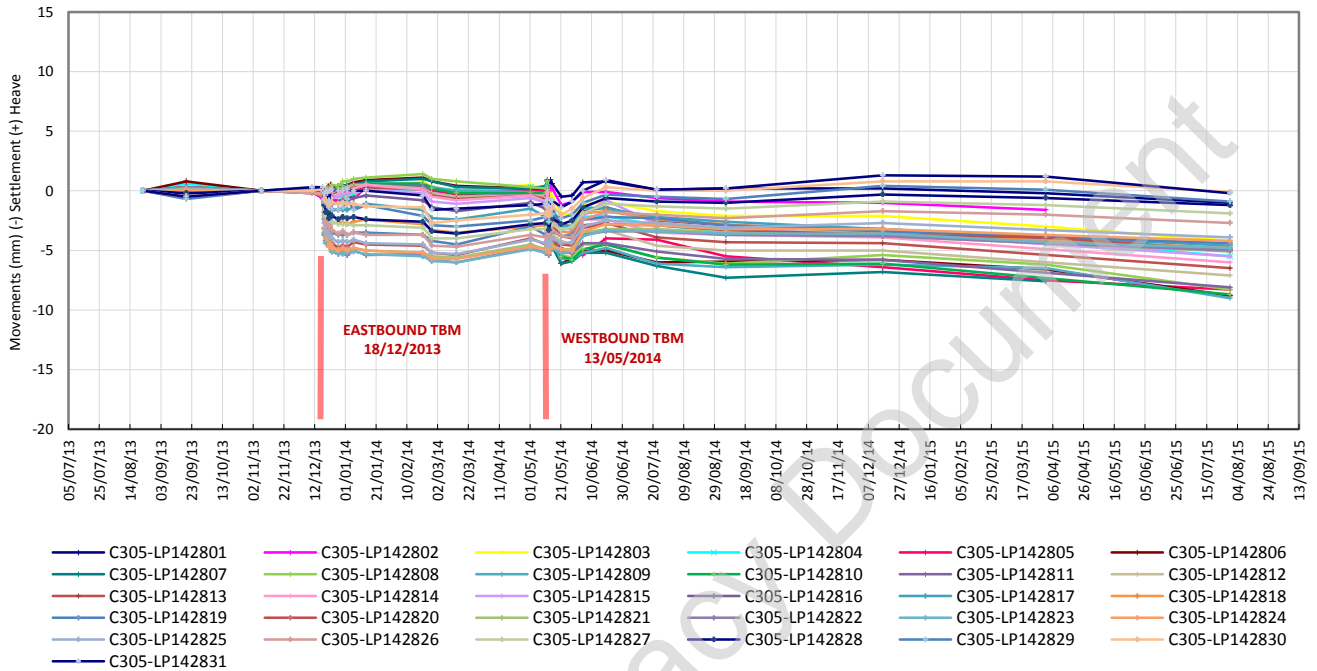
	Registered movement (mm)				mm/year
	05/09/2014	16/12/2014	01/04/2015	30/07/2015	
C305-LP142701	-1.30	-1.10	-1.30	-1.70	-0.484
C305-LP142702	-1.00	-0.90	-0.90	-1.20	-0.212
C305-LP142703	-0.90	-0.60	-0.70	-0.60	0.264
C305-LP142704	-0.50	-0.50	-0.60	-0.60	-0.133
C305-LP142705	-0.90	-0.70	-0.90	-0.90	-0.071
C305-LP142706	-0.70	-0.80	-1.10	-0.90	-0.290
C305-LP142707	-0.70	-0.90	-1.00	-1.00	-0.329
C305-LP142708	-1.20	-1.30	-1.70	-1.40	-0.320
C305-LP142709	-1.20	-1.60	-2.00	-1.70	-0.614
C305-LP142710	-1.60	-2.20	-2.50	-2.40	-0.883
C305-LP142711	-1.90	-2.70	-2.90	-2.80	-0.945
C305-LP142712	-2.40	-2.80	-3.50	-3.10	-0.909
C305-LP142713	-4.00	-4.50	-5.10	-4.50	-0.667
C305-LP142714	#N/A	-6.30	-6.60	-6.10	0.349
C305-LP142715	-5.60	-7.00	-7.10	-6.90	-1.296
C305-LP142716	-6.30	-7.30	-7.50	-7.10	-0.831
C305-LP142717	-6.20	-7.30	-7.10	-6.80	-0.500
C305-LP142718	-5.90	-7.00	-7.10	-6.60	-0.692
C305-LP142719	-6.00	-7.00	-7.00	-6.40	-0.358
C305-LP142720	-6.60	-8.00	-8.10	-7.80	-1.192
C305-LP142721	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP142722	-6.30	-7.50	-7.40	-6.80	-0.420
C305-LP142723	-6.20	-7.20	-7.20	-6.70	-0.461
C305-LP142724	-6.10	-7.40	-7.40	-6.50	-0.341
C305-LP142725	-5.50	-6.60	-7.50	-6.40	-1.137
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP142801 – C305-LP142831**

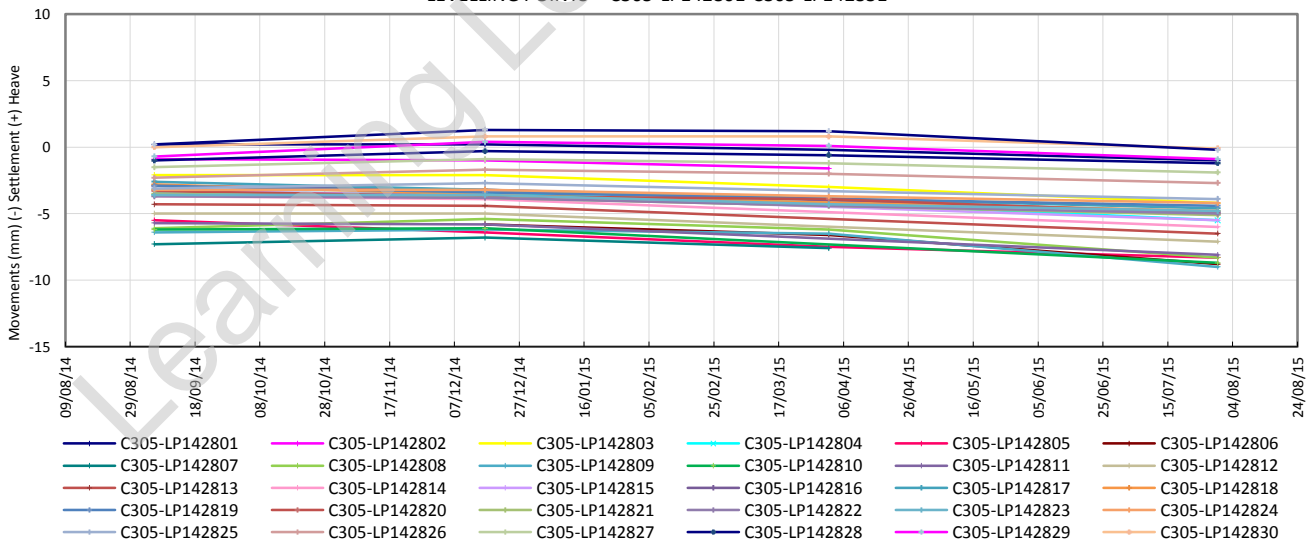
The graph presented below shows the levelling point readings from this array. A maximum settlement of -6 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.7 mm after the Westbound TBM transit.

AREA 14- STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142801-C305-LP142831



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14- STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142801-C305-LP142831



The table below lists the annual settlement rate for the levelling points in this array.

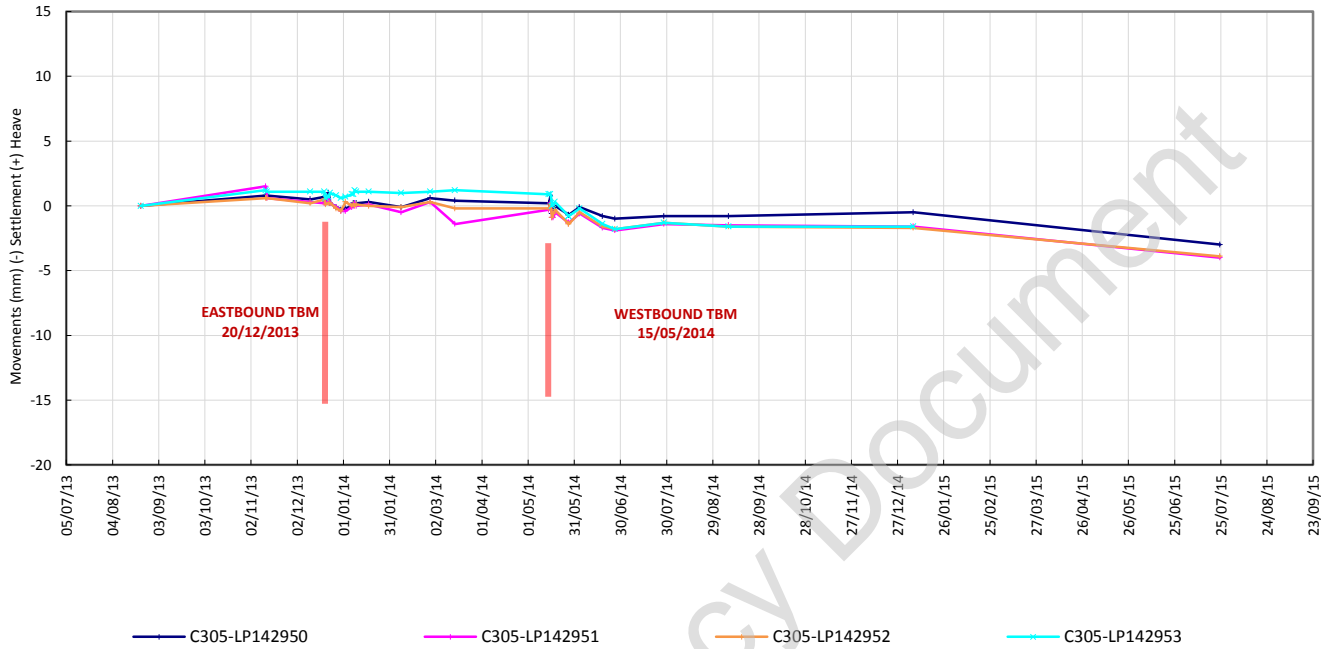
	Registered movement (mm)				mm/year
	05/09/2014	16/12/2014	01/04/2015	30/07/2015	
C305-LP142801	0.20	0.20	-0.20	-1.00	-1.360
C305-LP142802	-0.90	-1.00	-1.60	#N/A	-1.234
C305-LP142803	-2.10	-2.10	-3.00	-4.20	-2.439
C305-LP142804	-3.40	-3.50	-4.20	-5.50	-2.374
C305-LP142805	-5.50	-6.40	-7.50	-8.30	-3.173
C305-LP142806	#N/A	-5.80	-6.60	-8.80	#N/A
C305-LP142807	-7.30	-6.80	-7.60	#N/A	-0.541
C305-LP142808	-6.10	-5.40	-6.20	-8.30	-2.551
C305-LP142809	-6.40	-6.20	-6.50	-9.00	-2.788
C305-LP142810	-6.20	-6.10	#N/A	-8.70	-3.017
C305-LP142811	-5.70	-5.80	#N/A	-8.10	-2.844
C305-LP142812	-5.00	-5.00	#N/A	-7.10	-2.512
C305-LP142813	-4.30	-4.40	#N/A	-6.50	-2.605
C305-LP142814	-3.70	-3.90	#N/A	-6.00	-2.698
C305-LP142815	-3.30	-3.60	#N/A	-5.50	-2.551
C305-LP142816	-2.90	-3.20	#N/A	-4.90	-2.312
C305-LP142817	-2.60	-3.20	#N/A	-4.60	-2.232
C305-LP142818	-2.80	-3.60	#N/A	-4.80	-2.178
C305-LP142819	-2.90	-3.40	#N/A	-4.40	-1.660
C305-LP142820	-3.30	-3.70	-3.90	-5.00	-1.795
C305-LP142821	-3.50	-3.80	-4.40	-5.10	-1.816
C305-LP142822	-3.70	-3.80	-4.40	-5.00	-1.517
C305-LP142823	-3.60	-3.60	-4.30	-4.80	-1.449
C305-LP142824	-3.20	-3.20	-3.70	-4.20	-1.183
C305-LP142825	-3.10	-2.70	-3.30	-3.90	-1.028
C305-LP142826	-2.30	-1.70	-2.00	-2.70	-0.536
C305-LP142827	-1.50	-0.90	-1.20	-1.90	-0.536
C305-LP142828	-1.00	-0.30	-0.60	-1.20	-0.335
C305-LP142829	-0.70	0.40	0.10	-0.90	-0.357
C305-LP142830	0.00	0.80	0.80	-0.10	-0.148
C305-LP142831	0.20	1.30	1.20	-0.20	-0.504
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	70%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 70%.

**C305-LP142950 – C305-LP142953**

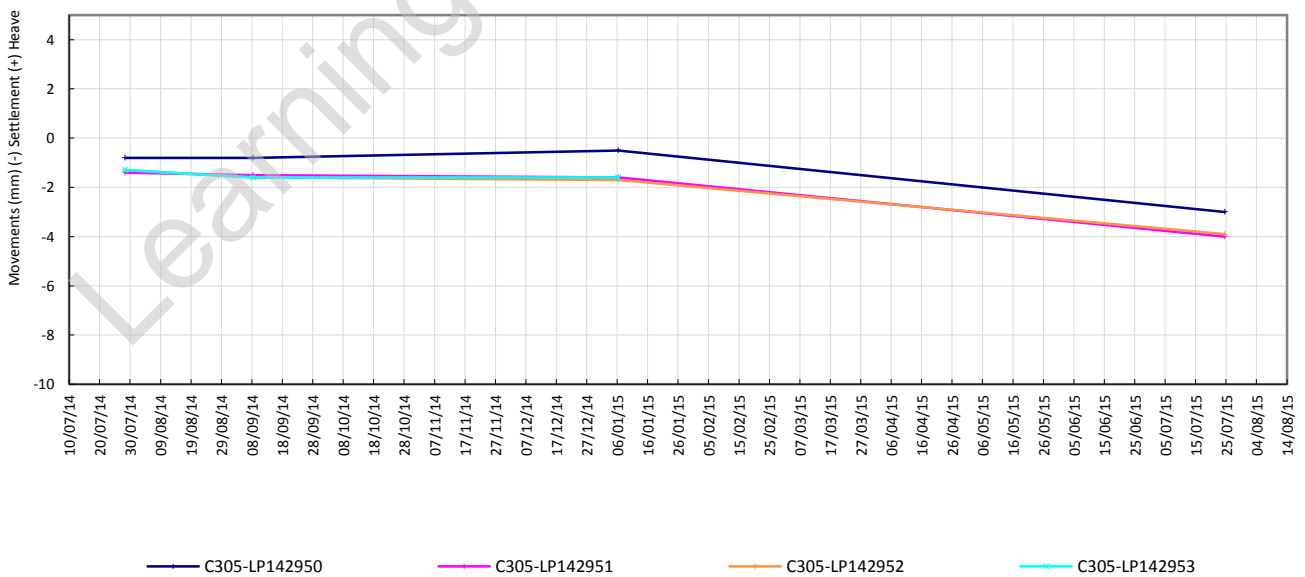
The graph presented below shows the levelling point readings from this array. A maximum settlement of -1.4 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -4 mm after the Westbound TBM transit.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142950-C305-LP142953



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142950-C305-LP142953



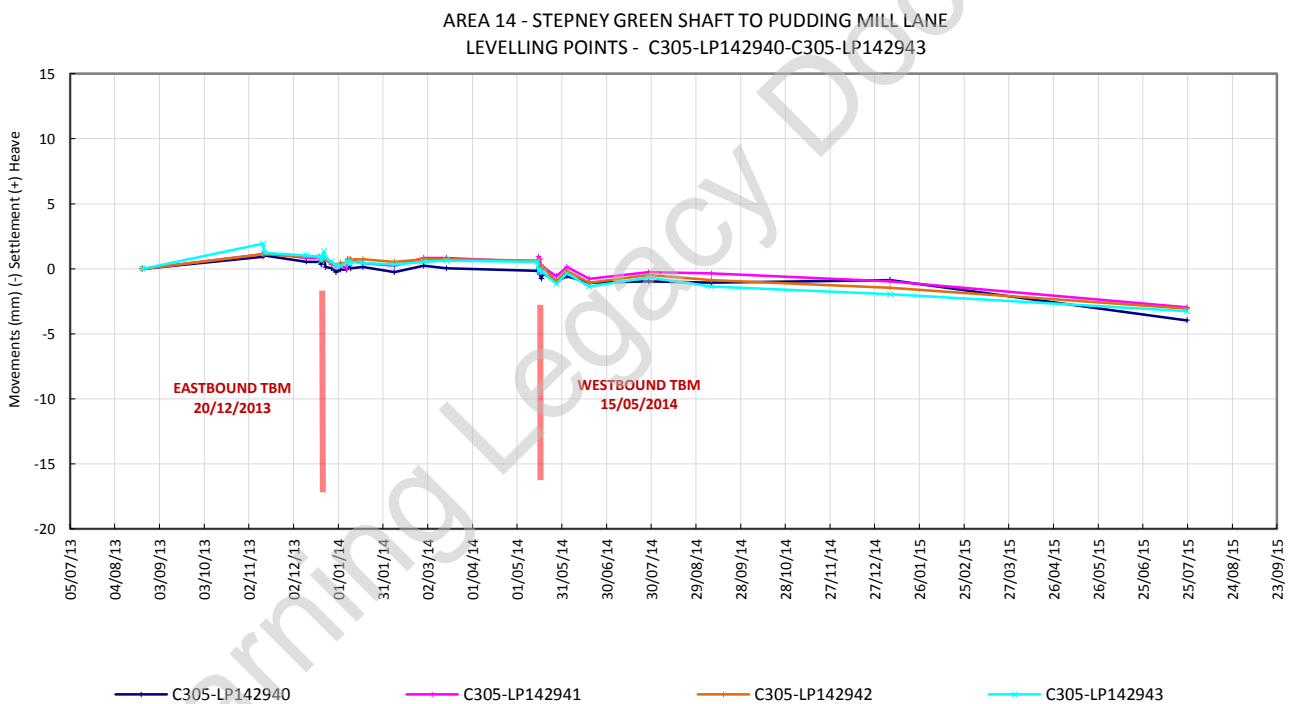
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	28/07/2014	08/09/2014	06/01/2015	24/07/2015	
C305-LP142950	-0.80	-0.80	-0.50	-3.00	-2.217
C305-LP142951	-1.40	-1.50	-1.60	-4.00	-2.628
C305-LP142952	-1.30	-1.60	-1.70	-3.90	-2.555
C305-LP142953	-1.30	-1.60	-1.60	#N/A	-0.527
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	50%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 50%.

### C305-LP142940 – C305-LP142943

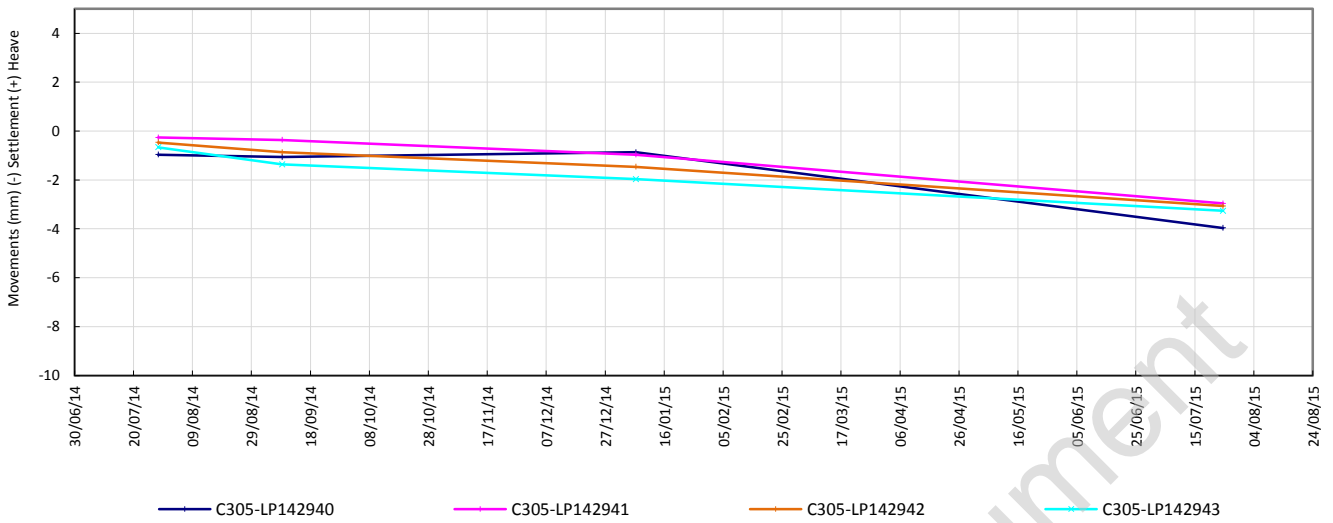
The graph presented below shows the levelling point readings from this array. A maximum settlement of -0.3 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -4 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



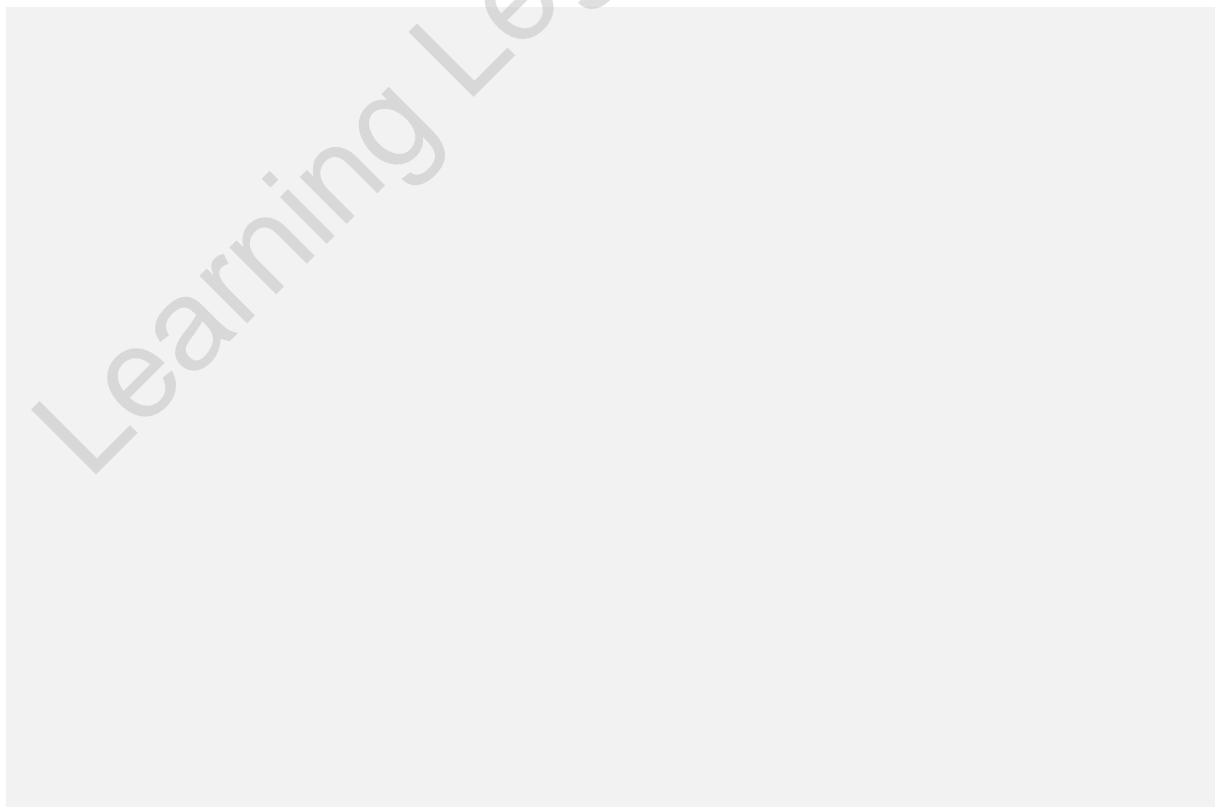
AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP142940-C305-LP142943



The table below lists the annual settlement rate for the levelling points in this array.

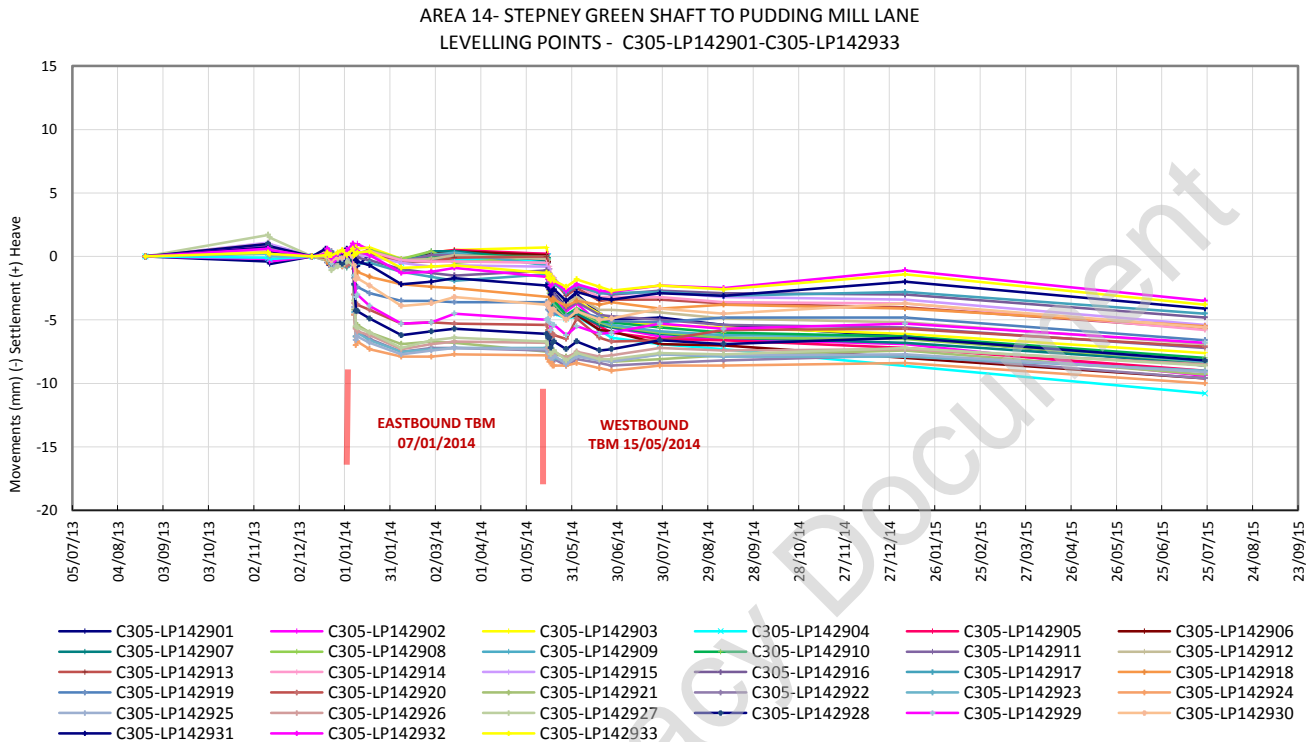
	Registered movement (mm)				mm/year
	28/07/2014	08/09/2014	06/01/2015	24/07/2015	
C305-LP142940	-0.97	-1.07	-0.87	-3.97	-3.007
C305-LP142941	-0.27	-0.37	-0.97	-2.97	-2.778
C305-LP142942	-0.47	-0.87	-1.47	-3.07	-2.566
C305-LP142943	-0.67	-1.37	-1.97	-3.27	-2.457
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	25%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 25%.

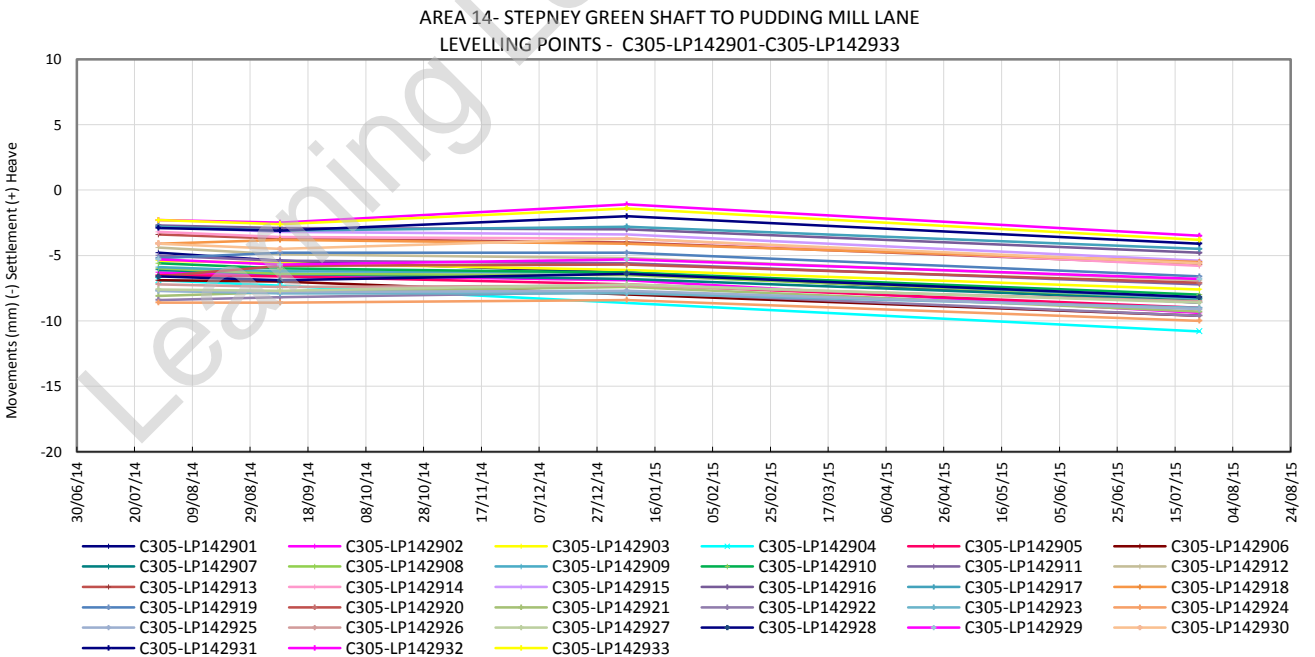


**C305-LP142901 – C305-LP142933**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -7.4 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -10.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



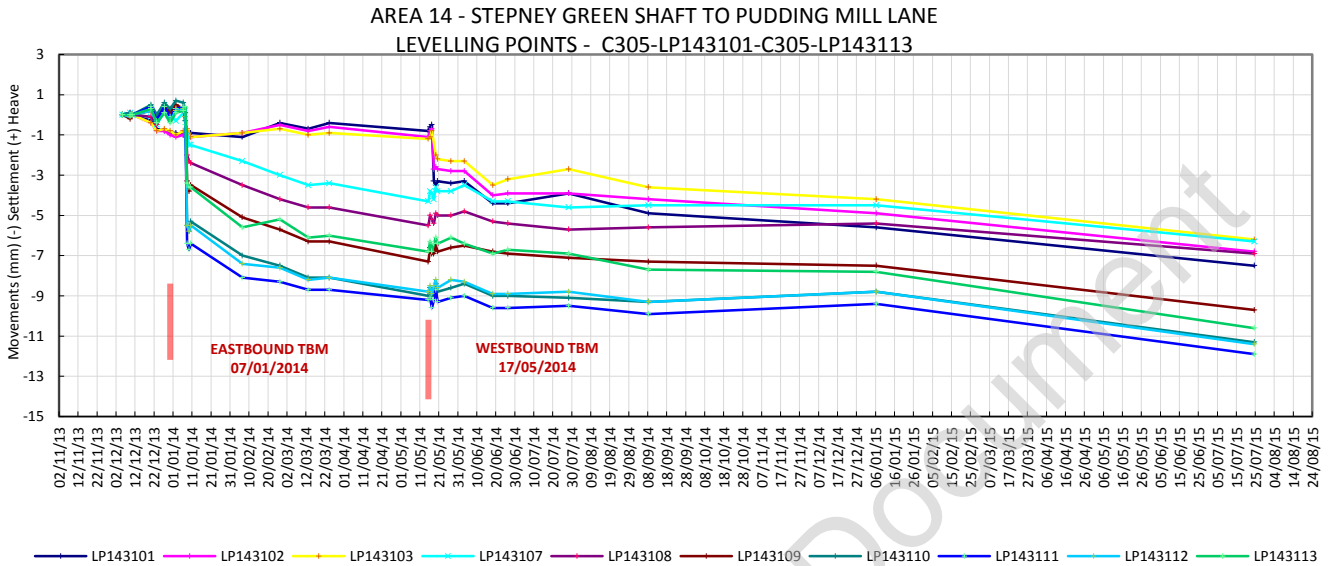
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	28/07/2014	08/09/2014	06/01/2015	23/07/2015	
C305-LP142901	-4.80	-5.40	-6.30	-8.60	-3.758
C305-LP142902	-6.30	-6.50	-6.90	-9.40	-3.138
C305-LP142903	-5.40	-5.60	-6.10	-7.60	-2.227
C305-LP142904	-6.90	-7.30	#N/A	-10.80	#N/A
C305-LP142905	-6.50	-6.60	-7.20	-9.00	-2.581
C305-LP142906	-6.90	-7.00	#N/A	-9.60	-2.829
C305-LP142907	-6.10	-6.40	-6.80	-8.40	-2.283
C305-LP142908	-6.00	-6.40	-6.50	-8.30	-2.218
C305-LP142909	-5.90	-6.20	-6.30	-8.30	-2.356
C305-LP142910	-5.60	-6.00	-6.30	-8.00	-2.339
C305-LP142911	-5.00	-5.40	-5.60	-7.20	-2.125
C305-LP142912	-4.40	-4.90	-5.20	-6.90	-2.405
C305-LP142913	-3.40	-3.70	-4.00	-5.70	-2.274
C305-LP142914	-3.20	-3.60	-3.70	-5.80	-2.525
C305-LP142915	-2.80	-3.20	-3.40	-5.40	-2.534
C305-LP142916	-2.70	-2.90	-3.00	-4.80	-2.086
C305-LP142917	-2.80	-3.10	-2.80	-4.50	-1.601
C305-LP142918	-4.10	-3.80	-4.10	-5.50	-1.571
C305-LP142919	-5.20	-4.80	-4.80	-6.60	-1.578
C305-LP142920	-6.60	-5.80	-5.70	-7.10	-0.794
C305-LP142921	-8.10	-7.80	-7.40	-9.30	-1.298
C305-LP142922	-8.40	-8.20	-7.80	-9.60	-1.262
C305-LP142923	-7.70	-7.90	-7.90	-9.00	-1.257
C305-LP142924	-8.60	-8.60	-8.40	-10.00	-1.413
C305-LP142925	-7.70	-7.80	-7.70	-9.10	-1.386
C305-LP142926	-7.20	-7.40	-7.30	-8.50	-1.248
C305-LP142927	-7.60	-7.70	-7.20	-8.60	-0.938
C305-LP142928	-6.60	-6.90	-6.40	-8.20	-1.479
C305-LP142929	-5.30	-5.70	-5.30	-6.80	-1.350
C305-LP142930	-4.10	-4.50	-3.70	-5.60	-1.311
C305-LP142931	-2.90	-3.10	-2.00	-4.10	-1.047
C305-LP142932	-2.30	-2.50	-1.10	-3.50	-1.018
C305-LP142933	-2.30	-2.60	-1.40	-3.80	-1.308
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	81%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	97%

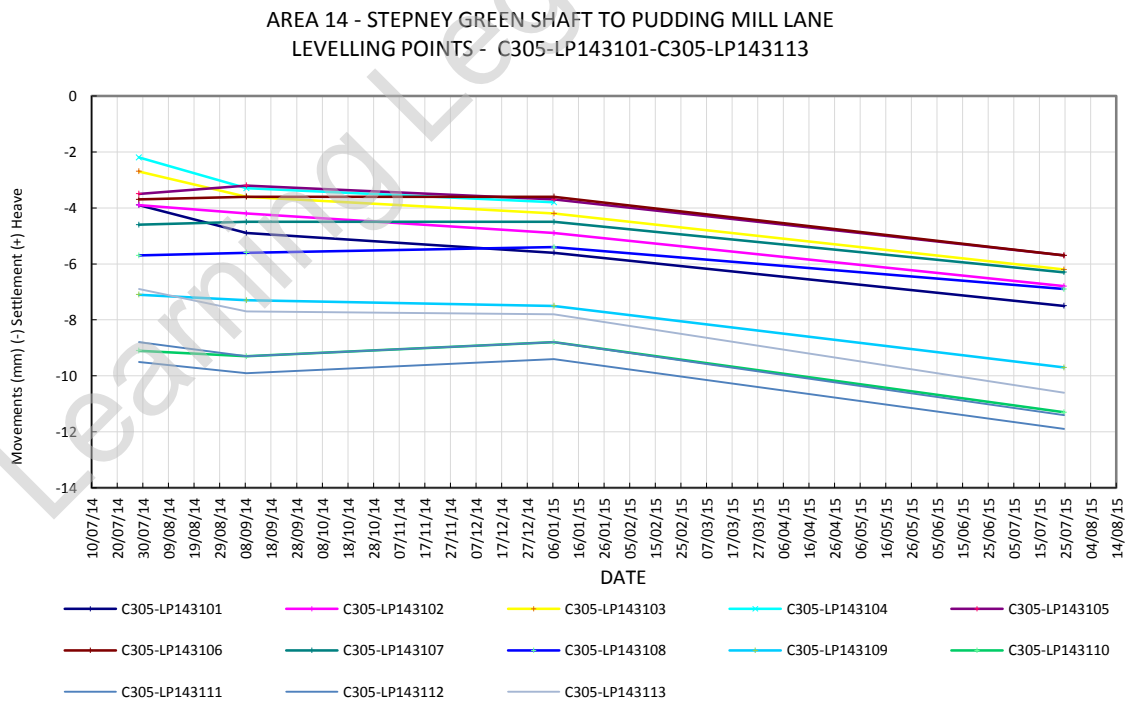
The percentage of the levelling points with a settlement rate less than 2 mm/year is 81%.

**C305-LP143101 – C305-LP143113**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -8.1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -11.3 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



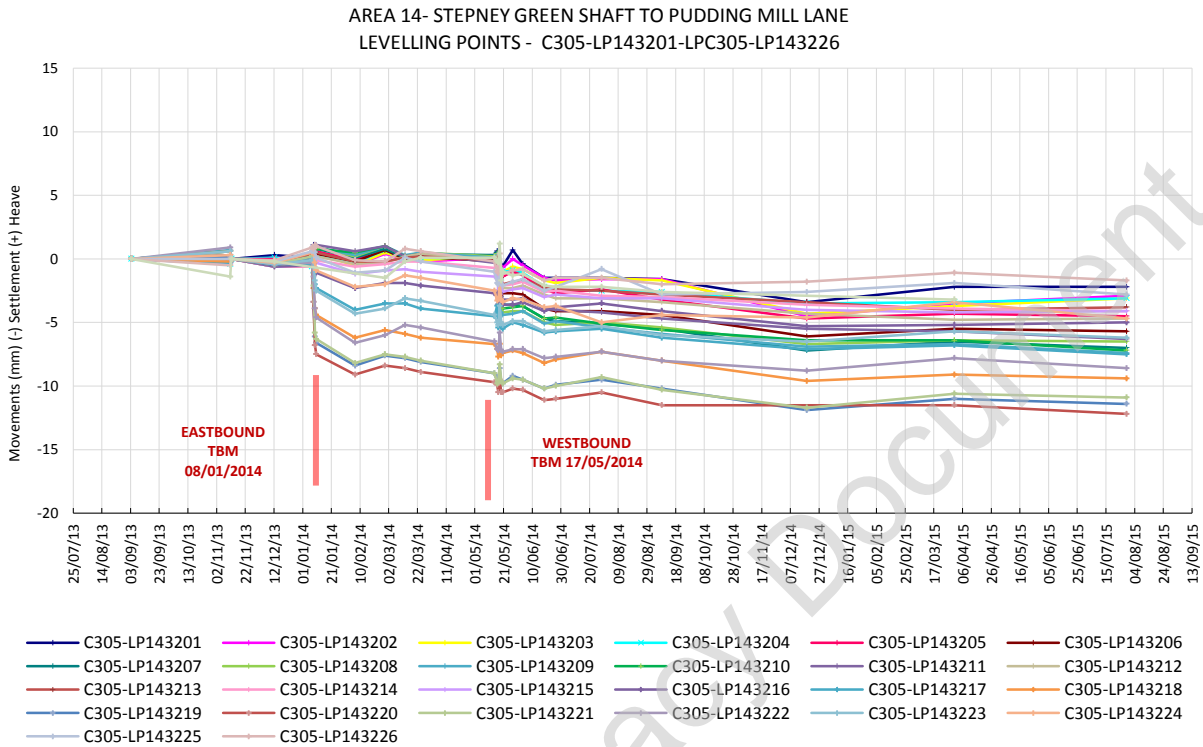
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	28/07/2014	08/09/2014	06/01/2015	24/07/2015	
C305-LP143101	-3.90	-4.90	-5.60	-7.50	-3.379
C305-LP143102	-3.90	-4.20	-4.90	-6.80	-2.919
C305-LP143103	-2.70	-3.60	-4.20	-6.20	-3.304
C305-LP143104	-2.20	-3.30	-3.80	#N/A	-3.145
C305-LP143105	-3.50	-3.20	-3.70	-5.70	-2.404
C305-LP143106	-3.70	-3.60	-3.60	-5.70	-2.079
C305-LP143107	-4.60	-4.50	-4.50	-6.30	-1.772
C305-LP143108	-5.70	-5.60	-5.40	-6.90	-1.243
C305-LP143109	-7.10	-7.30	-7.50	-9.70	-2.601
C305-LP143110	-9.10	-9.30	-8.80	-11.30	-2.125
C305-LP143111	-9.50	-9.90	-9.40	-11.90	-2.257
C305-LP143112	-8.80	-9.30	-8.80	-11.40	-2.424
C305-LP143113	-6.90	-7.70	-7.80	-10.60	-3.496
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	54%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

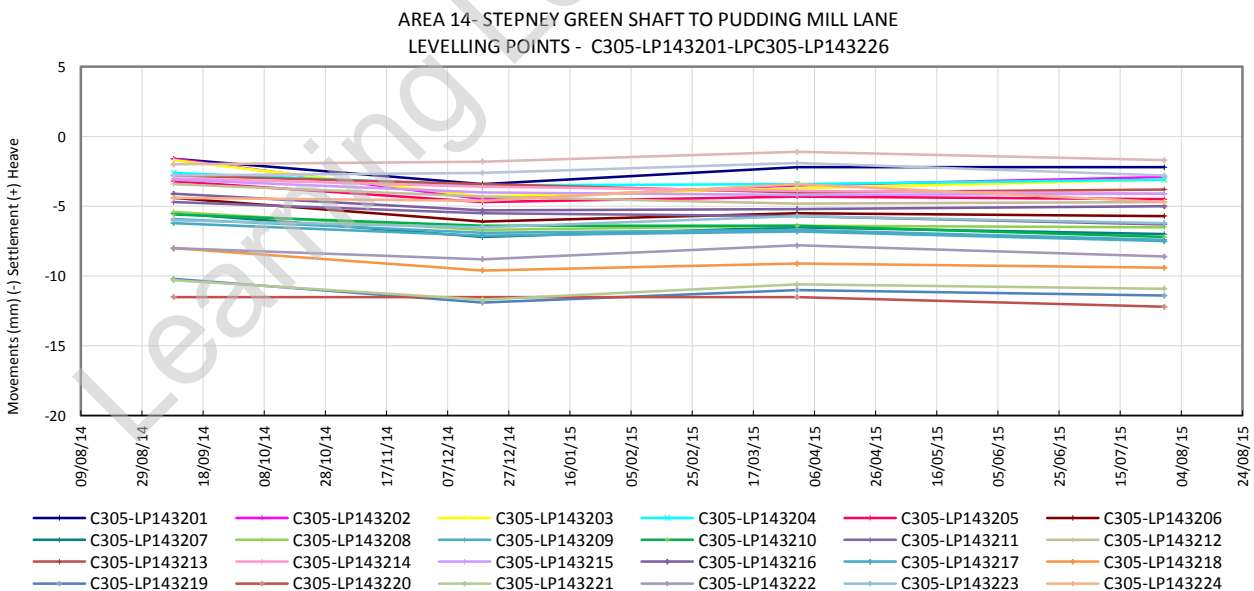
The percentage of the levelling points with a settlement rate less than 2 mm/year is 54%.

**C305-LP143201 – C305-LP143226**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -8.9 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -12.2 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



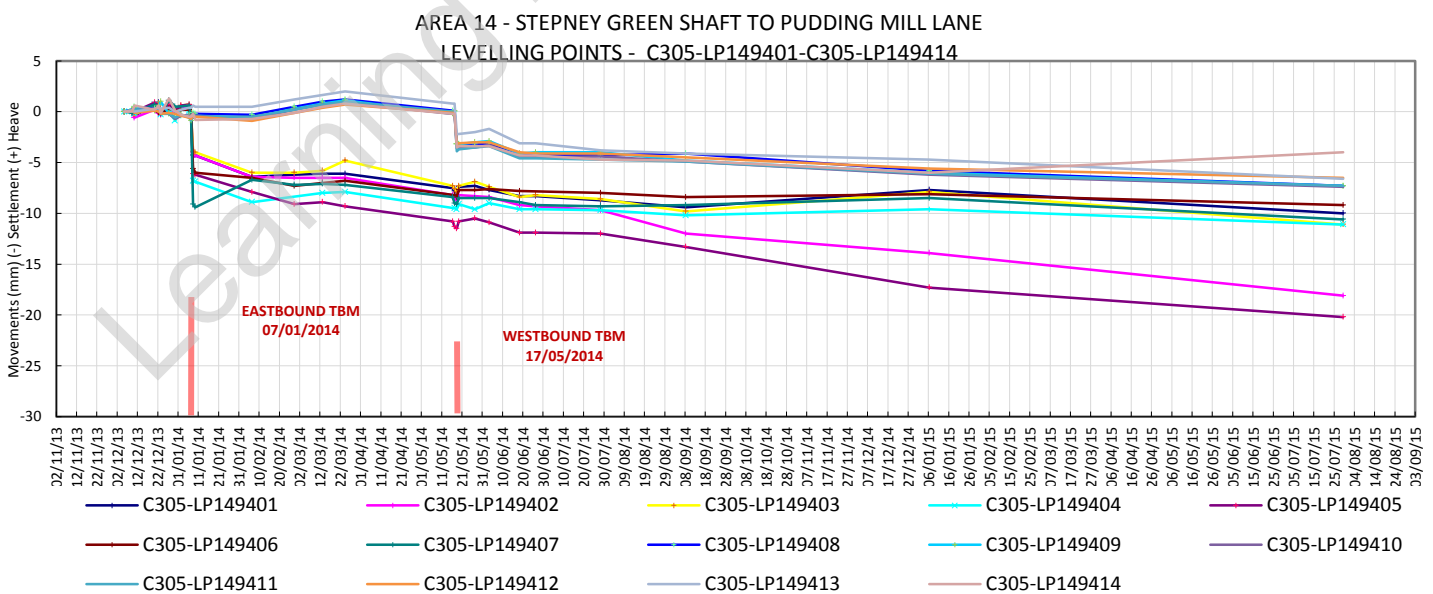
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	08/09/2014	18/12/2014	31/03/2015	29/07/2015	
C305-LP143201	-1.60	-3.40	-2.20	-2.20	-0.169
C305-LP143202	-1.60	-4.50	-3.50	-2.90	-0.898
C305-LP143203	-1.70	-4.30	-3.70	-3.10	-1.139
C305-LP143204	-2.60	-3.50	-3.40	-3.10	-0.442
C305-LP143205	-3.20	-4.70	-4.30	-4.50	-1.159
C305-LP143206	-4.40	-6.10	-5.50	-5.70	-1.088
C305-LP143207	-5.50	-7.20	-6.50	-7.00	-1.269
C305-LP143208	-5.40	-6.70	-6.40	-6.50	-0.990
C305-LP143209	-5.90	-6.90	-6.70	-7.40	-1.458
C305-LP143210	-5.60	-6.40	-6.40	-7.20	-1.634
C305-LP143211	-4.70	-5.50	-5.70	-6.30	-1.693
C305-LP143212	-3.40	-4.30	-4.80	-4.70	-1.460
C305-LP143213	-2.80	-3.40	-4.00	-3.80	-1.192
C305-LP143214	-3.00	-3.60	-3.90	-4.10	-1.209
C305-LP143215	-3.10	-4.00	-4.20	-4.10	-1.056
C305-LP143216	-4.10	-5.30	-5.20	-5.00	-0.845
C305-LP143217	-6.20	-7.10	-6.80	-7.50	-1.224
C305-LP143218	-8.00	-9.60	-9.10	-9.40	-1.229
C305-LP143219	-10.20	-11.90	-11.00	-11.40	-0.894
C305-LP143220	-11.50	#N/A	-11.50	-12.20	-0.705
C305-LP143221	-10.30	-11.70	-10.60	-10.90	-0.223
C305-LP143222	-8.00	-8.80	-7.80	-8.60	-0.288
C305-LP143223	-6.00	-6.50	-5.70	-6.20	0.055
C305-LP143224	-4.40	-4.60	-3.40	-4.70	0.050
C305-LP143225	-2.80	-2.60	-1.90	-2.80	0.194
C305-LP143226	-2.00	-1.80	-1.10	-1.70	0.510
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

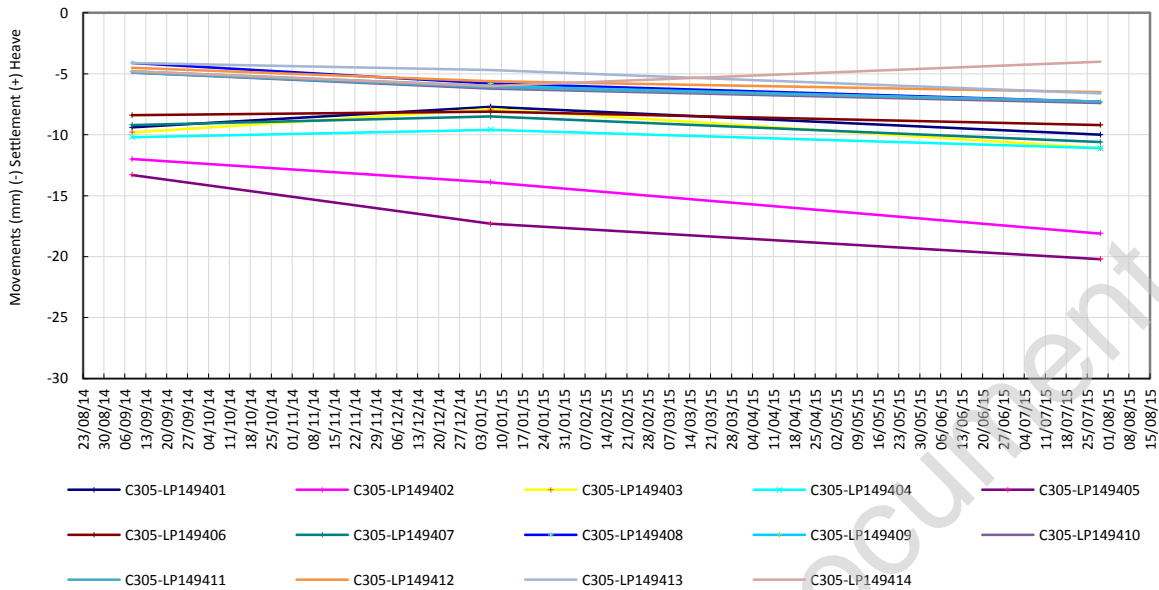
**C305-LP149401 – C305-LP149414**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -11 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -20 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP149401-C305-LP149414



The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)			mm/year
	08/09/2014	06/01/2015	29/07/2015	
C305-LP149401	-9.40	-7.70	-10.00	-1.042
C305-LP149402	-12.00	-13.90	-18.10	-6.939
C305-LP149403	-9.80	-7.90	-11.10	-1.918
C305-LP149404	-10.20	-9.60	-11.10	-1.192
C305-LP149405	-13.30	-17.30	-20.20	-7.497
C305-LP149406	-8.40	-8.10	-9.20	-1.015
C305-LP149407	-9.20	-8.50	-10.60	-1.809
C305-LP149408	-4.10	-5.80	-7.30	-3.506
C305-LP149409	-4.80	-6.00	-7.30	-2.764
C305-LP149410	-4.90	-6.20	-7.40	-2.745
C305-LP149411	-4.90	-6.10	-7.30	-2.644
C305-LP149412	-4.50	-5.60	-6.50	-2.184
C305-LP149413	-4.10	-4.70	-6.60	-2.878
C305-LP149414	-4.80	-6.00	-4.00	1.186
	Rate less than -2.5 mm/year		% less 2 mm/ year	50%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	79%

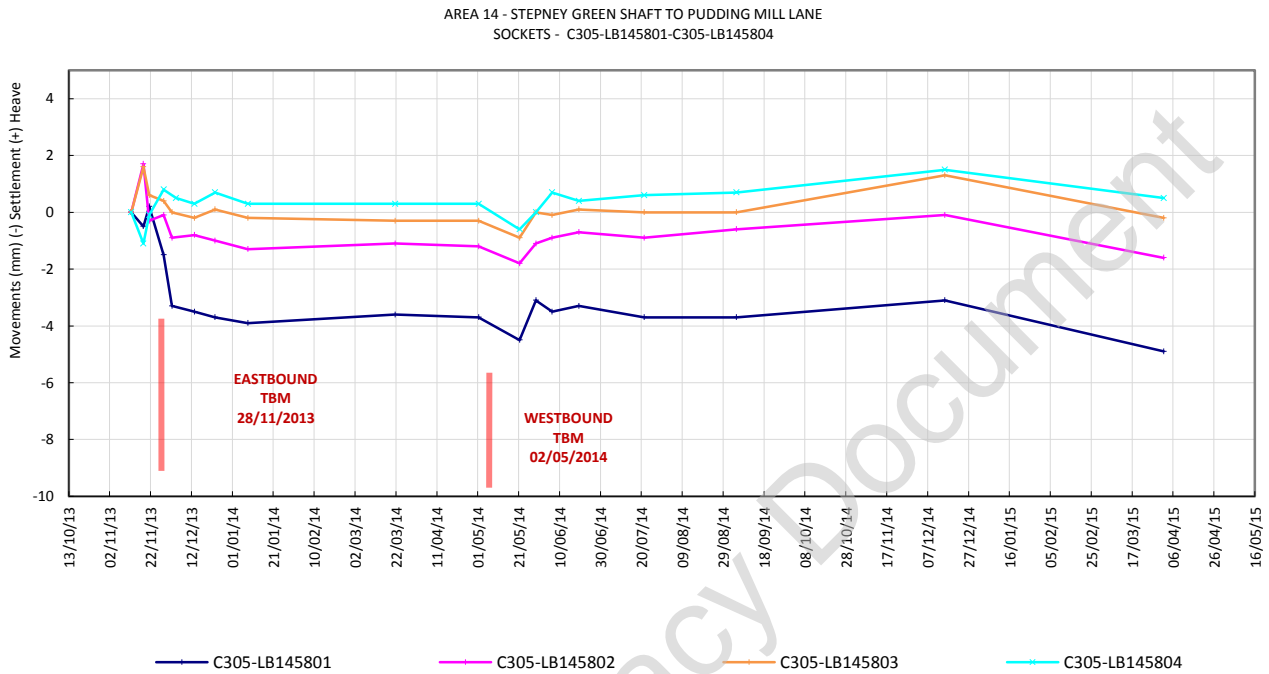
The percentage of the levelling points with a settlement rate less than 2 mm/year is 50% and less than 3 mm/year is 79%.



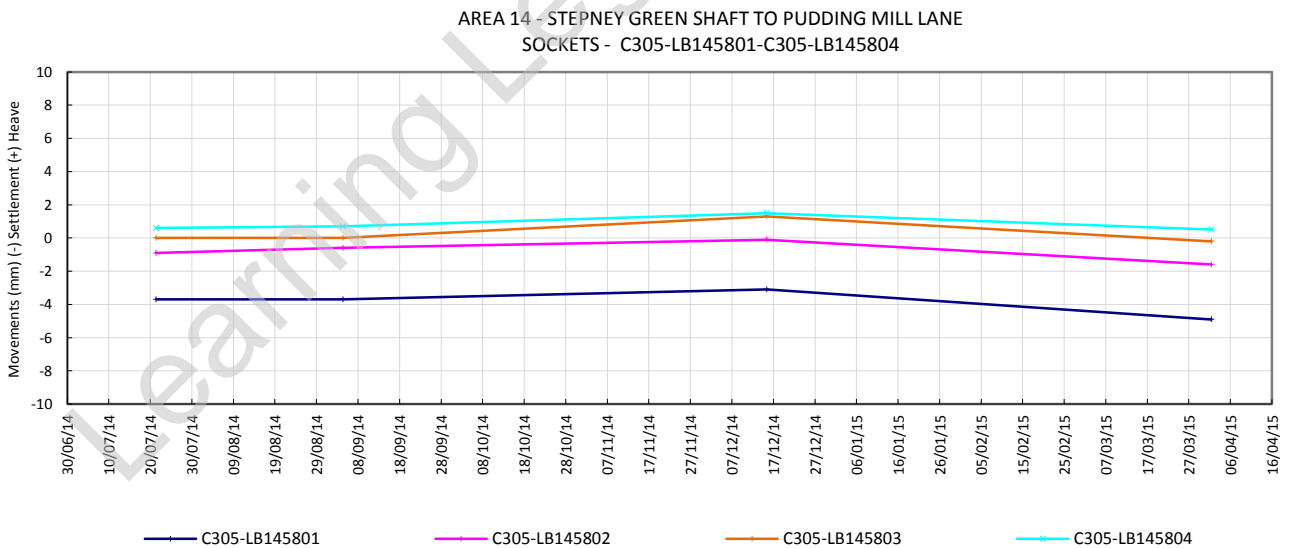
**SOCKETS**

**C305-LB145801 – C305-LB145804**

The graph presented below shows the socket readings from this array. A maximum settlement of -3.9 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -4.9 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



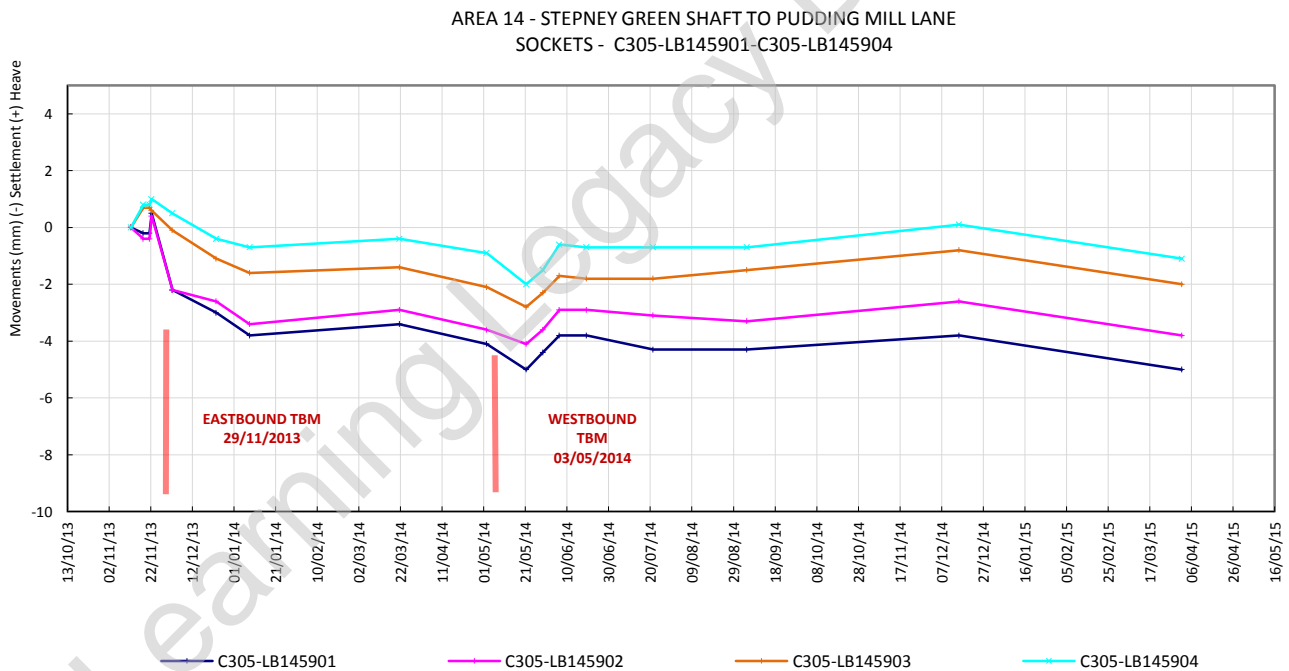
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	21/07/2014	04/09/2014	15/12/2014	01/04/2015	
C305-LB145801	-3.70	-3.70	-3.10	-4.90	-1.422
C305-LB145802	-0.90	-0.60	-0.10	-1.60	-0.867
C305-LB145803	0.00	0.00	1.30	-0.20	0.168
C305-LB145804	0.60	0.70	1.50	0.50	0.105
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

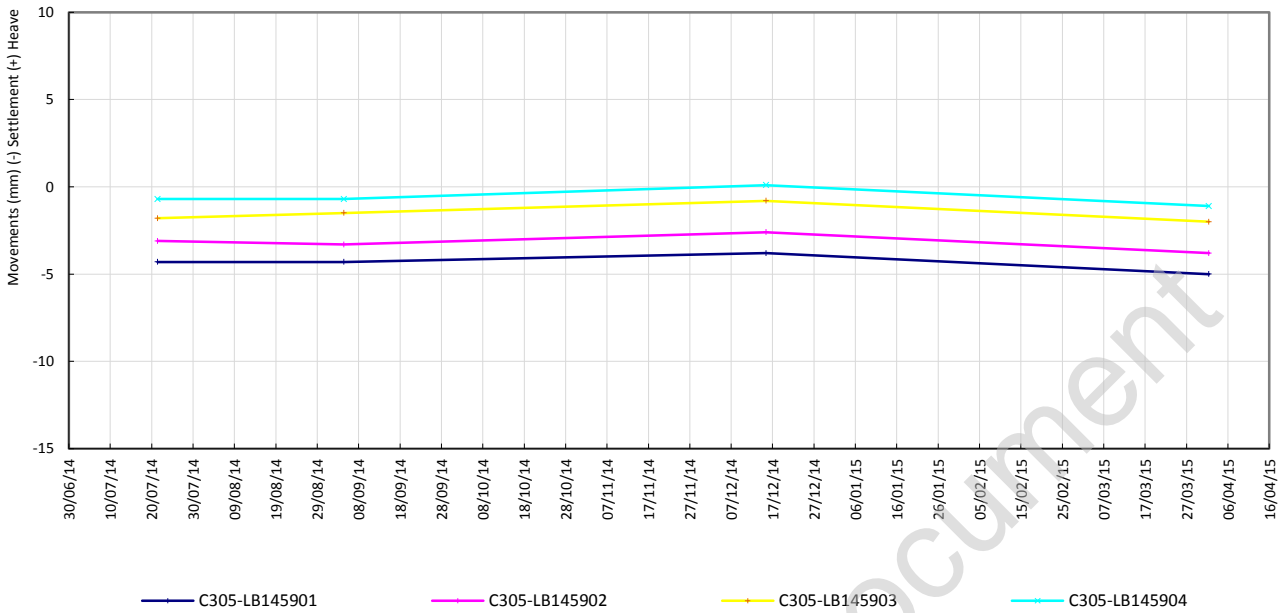
### C305-LB145901 – C305-LB145904

The graph presented below shows the socket readings from this array. A maximum settlement of -3.8 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -5 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 SOCKETS - C305-LB145901-C305-LB145904



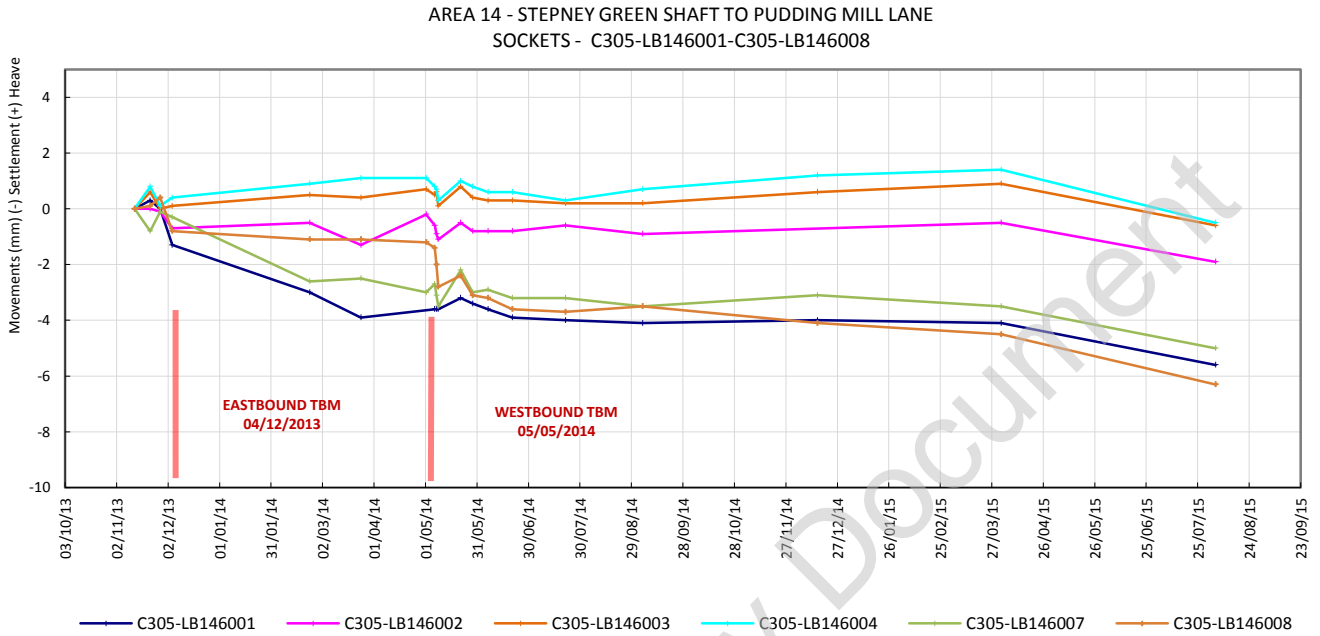
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	21/07/2014	04/09/2014	15/12/2014	01/04/2015	
C305-LB145901	-4.30	-4.30	-3.80	-5.00	-0.779
C305-LB145902	-3.10	-3.30	-2.60	-3.80	-0.653
C305-LB145903	-1.80	-1.50	-0.80	-2.00	-0.123
C305-LB145904	-0.70	-0.70	0.10	-1.10	-0.272
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

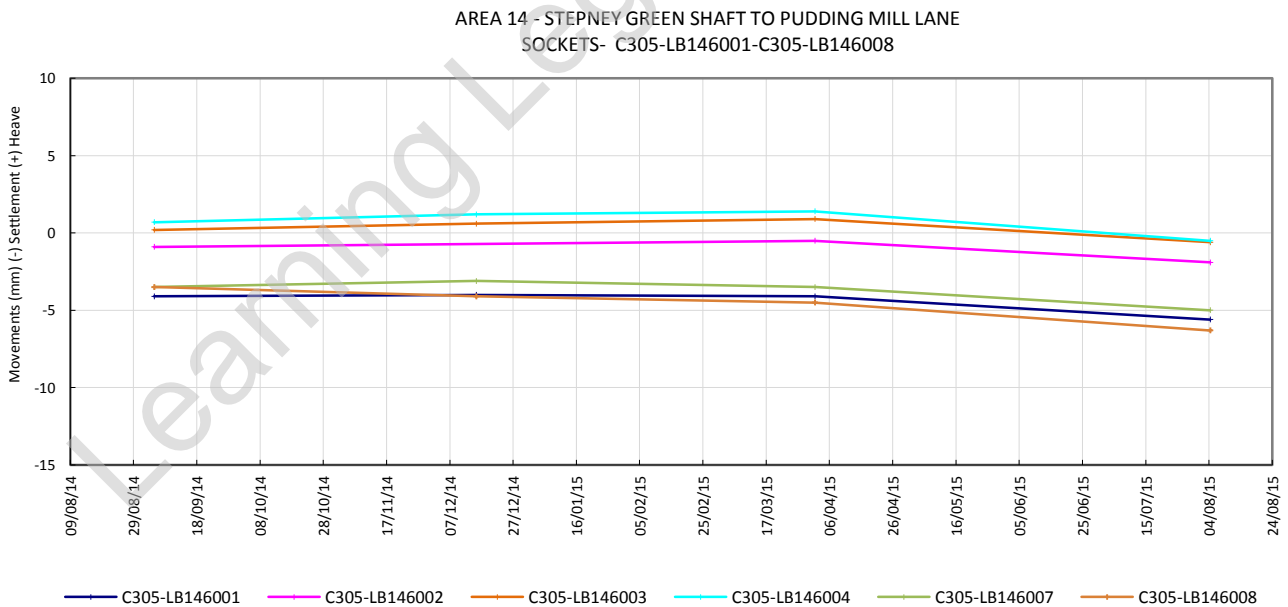
The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

**C305-LB146001 – C305-LB146008**

The graph presented below shows the socket readings from this array. A maximum settlement of -3.9 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.3 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



The table below lists the annual settlement rate for the sockets in this array.

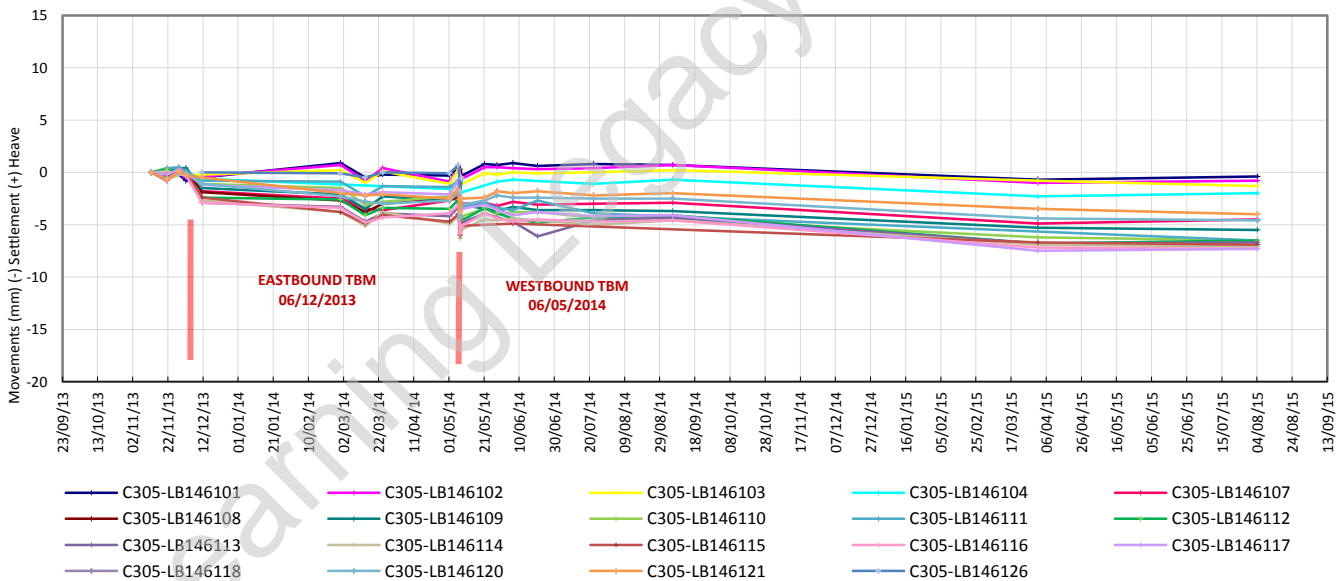
	Registered movement (mm)				mm/year
	04/09/2014	15/12/2014	01/04/2015	04/08/2015	
C305-LB146001	-4.10	-4.00	-4.10	-5.60	-1.570
C305-LB146002	-0.90	#N/A	-0.50	-1.90	-0.909
C305-LB146003	0.20	0.60	0.90	-0.60	-0.761
C305-LB146004	0.70	1.20	1.40	-0.50	-1.206
C305-LB146007	-3.50	-3.10	-3.50	-5.00	-1.676
C305-LB146008	-3.50	-4.10	-4.50	-6.30	-2.938
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	83%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 83%.

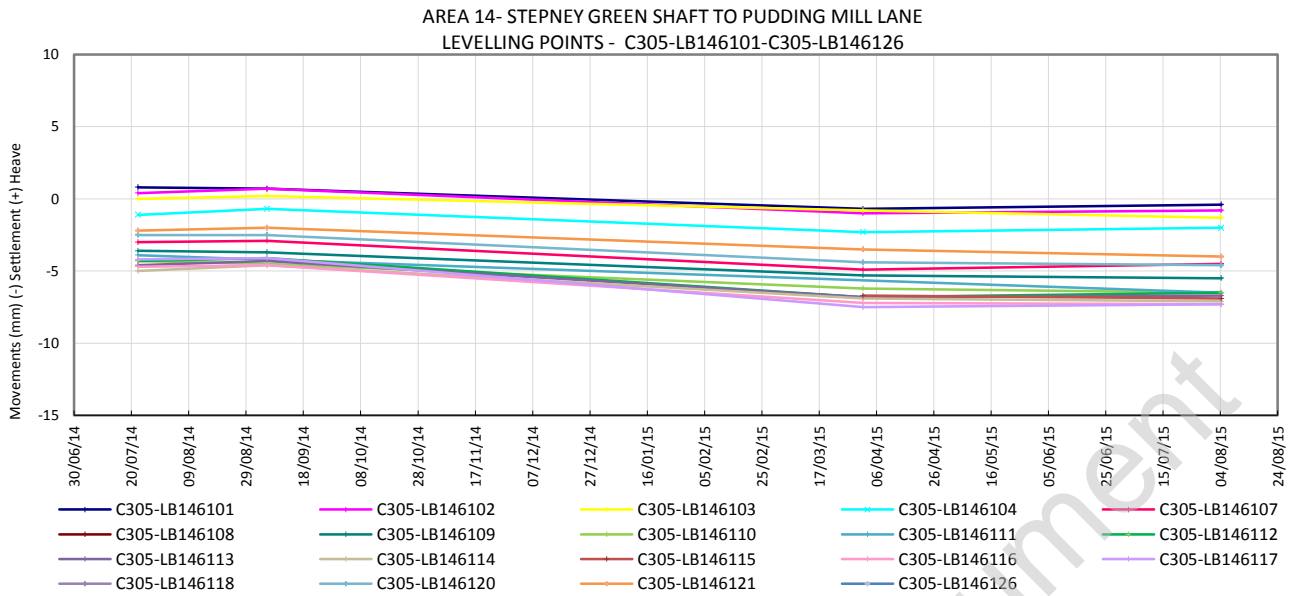
### C305-LB146101 – C305-LB146126

The graph presented below shows the socket readings from this array. A maximum settlement of -4.8 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7.5 mm after the Westbound TBM transit.

AREA 14- STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LB146101-C305-LB146126



The next plot shows the trend line adjustment for the sockets in this array.



The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	22/07/2014	05/09/2014	01/04/2015	04/08/2015	
C305-LB146101	0.80	0.70	-0.70	-0.40	-1.405
C305-LB146102	0.40	0.70	-1.00	-0.80	-1.564
C305-LB146103	0.00	0.20	-0.80	-1.30	-1.402
C305-LB146104	-1.10	-0.70	-2.30	-2.00	-1.305
C305-LB146107	-3.00	-2.90	-4.90	-4.50	-1.872
C305-LB146108	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LB146109	-3.60	-3.70	-5.30	-5.50	-2.034
C305-LB146110	-4.30	-4.50	-6.20	-6.50	-2.292
C305-LB146111	-3.90	#N/A	#N/A	-6.50	#N/A
C305-LB146112	-4.30	-4.10	-6.80	-6.50	-2.678
C305-LB146113	-4.60	-4.30	-6.80	-6.70	-2.548
C305-LB146114	-5.00	-4.60	-6.90	-7.10	-2.499
C305-LB146115	#N/A	#N/A	-6.70	-6.90	#N/A
C305-LB146116	-4.70	-4.60	-7.20	-7.30	-2.952
C305-LB146117	-4.20	-4.10	-7.50	-7.30	-3.614
C305-LB146118	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LB146120	-2.50	-2.50	-4.40	-4.60	-2.307
C305-LB146121	-2.20	-2.00	-3.50	-4.00	-1.967
C305-LB146126	#N/A	#N/A	#N/A	#N/A	#N/A
Rate less than -2.5 mm/year				<b>% less 2 mm/ year</b>	<b>71%</b>
Rate greater than -3.5 mm/year				<b>% less 3 mm/ year</b>	<b>93%</b>

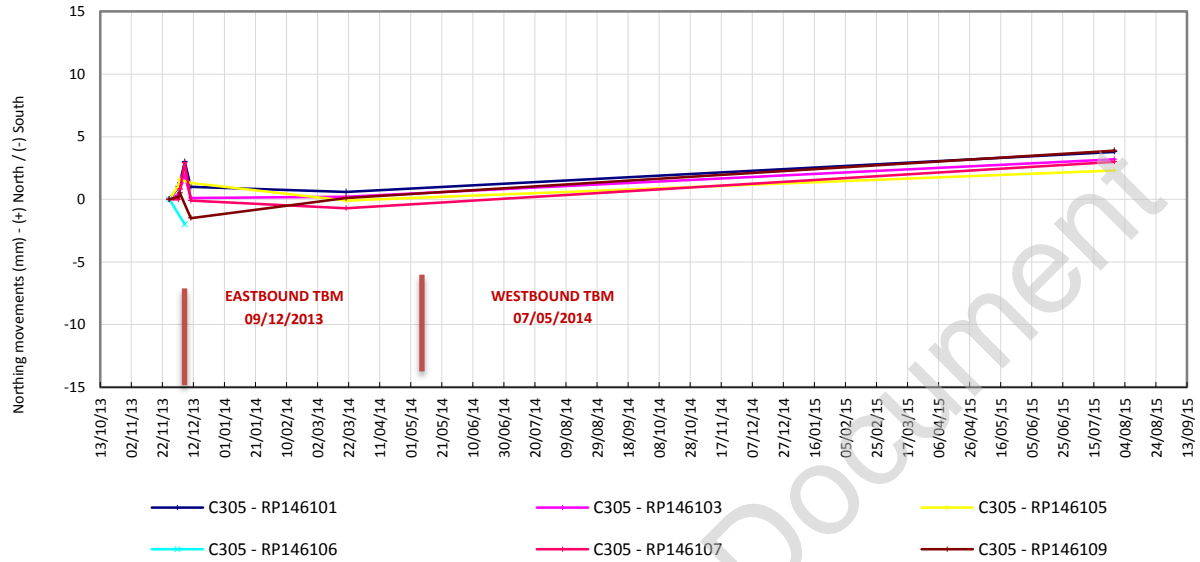
The percentage of the sockets with a settlement rate less than 2 mm/year is 71%.

**3D PRISMS AND RETRO TARGETS**

**C305-RP146101 – C305-RP146109**

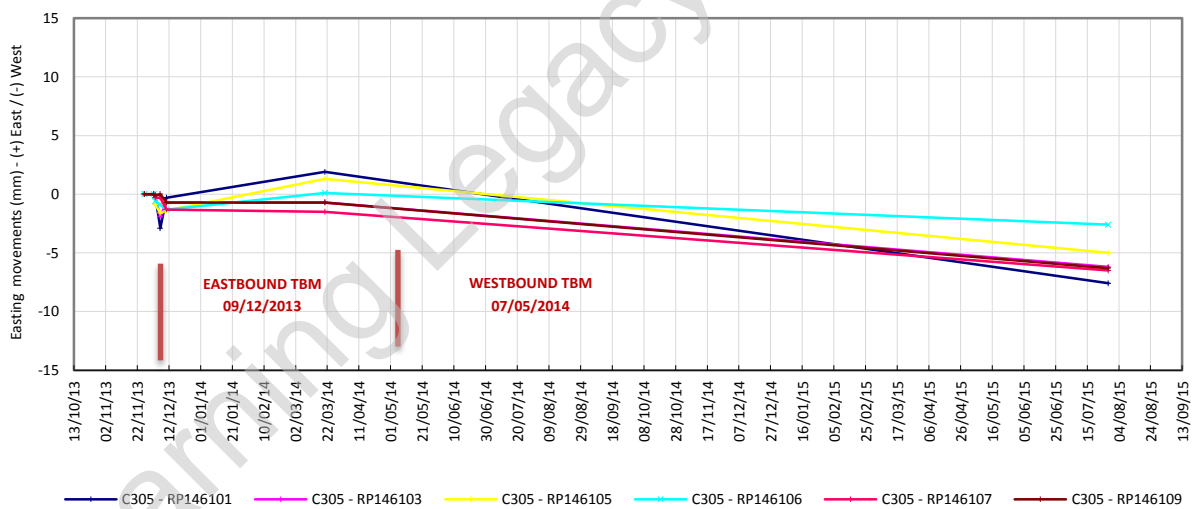
AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN

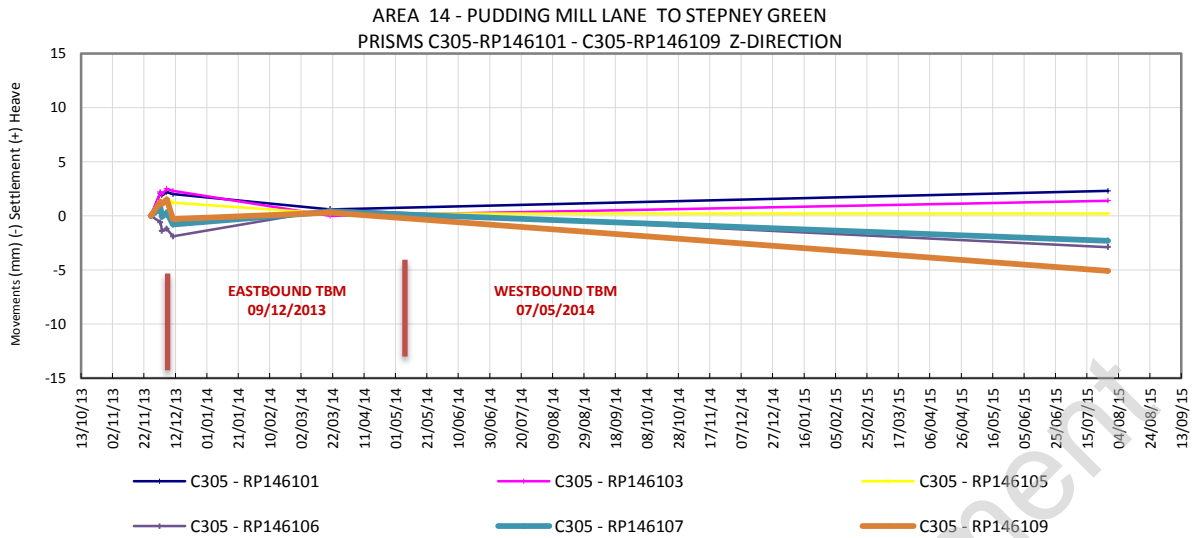
PRISMS C305-RP146101 - C305-RP146109 X-DIRECTION



AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN

PRISMS C305-RP146101 - C305-RP146109 Y-DIRECTION



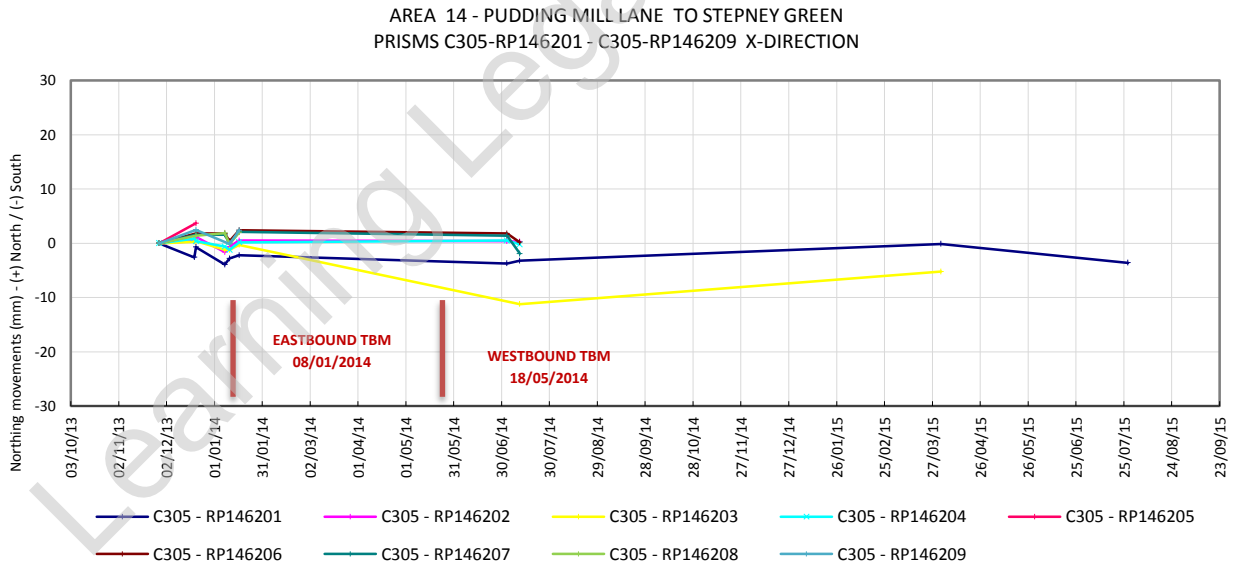


The X Axis shows a maximum movement of 3.9 mm after the Westbound TBM transit.

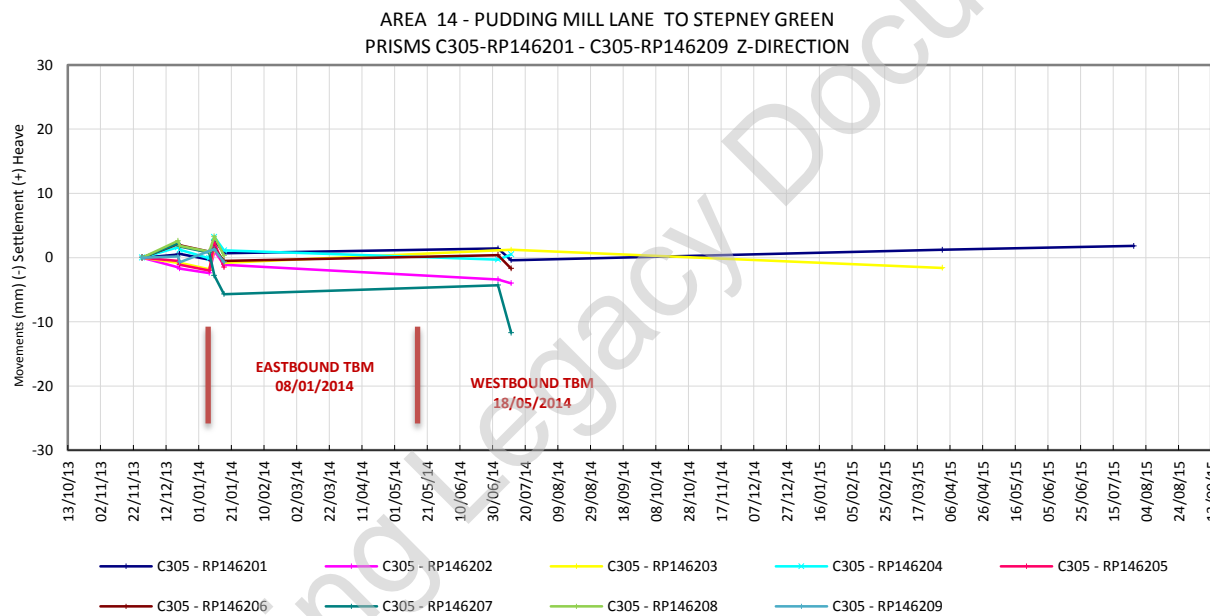
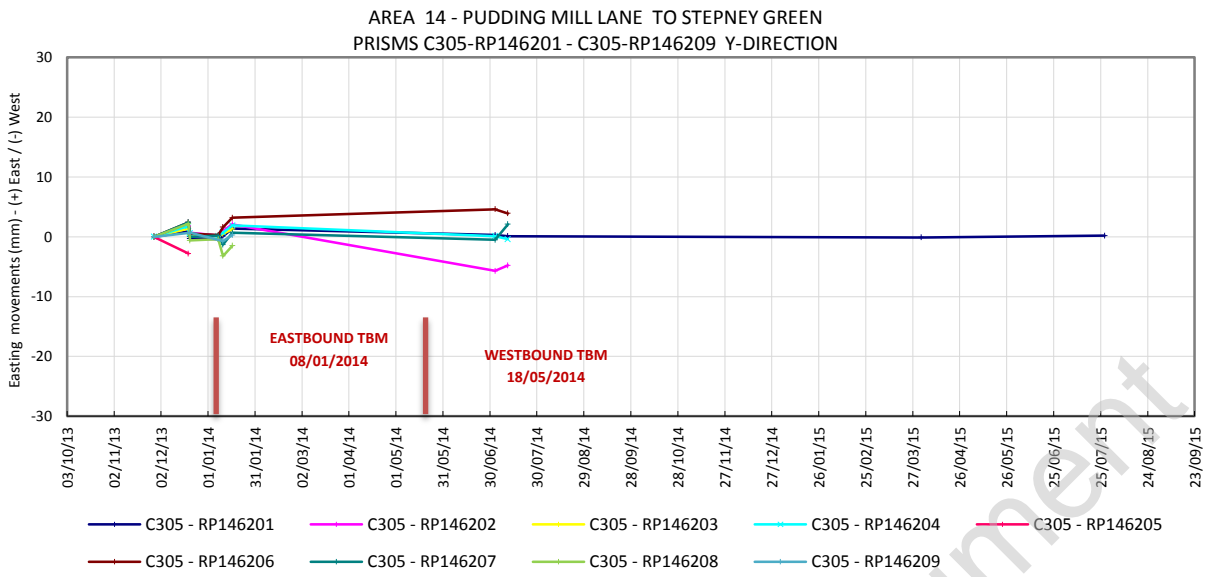
The Y Axis shows a maximum movement of -7.6 mm after the Westbound TBM transit.

The Z Axis shows a maximum settlement of -5.1 mm after the Westbound TBM transit.

**C305-RP146201 – C305-RP146209**







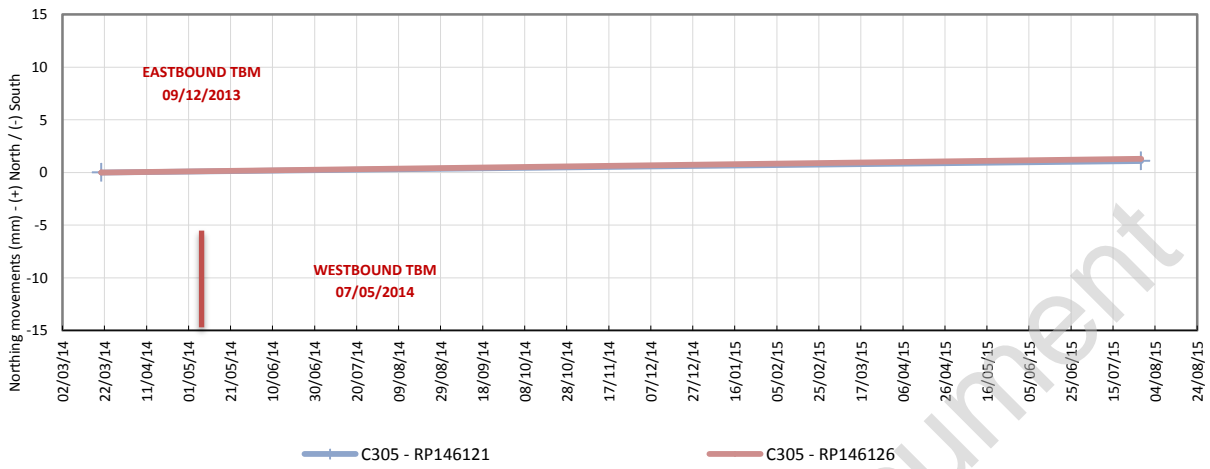
The X Axis shows a maximum movement of -11.2 mm after the Westbound TBM transit.

The Y Axis shows a maximum movement of -5.7 mm after the Westbound TBM transit.

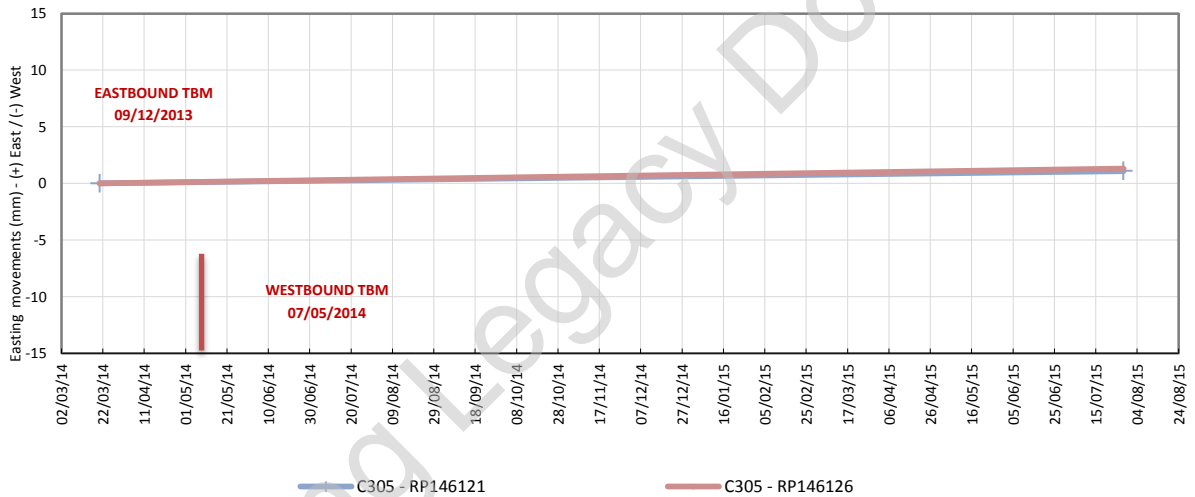
The Z Axis shows a maximum settlement of -11.7 mm after the Westbound TBM transit.

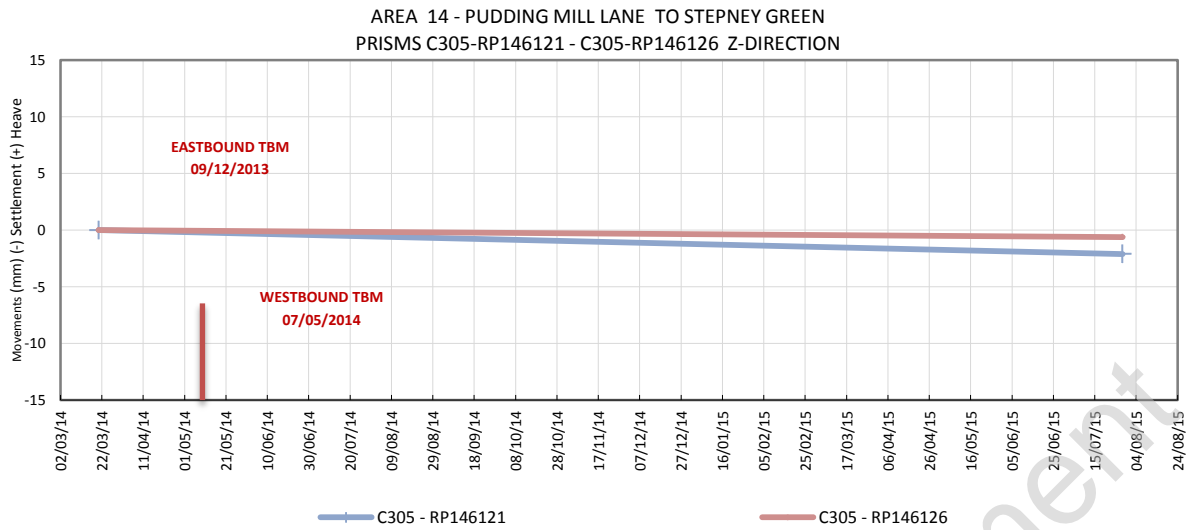
**C305-RP146121 – C305-RP146126**

AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN  
 PRISMS C305-RP146121 - C305-RP146126 X-DIRECTION



AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN  
 PRISMS C305-RP146121 - C305-RP146126 Y-DIRECTION





The X Axis shows a maximum movement of 1.3 mm after the Westbound TBM transit.

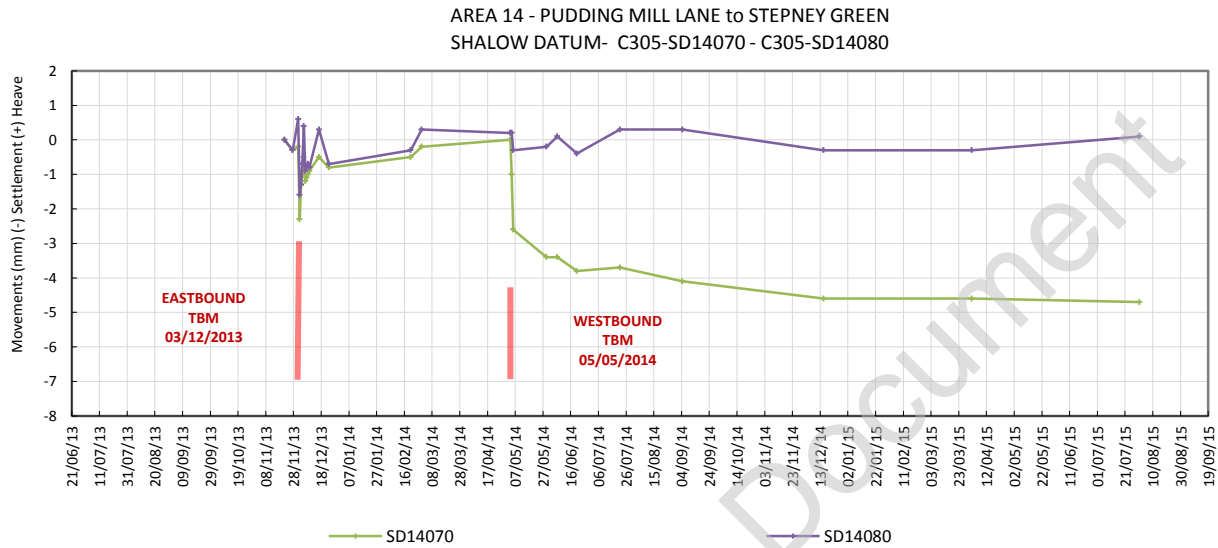
The Y Axis shows a maximum movement of 1.3 mm after the Westbound TBM transit.

The Z Axis shows a maximum settlement of -2.1 mm after the Westbound TBM transit.

**SHALLOW DATUM**

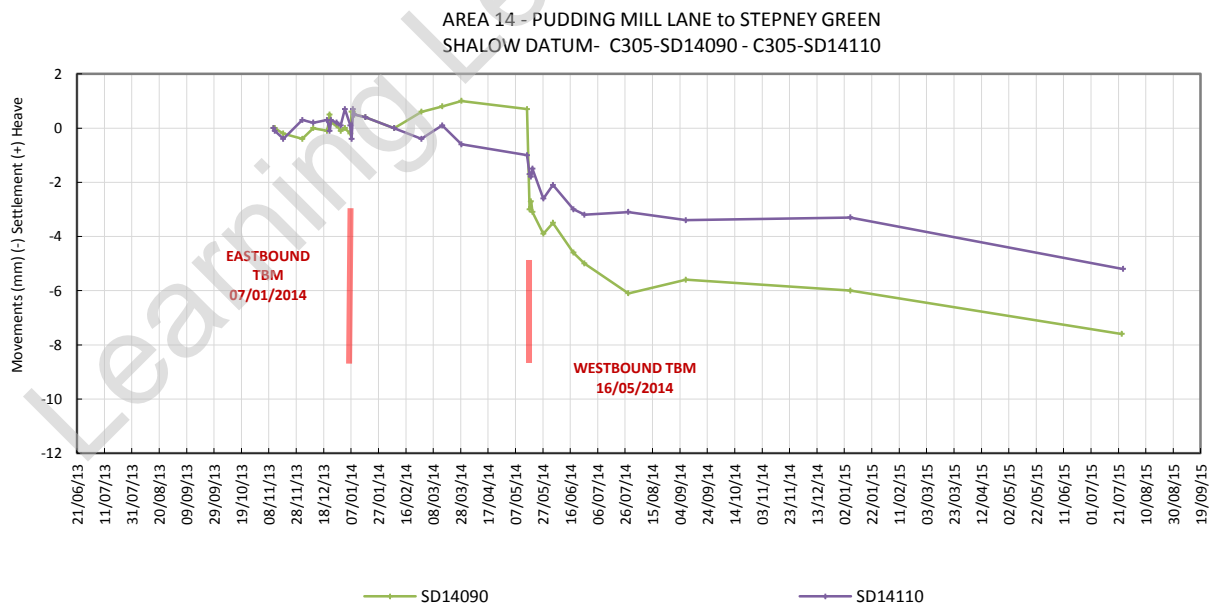
**C305-SD14070-C305-SD14080**

The graph below shows the data of shallow datum C305-SD14070 and C305-SD14080; there was a maximum settlement of -2.3 mm after the Eastbound TBM transit and a total maximum settlement of -4.7 mm after the Westbound TBM transit.



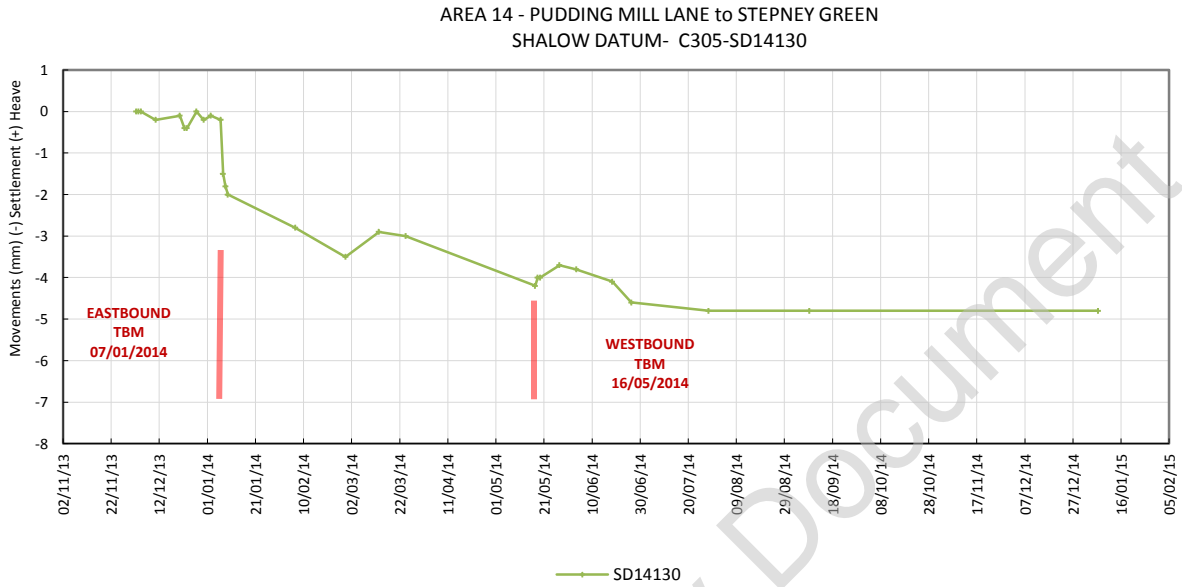
**C305-SD14090 and C305-SD14110**

The graph below shows the data of shallow datum: C305-SD14090 and C305-SD14110; there was a maximum settlement of -0.6 mm after the Eastbound TBM transit and a total maximum settlement of -7.6 mm after the Westbound TBM transit.



**C305-SD14130**

The graph below shows the data of shallow datum C305-SD14130; there was a maximum settlement of -3.5 mm after the Eastbound TBM transit and a total maximum settlement of -4.8 mm after the Westbound TBM transit.

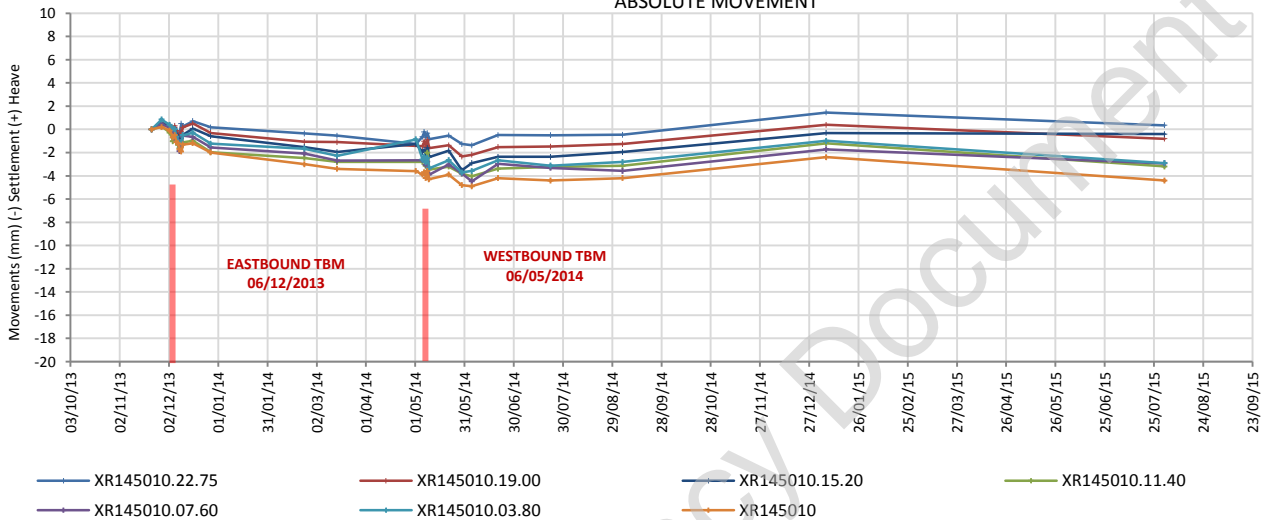


**ROD EXTENSOMETERS**

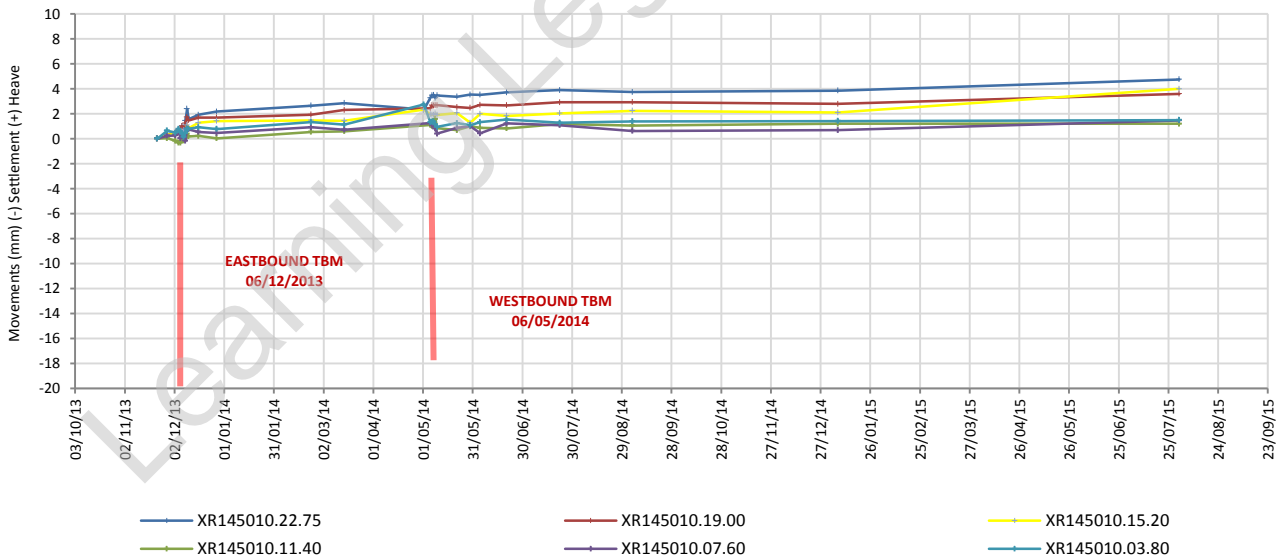
For each rod extensometer two graphs are displayed, showing relative and absolute movements. The relative movement graph represents the movement of the rod extensometers without taking in account the head level elevation whereas in the absolute movement the levelling of the head level has been introduced, adding the value to the relative movement of the rods.

**C305 - XR0145010**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR145010  
 ABSOLUTE MOVEMENT

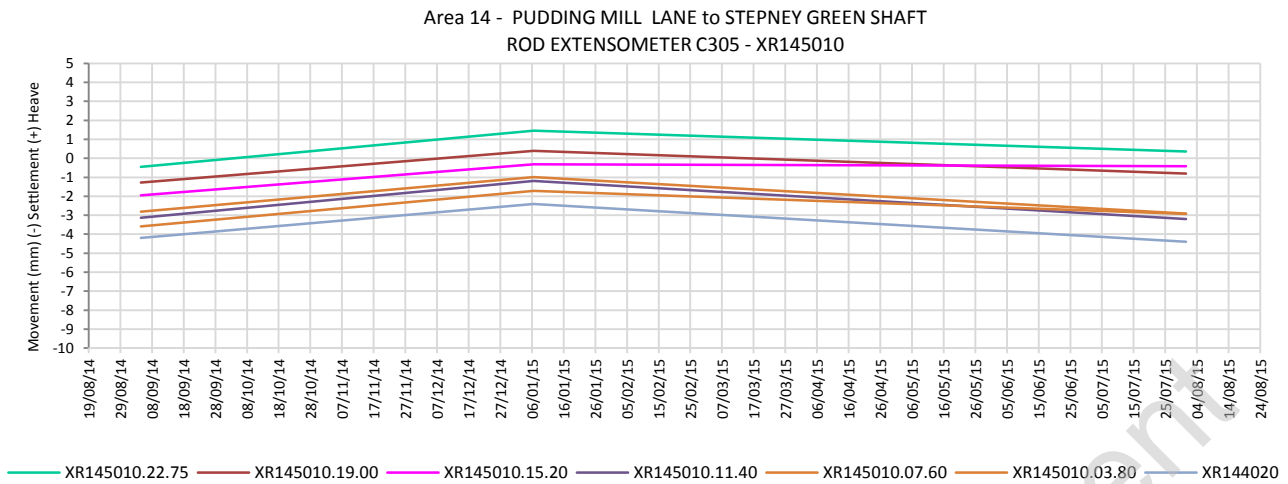


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR145010  
 RELATIVE MOVEMENT



The graph above shows an absolute settlement of -2.81 mm after the Eastbound TBM transit and an additional -3.2 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

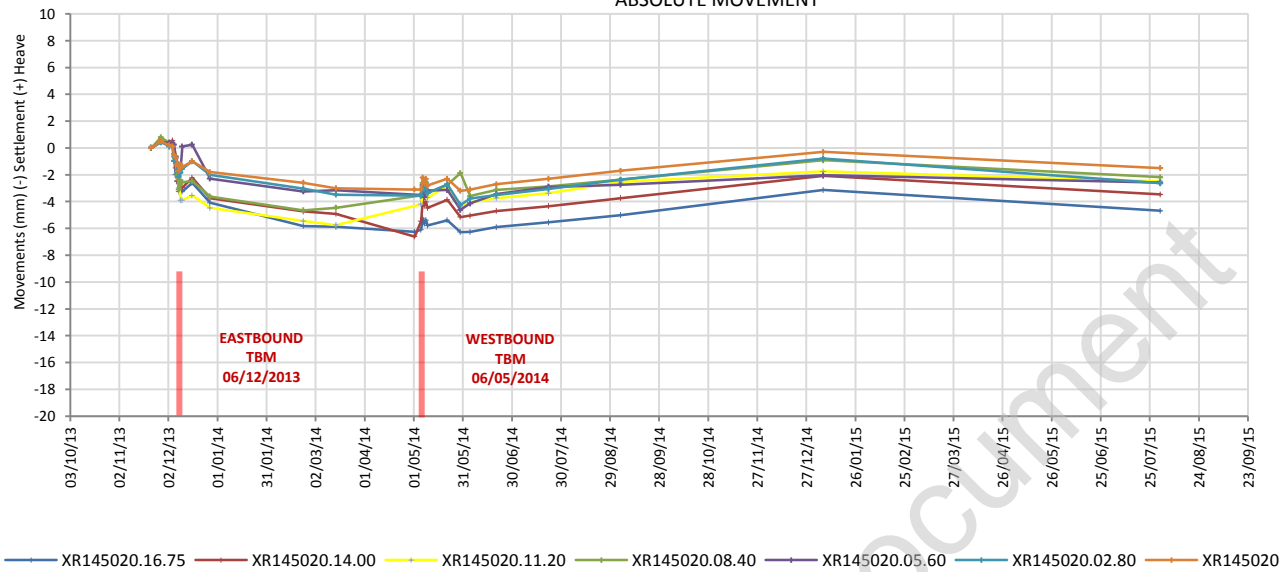
	Registered Movement (mm)			Rate (mm/year)
	04/09/2014	06/01/2015	31/07/2015	
XR145010.22.75	-0.46	1.45	0.35	0.608
XR145010.19.00	-1.27	0.39	-0.81	0.242
XR145010.15.20	-1.96	-0.31	-0.41	1.523
XR145010.11.40	-3.14	-1.20	-3.20	-0.419
XR145010.07.60	-3.58	-1.72	-2.93	0.429
XR145010.03.80	-2.81	-0.99	-2.91	-0.444
XR144020	-4.20	-2.40	-4.40	-0.558
	Rate less than -2.5 mm/year		% less 2 mm/ year	100.00%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	100.00%

Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

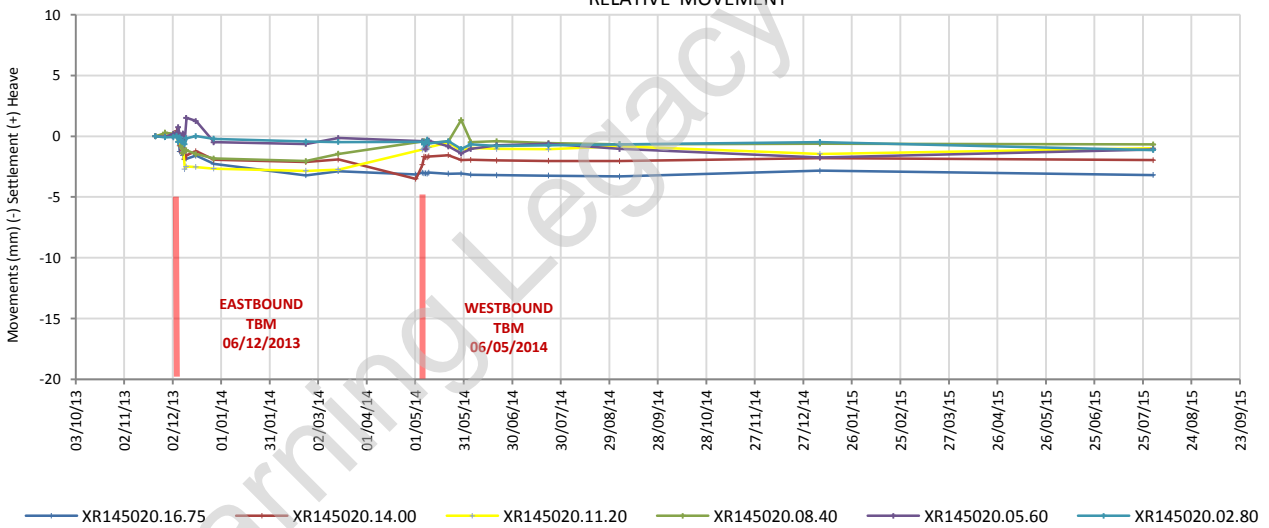
The percentage of the rods with a settlement rate less than 2 mm/year is 100%

**C305 - XR0145020**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR145020  
 ABSOLUTE MOVEMENT



Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR145020  
 RELATIVE MOVEMENT

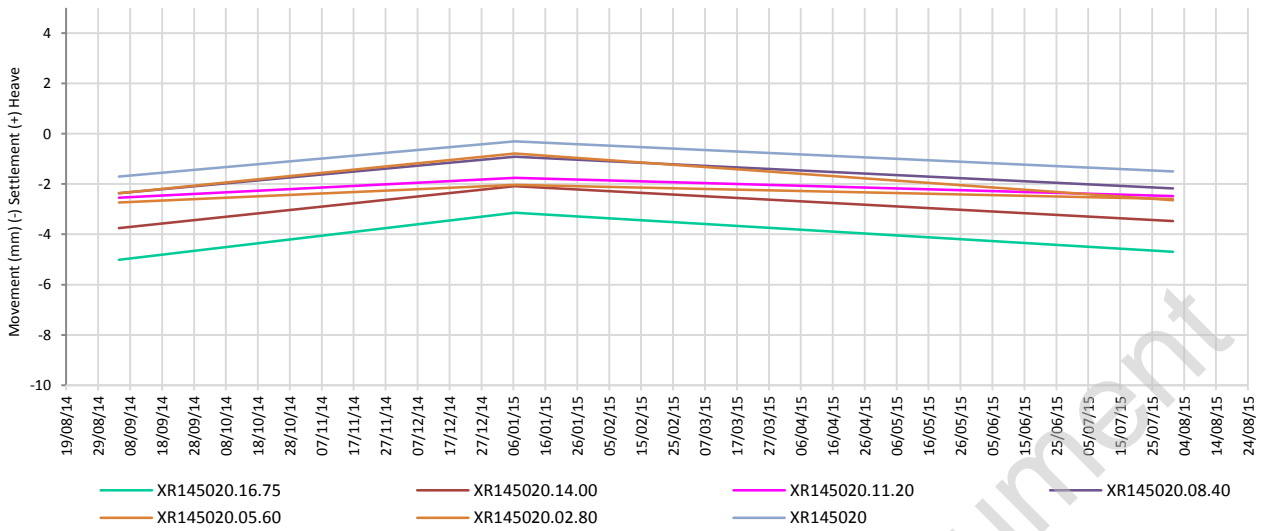


The graph above shows an absolute settlement of -5.88 mm after the Eastbound TBM transit and an additional -4.69 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR145020



The table below lists the annual settlement rate for each rod of the extensometer.

	Registered Movement (mm)			Rate (mm/year)
	04/09/2014	06/01/2015	31/07/2015	
XR145020.16.75	-5.01	-3.14	-4.69	0.040
XR145020.14.00	-3.75	-2.09	-3.47	0.031
XR145020.11.20	-2.54	-1.75	-2.48	-0.071
XR145020.08.40	-2.37	-0.91	-2.18	-0.039
XR145020.05.60	-2.74	-2.04	-2.59	0.050
XR145020.02.80	-2.37	-0.78	-2.64	-0.602
XR145020	-1.70	-0.30	-1.50	-0.017
	Rate less than -2.5 mm/year	% less 2 mm/ year		100.00%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		100.00%

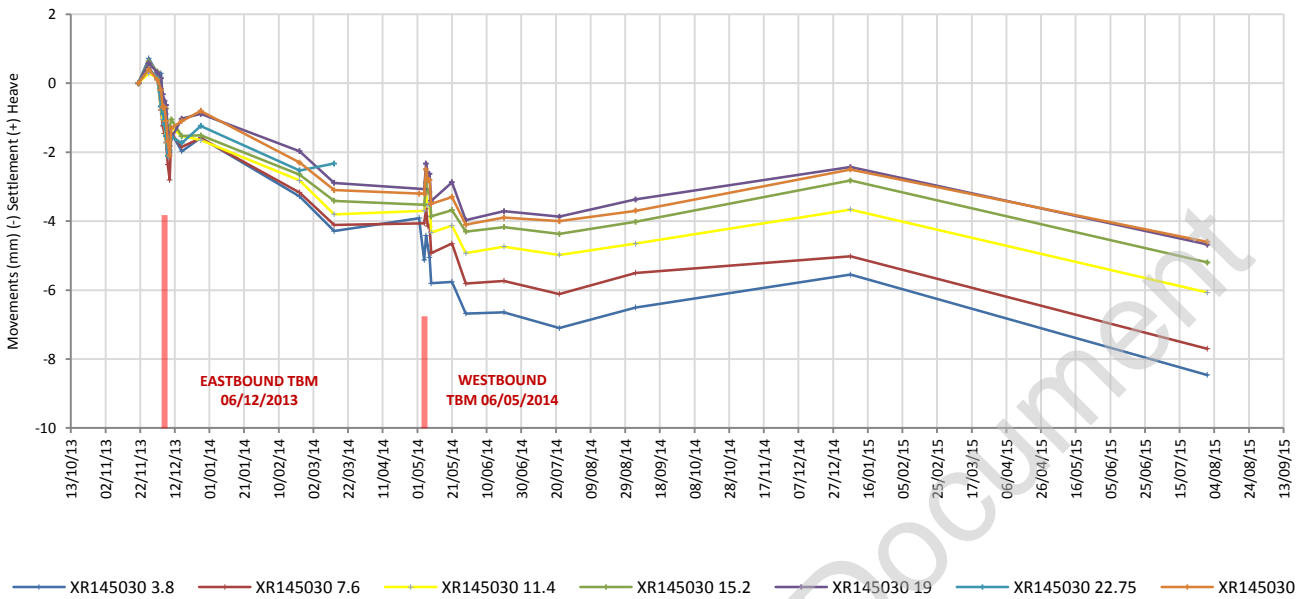
Note: All the movements are in mm. (-) Settlement / (+) Heave

#N/A: No readings

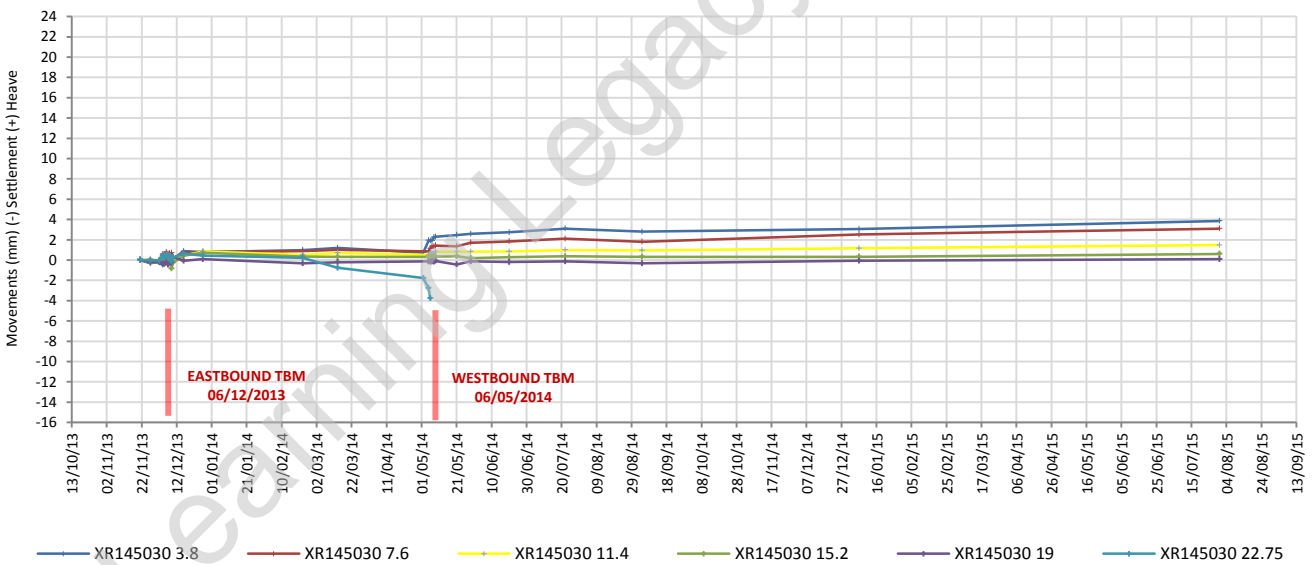
The percentage of the rods with a settlement rate less than 2 mm/year is 100%

**C305 - XR0145030**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR145030  
 ABSOLUTE MOVEMENT

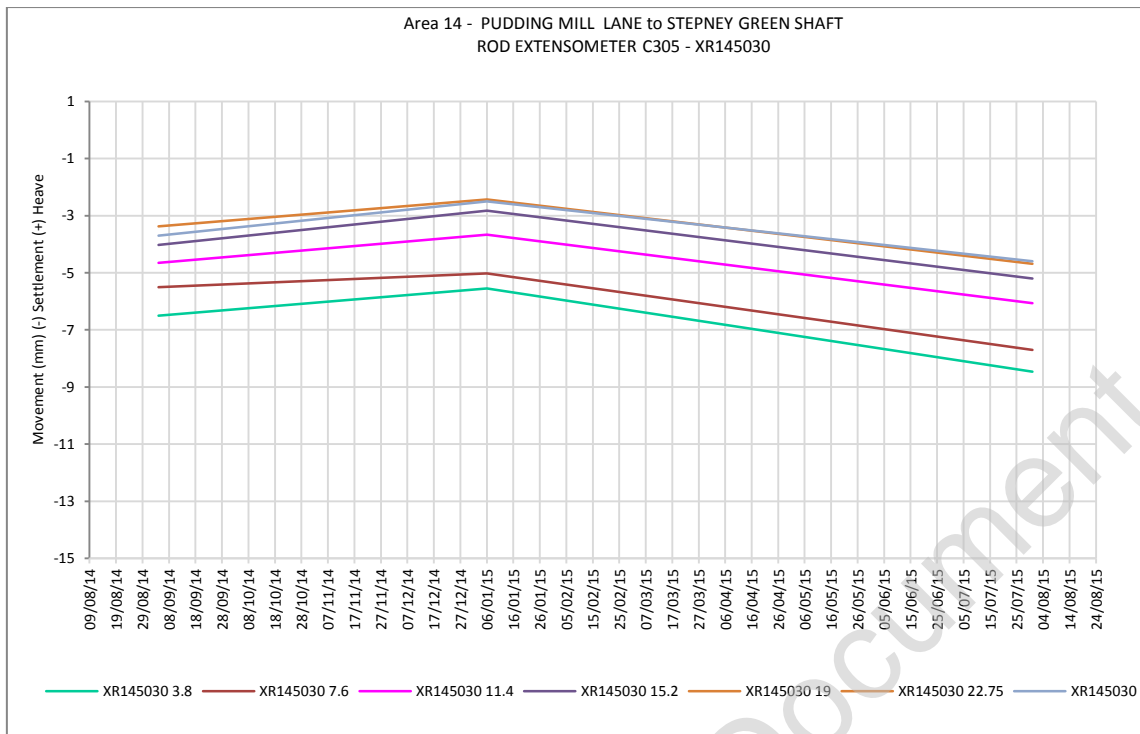


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR145030  
 RELATIVE MOVEMENT



The graph above shows an absolute settlement of -4.29 mm after the Eastbound TBM transit and an additional -8.46 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

	Registered Movement (mm)			Rate (mm/year)
	04/09/2014	06/01/2015	31/07/2015	
XR145030 3.8	-6.50	-5.55	-8.46	-2.471
XR145030 7.6	-5.50	-5.02	-7.70	-2.668
XR145030 11.4	-4.65	-3.66	-6.07	-1.844
XR145030 15.2	-4.02	-2.82	-5.20	-1.600
XR145030 19	-3.37	-2.43	-4.68	-1.706
XR145030 22.75	#N/A	#N/A	#N/A	#N/A
XR145030	-3.70	-2.50	-4.60	-1.272
	Rate less than -2.5 mm/year	% less 2 mm/ year		83.33%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		100.00%

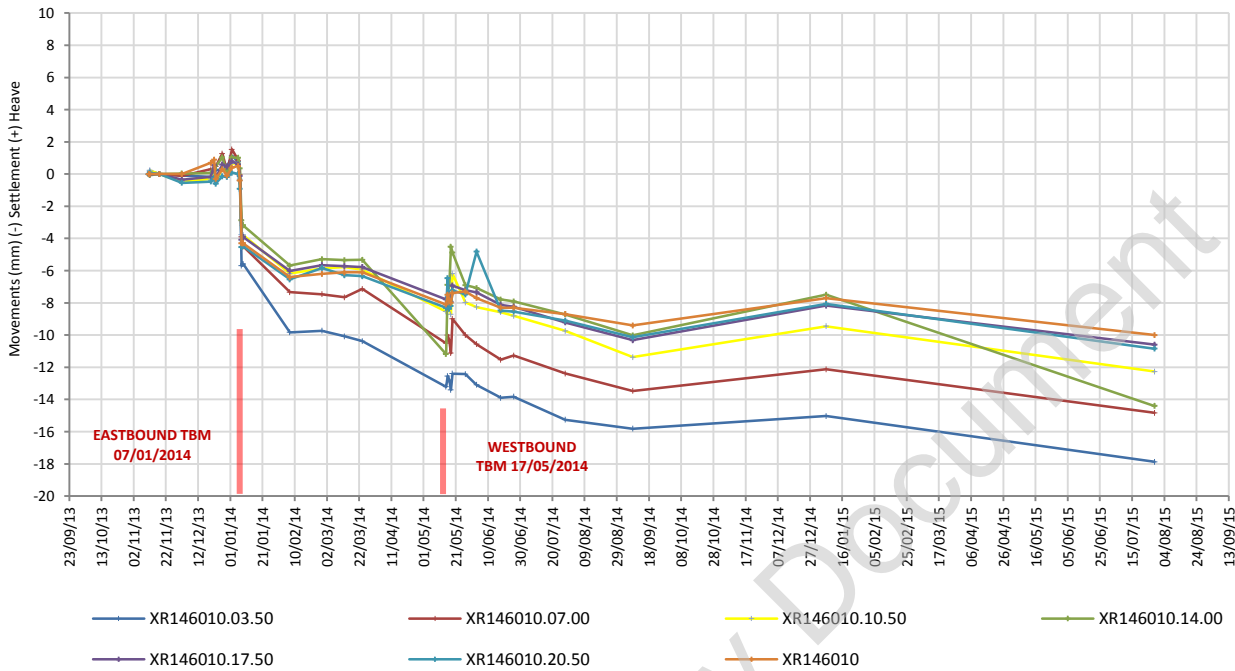
Note: All the movements are in mm. (-) Settlement / (+) Heave

#N/A: No readings

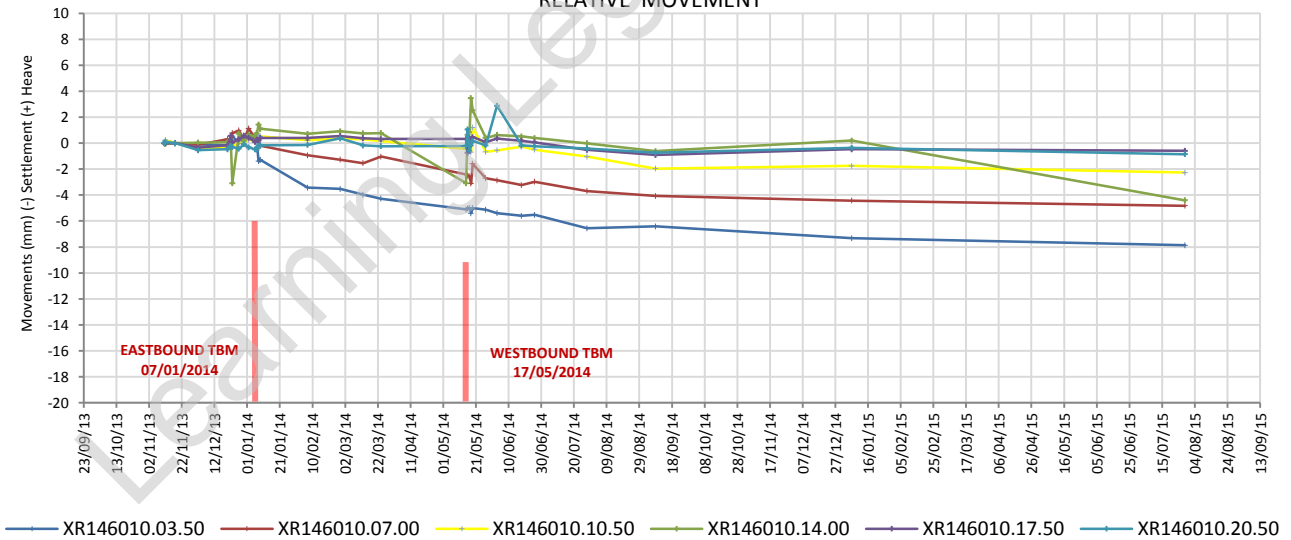
The percentage of the rods with a settlement rate less than 2 mm/year is 83%

**C305 - XR0146010**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146010  
 ABSOLUTE MOVEMENT

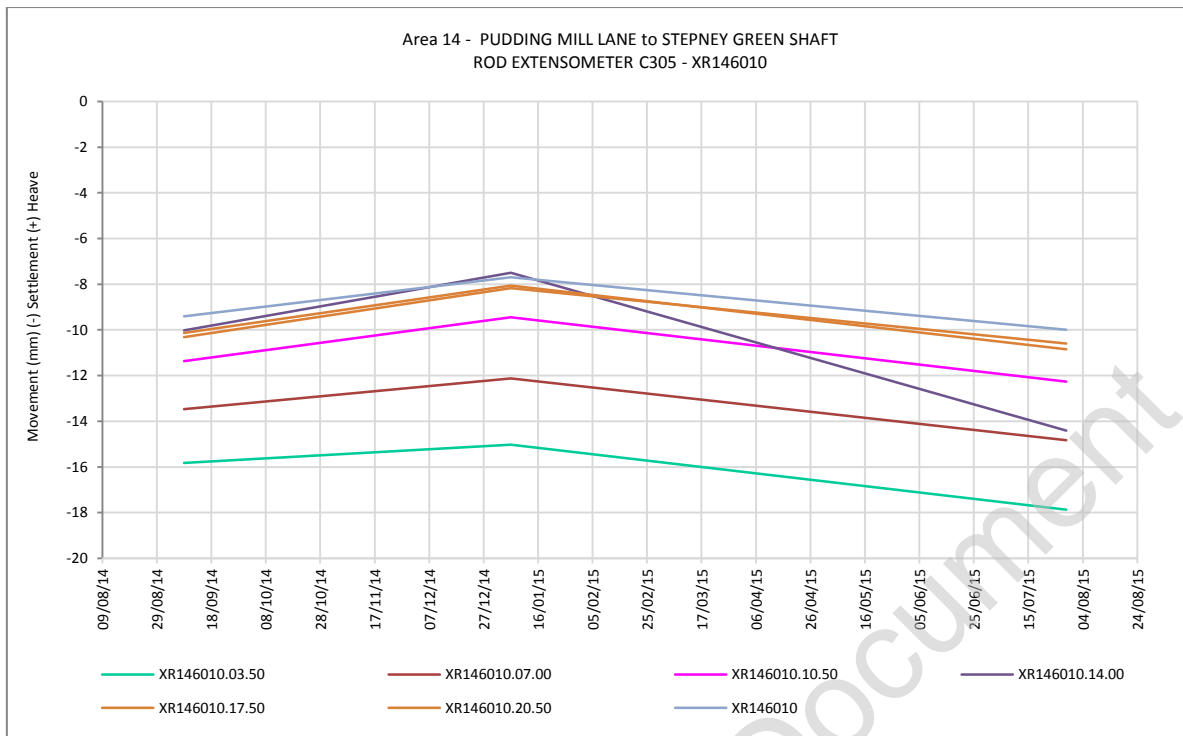


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146010  
 RELATIVE MOVEMENT



The graph above shows an absolute settlement of -10.08 mm after the Eastbound TBM transit and an additional -17.87 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

	Registered Movement (mm)			Rate (mm/year)
	08/09/2014	06/01/2015	29/07/2015	
XR146010.03.50	-15.82	-15.03	-17.87	-2.604
XR146010.07.00	-13.47	-12.13	-14.83	-1.883
XR146010.10.50	-11.37	-9.45	-12.27	-1.443
XR146010.14.00	-10.02	-7.50	-14.41	-5.735
XR146010.17.50	-10.32	-8.17	-10.60	-0.745
XR146010.20.50	-10.14	-8.06	-10.85	-1.246
XR146010	-9.40	-7.70	-10.00	-1.042
	Rate less than -2.5 mm/year	% less 2 mm/ year		71.43%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		85.71%

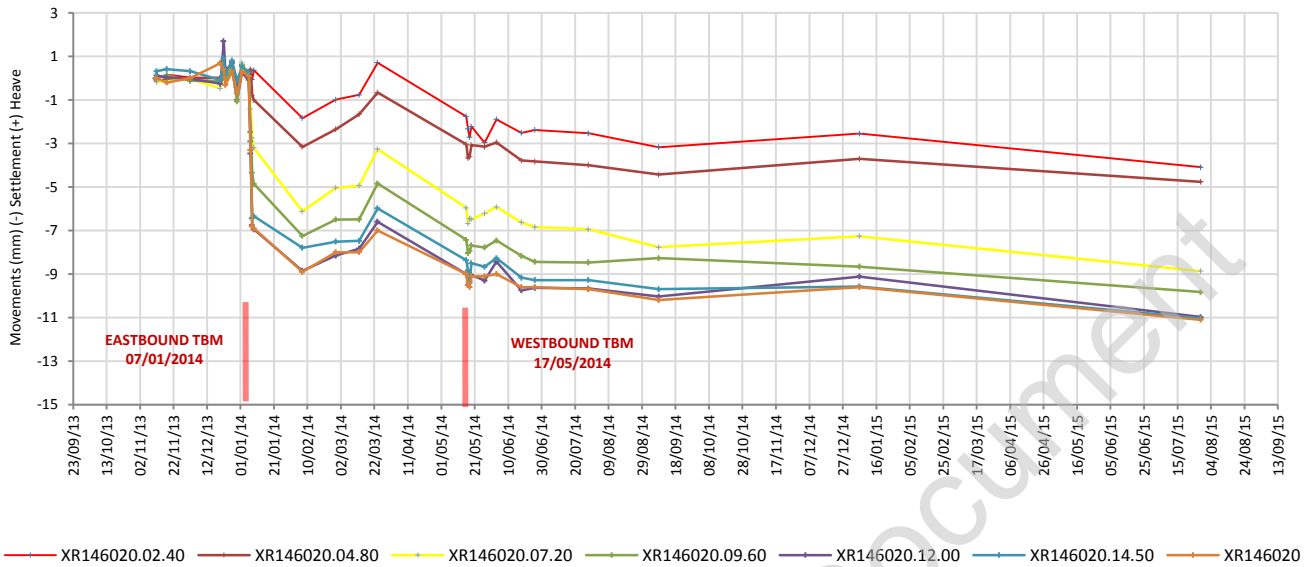
Note: All the movements are in mm. (-) Settlement / (+) Heave

#N/A: No readings

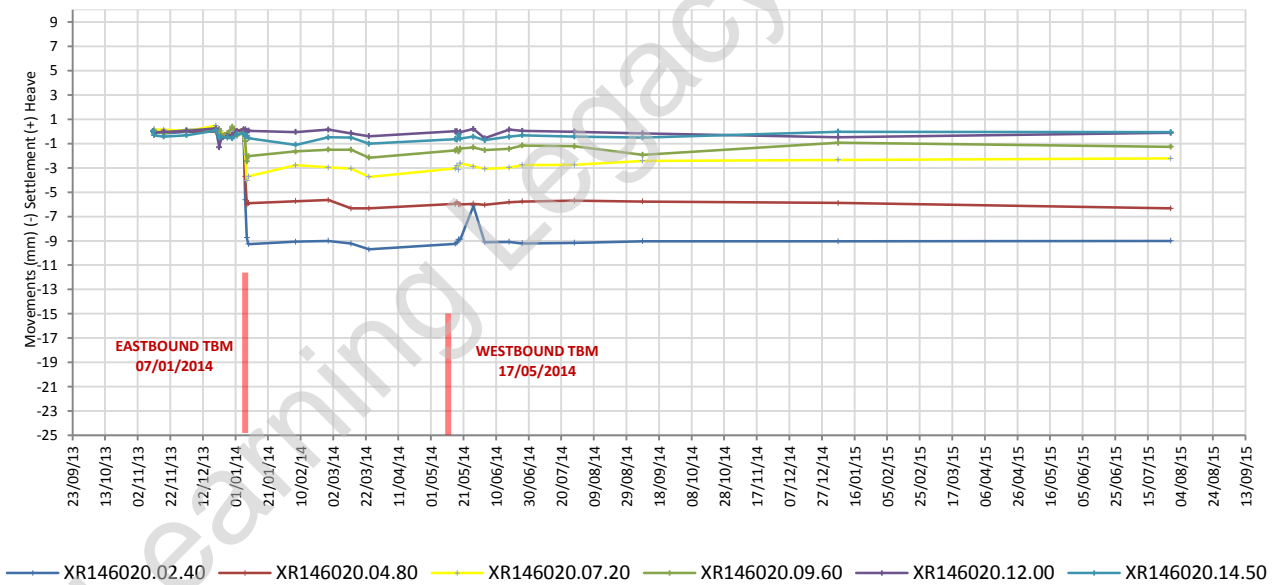
The percentage of the rods with a settlement rate less than 2 mm/year is 71.43%

**C305 - XR0146020**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146020  
 ABSOLUTE MOVEMENT

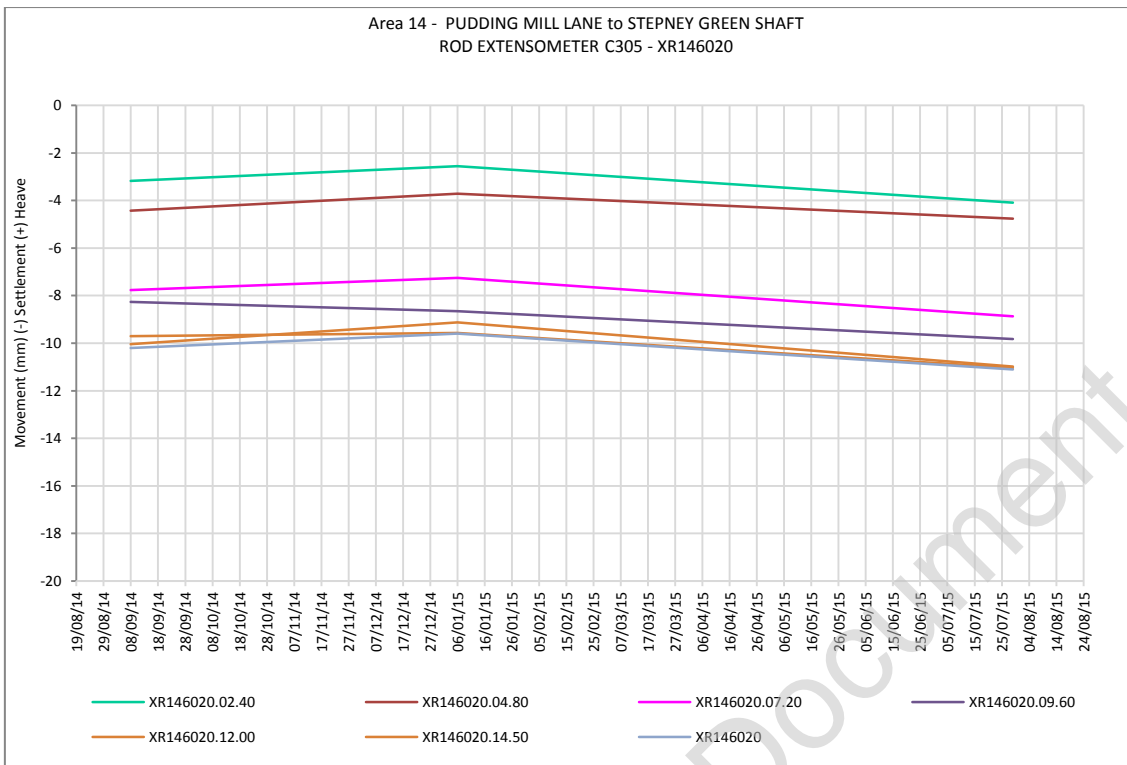


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146020  
 RELATIVE MOVEMENT



The graph above shows an absolute settlement of -8.85 mm after the Eastbound TBM transit and an additional -11.1 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

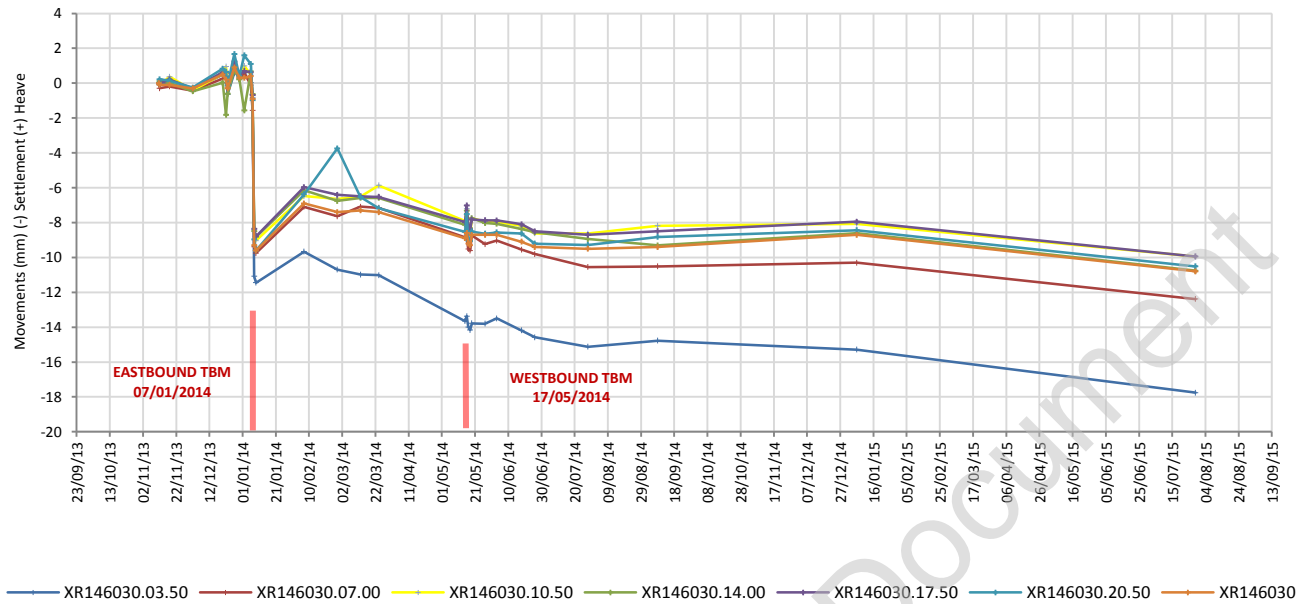
	Registered Movement (mm)			Rate (mm/year)
	08/09/2014	06/01/2015	29/07/2015	
XR146020.02.40	-3.17	-2.55	-4.09	-1.219
XR146020.04.80	-4.43	-3.71	-4.76	-0.532
XR146020.07.20	-7.77	-7.26	-8.87	-1.414
XR146020.09.60	-8.27	-8.66	-9.83	-1.793
XR146020.12.00	-10.04	-9.12	-10.98	-1.300
XR146020.14.50	-9.70	-9.57	-11.03	-1.617
XR146020	-10.20	-9.60	-11.10	-1.192
	Rate less than -2.5 mm/year	% less 2 mm/ year		100.00%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		100.00%

Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

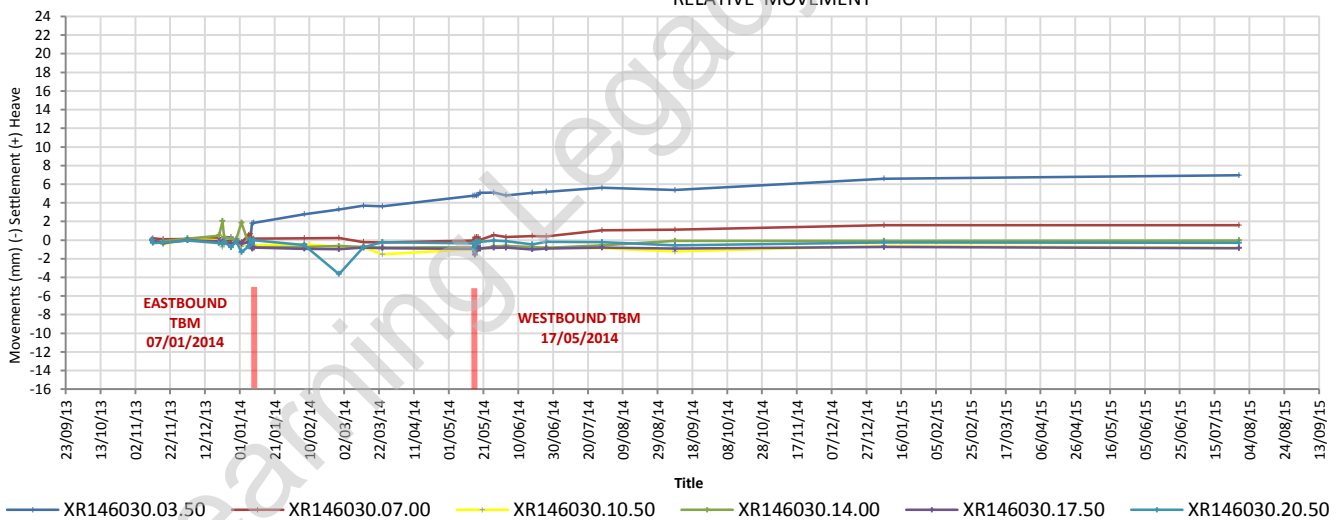
The percentage of the rods with a settlement rate less than 2 mm/year is 100%

**C305 - XR0146030**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146030  
 ABSOLUTE MOVEMENT



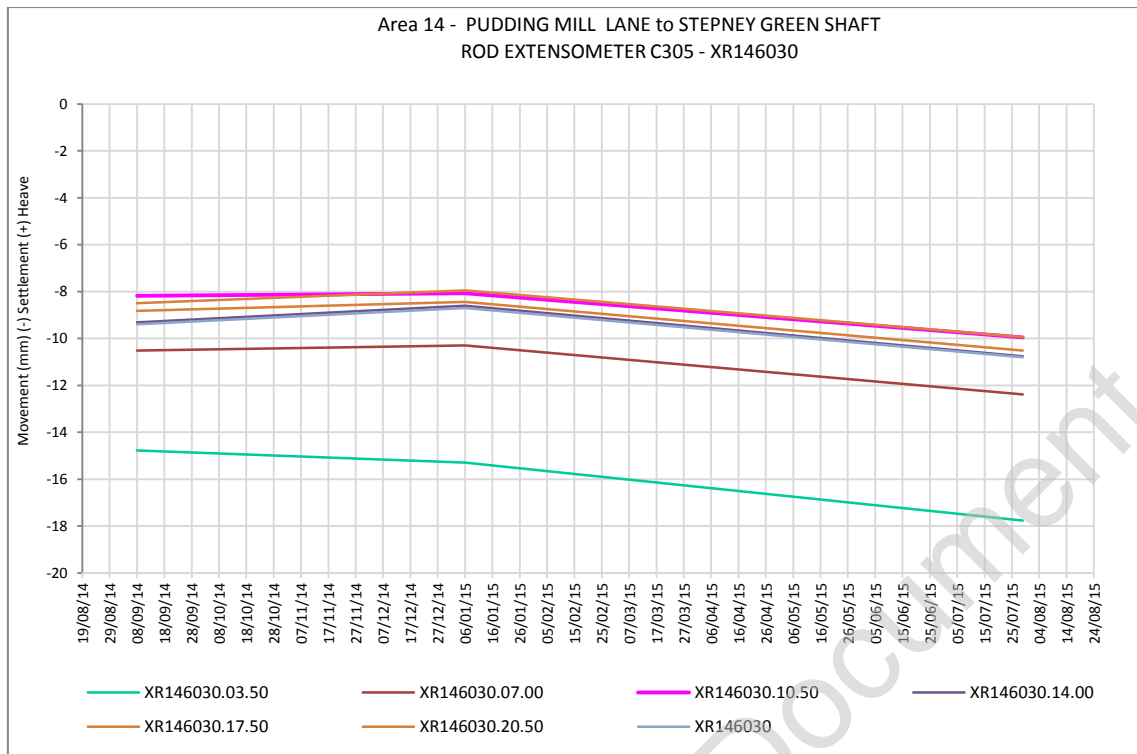
Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146030  
 RELATIVE MOVEMENT



The graph above shows an absolute settlement of -11.02 mm after the Eastbound TBM transit and an additional -17.73 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.





The table below lists the annual settlement rate for each rod of the extensometer.

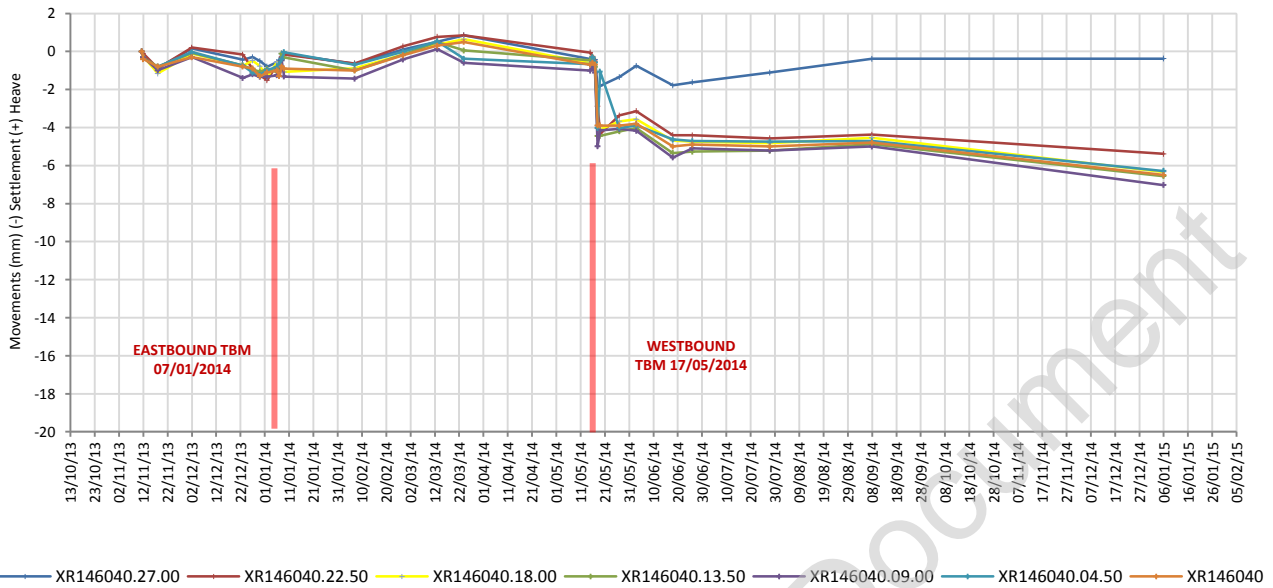
	Registered Movement (mm)			Rate (mm/year)
	08/09/2014	06/01/2015	29/07/2015	
XR146030.03.50	-14.77	-15.29	-17.76	-3.480
XR146030.07.00	-10.51	-10.30	-12.39	-2.291
XR146030.10.50	-8.18	-8.07	-9.95	-2.140
XR146030.14.00	-9.31	-8.61	-10.76	-1.869
XR146030.17.50	-8.49	-7.95	-9.94	-1.839
XR146030.20.50	-8.82	-8.44	-10.51	-2.095
XR146030	-9.40	-8.70	-10.80	-1.809
	Rate less than -2.5 mm/year	% less 2 mm/ year		85.71%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		100.00%

Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

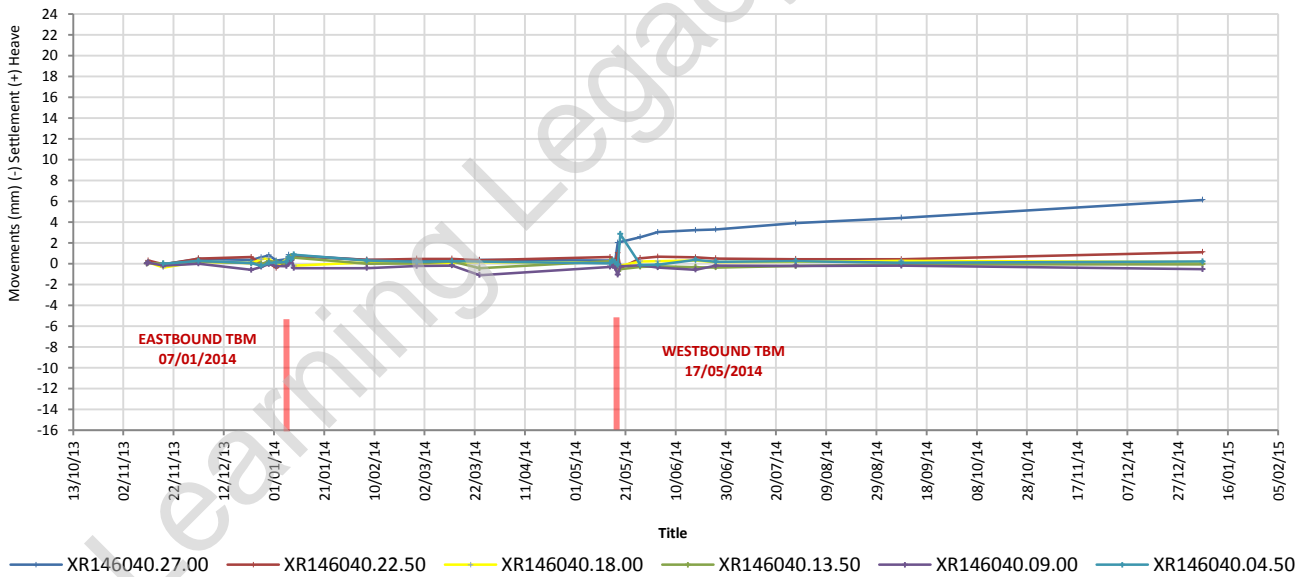
The percentage of the rods with a settlement rate less than 2 mm/year is 85%

**C305 - XR0146040**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146040  
 ABSOLUTE MOVEMENT

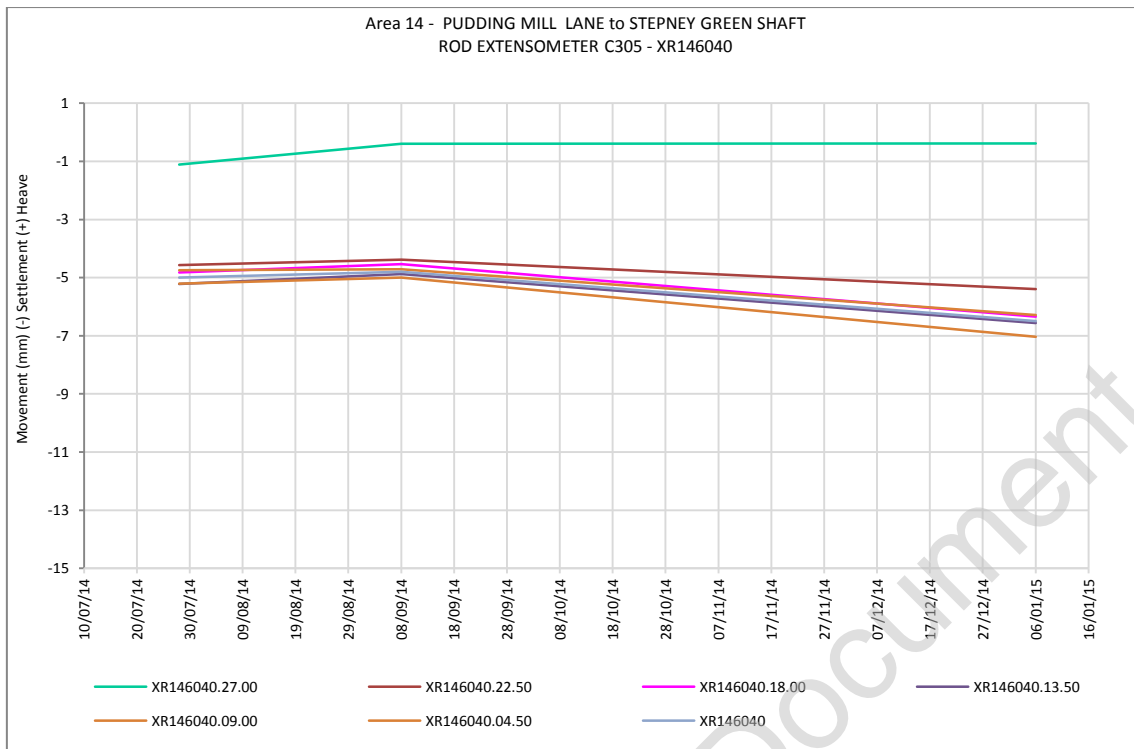


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146040  
 RELATIVE MOVEMENT



The graph above shows an absolute settlement of -1.43 mm after the Eastbound TBM transit and an additional -7.03 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

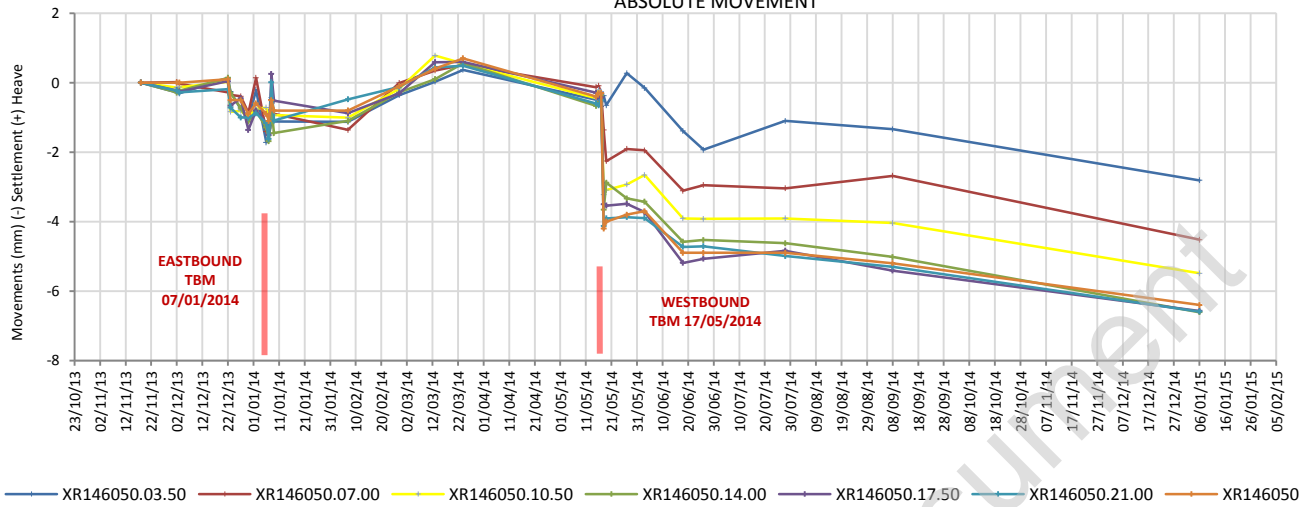
	Registered Movement (mm)			Rate (mm/year)
	28/07/2014	08/09/2014	06/01/2015	
XR146040.27.00	-1.11	-0.39	-0.38	1.288
XR146040.22.50	-4.57	-4.38	-5.39	-2.118
XR146040.18.00	-4.82	-4.54	-6.34	-3.877
XR146040.13.50	-5.22	-4.88	-6.56	-3.481
XR146040.09.00	-5.21	-5.00	-7.03	-4.558
XR146040.04.50	-4.75	-4.71	-6.29	-3.765
XR146040	-5.00	-4.80	-6.50	-3.775
	Rate less than -2.5 mm/year	% less 2 mm/ year		28.57%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		42.86%

Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

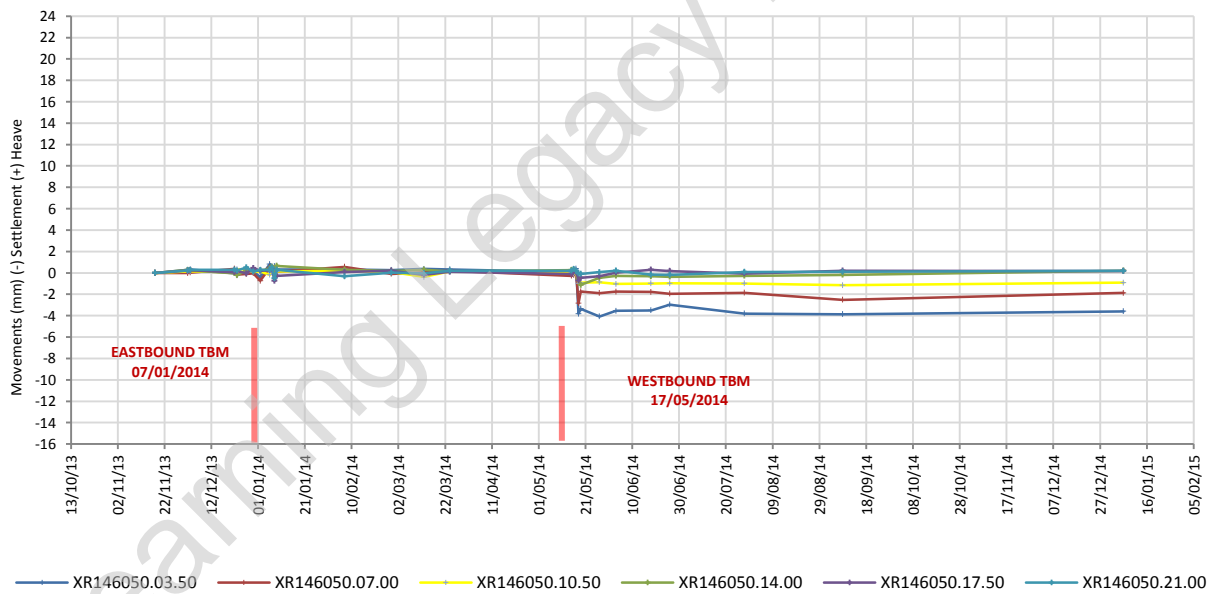
The percentage of the rods with a settlement rate less than 2 mm/year is 28%

**C305 - XR0146050**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146050  
 ABSOLUTE MOVEMENT

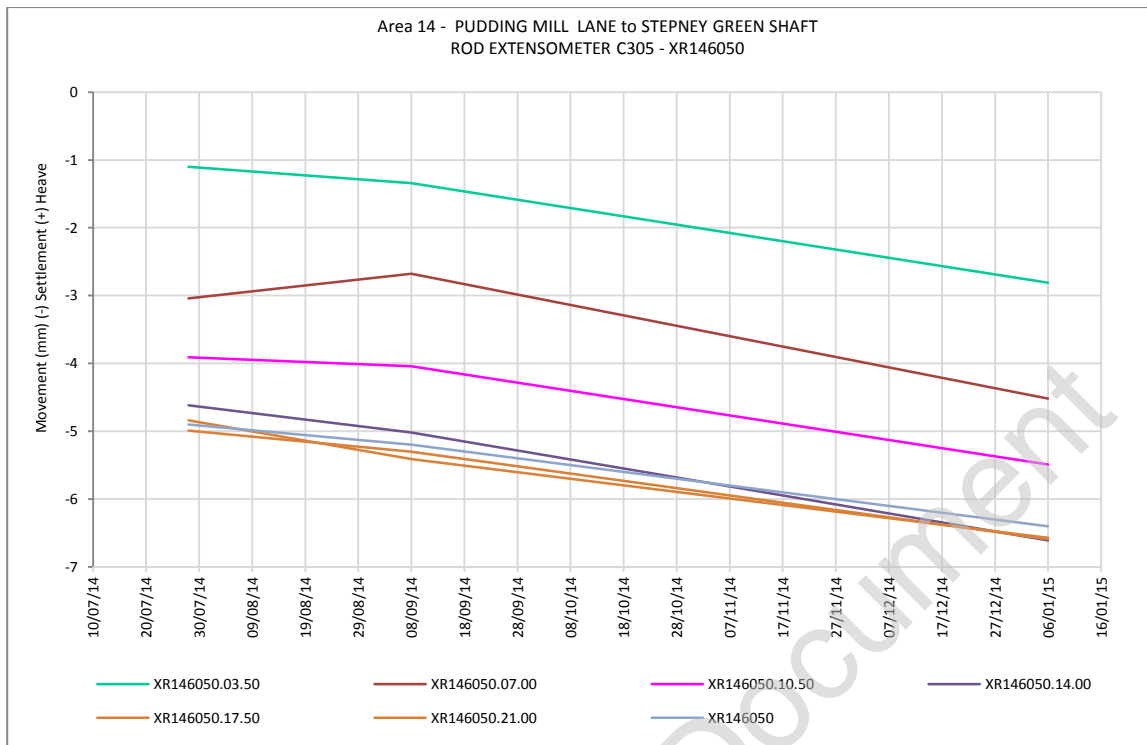


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146050  
 RELATIVE MOVEMENT



The graph above shows an absolute settlement of -1.61 mm after the Eastbound TBM transit and an additional -6.61 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

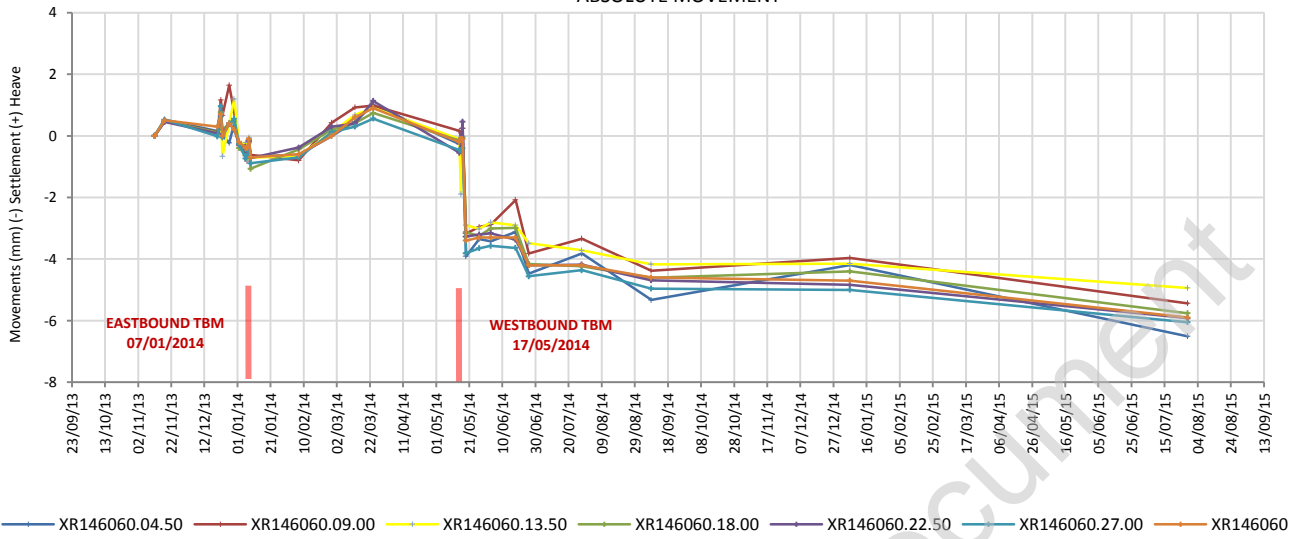
	Registered Movement (mm)			Rate (mm/year)
	28/07/2014	08/09/2014	06/01/2015	
XR146050.03.50	-1.10	-1.34	-2.81	-3.989
XR146050.07.00	-3.04	-2.68	-4.52	-3.834
XR146050.10.50	-3.91	-4.04	-5.49	-3.748
XR146050.14.00	-4.62	-5.02	-6.61	-4.561
XR146050.17.50	-4.84	-5.41	-6.57	-3.816
XR146050.21.00	-4.99	-5.30	-6.59	-3.675
XR146050	-4.90	-5.20	-6.40	-3.439
	Rate less than -2.5 mm/year	% less 2 mm/ year		0.00%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		14.29%

Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

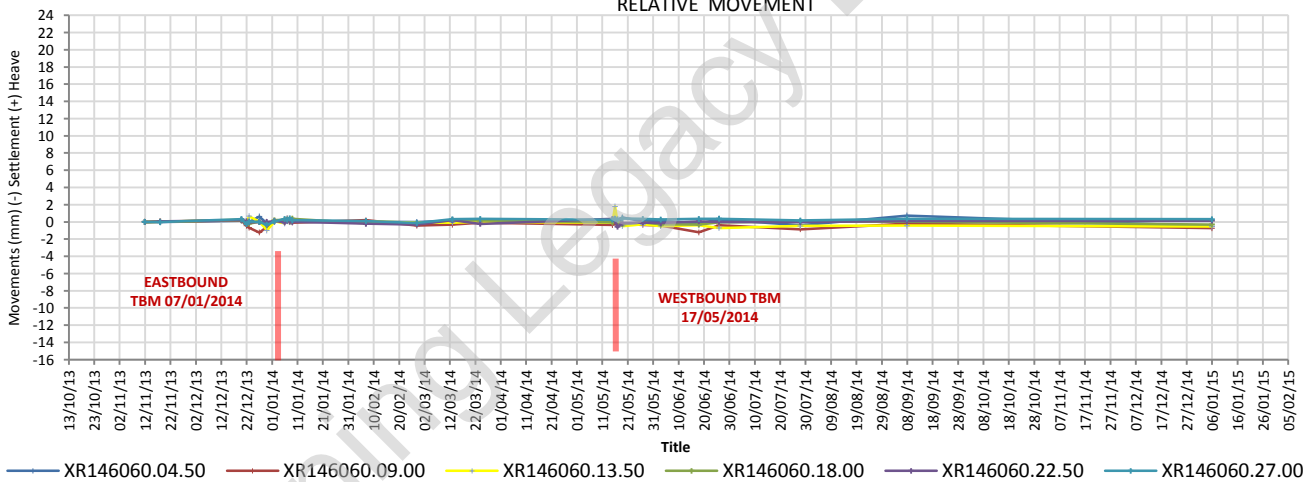
The percentage of the rods with a settlement rate less than 3 mm/year is 14.29%

**C305 - XR0146060**

Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146060  
 ABSOLUTE MOVEMENT

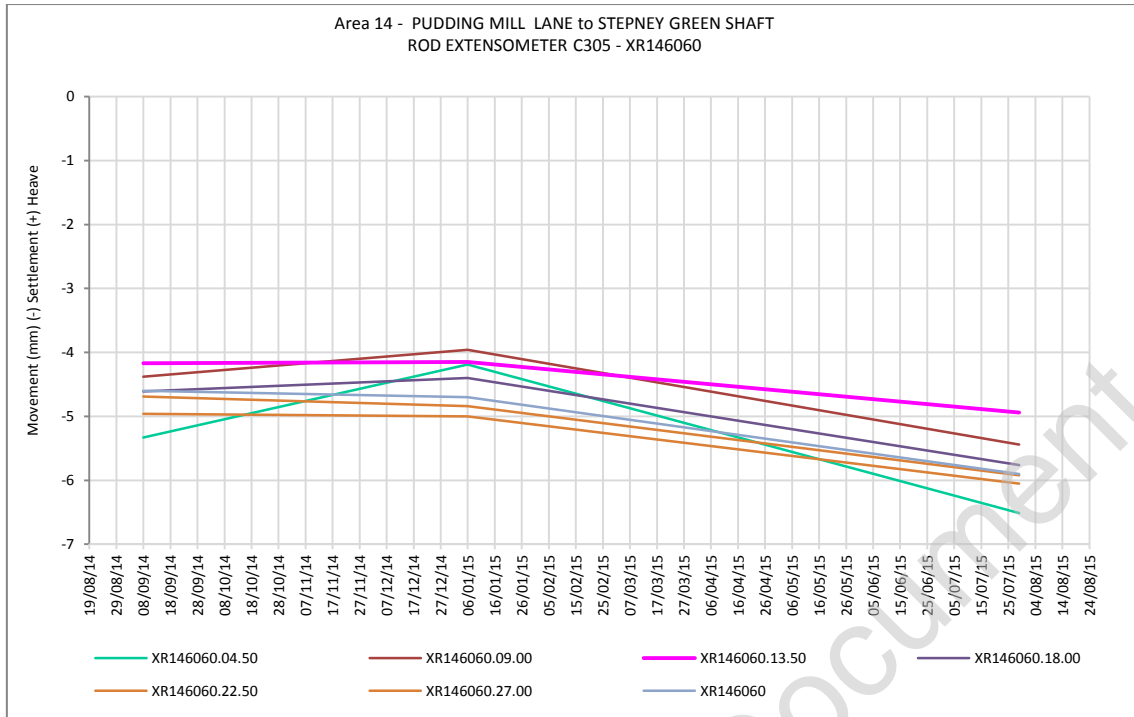


Area 14 - PUDDING MILL LANE to STEPNEY GREEN SHAFT  
 ROD EXTENSOMETER C305 - XR146060  
 RELATIVE MOVEMENT



The graph above shows an absolute settlement of -0.82 mm after the Eastbound TBM transit and an additional -6.86 mm settlement after the Westbound TBM transit.

The next plot shows the trend line adjustment for each rod.



The table below lists the annual settlement rate for each rod of the extensometer.

	Registered Movement (mm)			Rate (mm/year)
	08/09/2014	06/01/2015	29/07/2015	
XR146060.04.50	-5.33	-4.19	-6.51	-1.630
XR146060.09.00	-4.38	-3.96	-5.44	-1.349
XR146060.13.50	-4.17	-4.15	-4.94	-0.926
XR146060.18.00	-4.61	-4.40	-5.76	-1.417
XR146060.22.50	-4.69	-4.84	-5.92	-1.444
XR146060.27.00	-4.96	-5.00	-6.05	-1.297
XR146060	-4.60	-4.70	-5.90	-1.537
	Rate less than -2.5 mm/year	% less 2 mm/ year		100.00%
	Rate greater than -3.5 mm/year	% less 3 mm/ year		100.00%

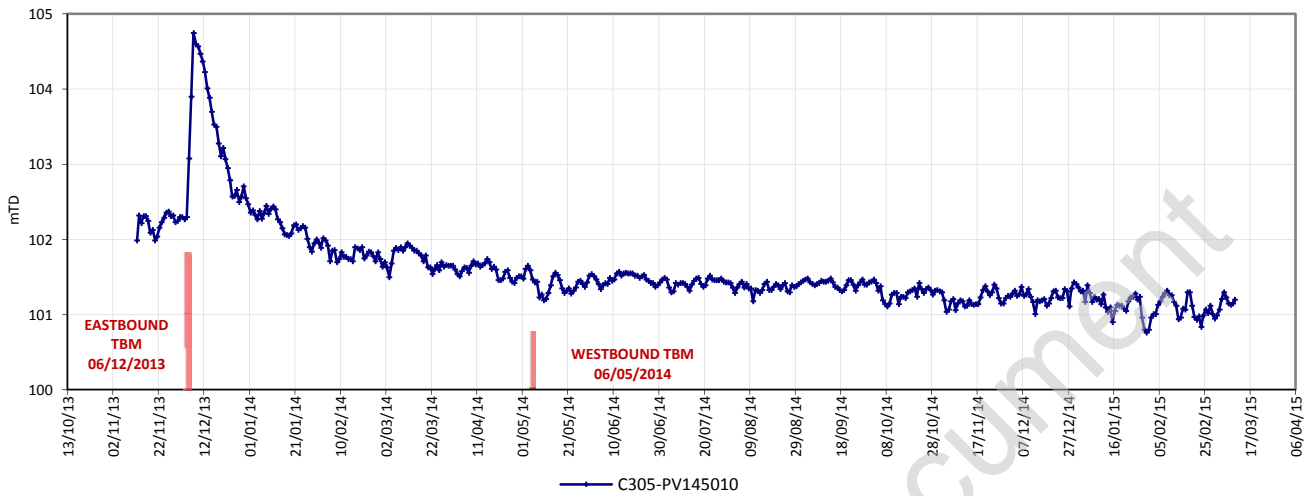
Note: All the movements are in mm. (-) Settlement / (+) Heave  
 #N/A: No readings

The percentage of the rods with a settlement rate less than 3 mm/year is 71.43%

PIEZOMETERS

**C305 – PV145010**

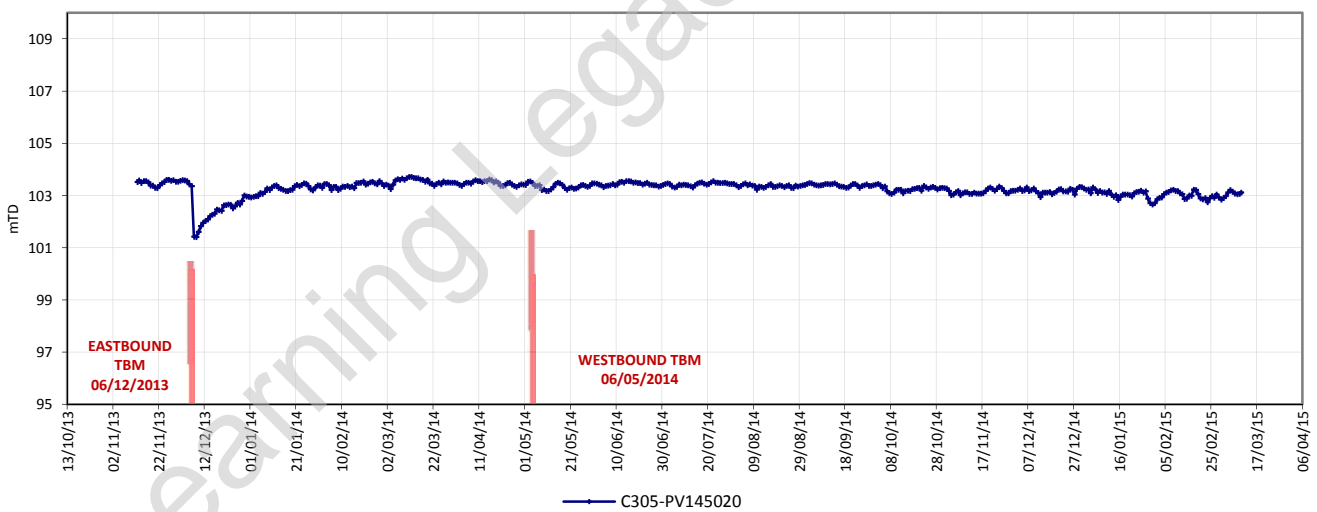
VIBRATING WIRE PIEZOMETER C305 - PV145010



There was a rise in the water level (+2 m) during Eastbound TMB transit and subsequently water recovered level to 101 m. There was no significant variation during Westbound TMB transit.

**C305 – PV145020**

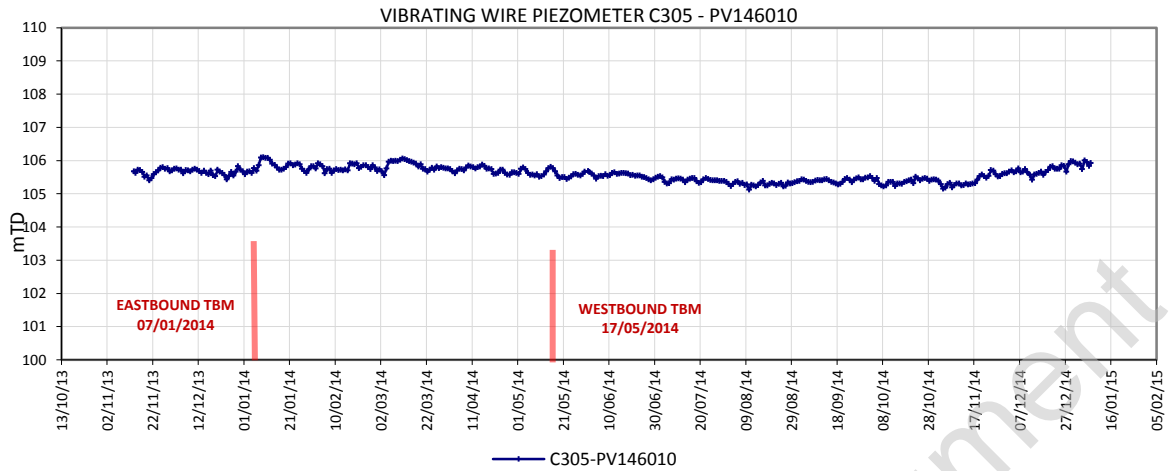
VIBRATING WIRE PIEZOMETER C305 - PV145020



There was a fall in the water level (-2 m) during Eastbound TMB transit and subsequently water recovered level to 103 m. There was no significant variation during Westbound TMB transit.

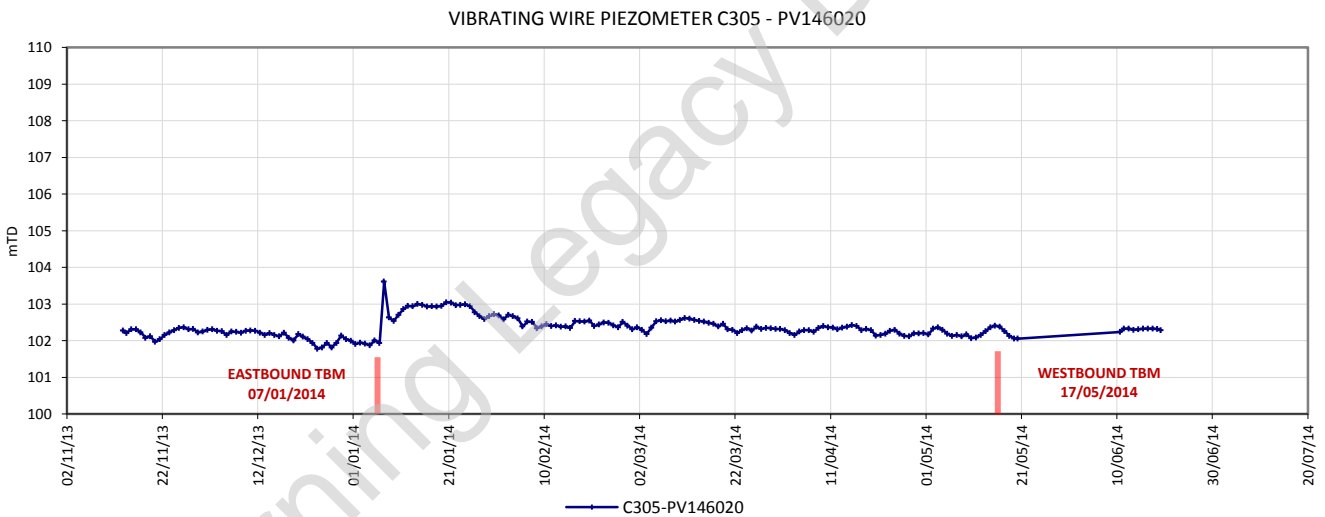


**C305 – PV146010**



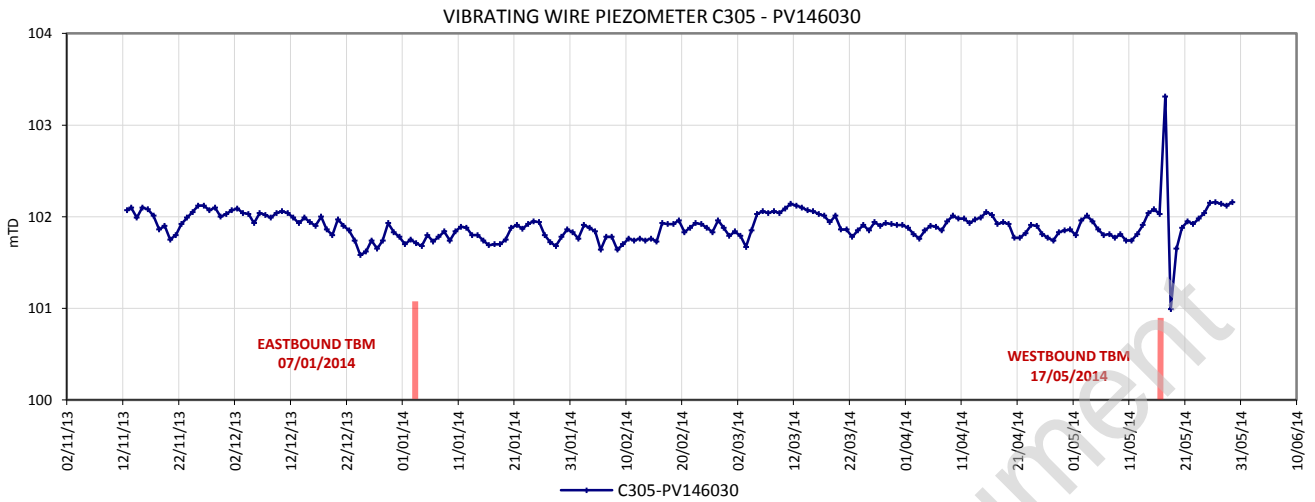
There was no significant variation in the water level during TBMs transit.

**C305 – PV146020**



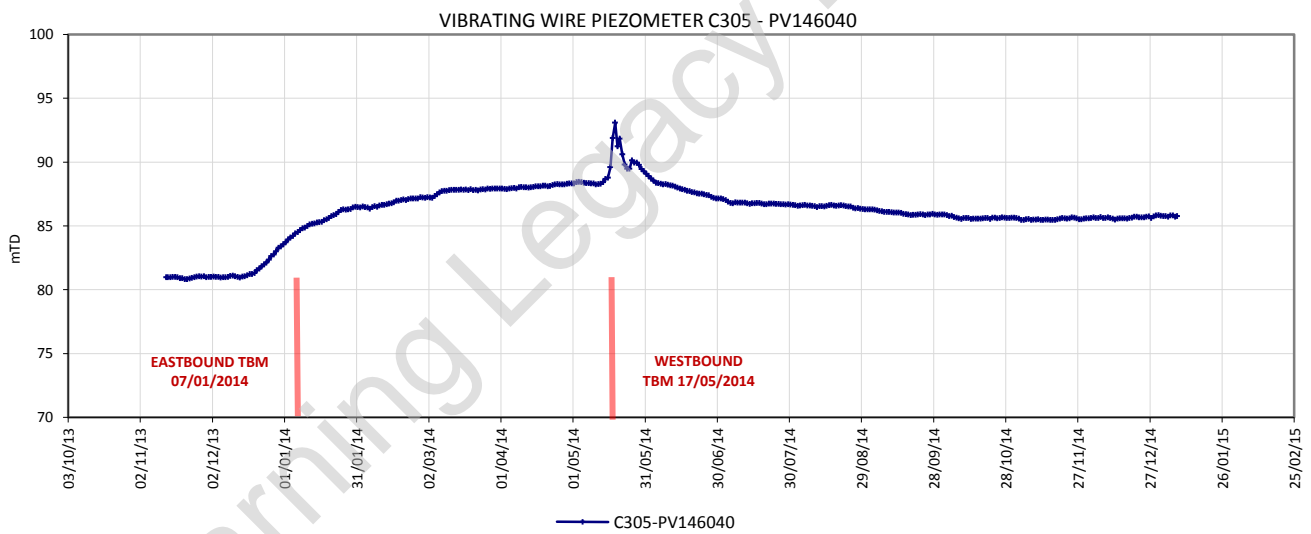
There was a rise in the water level (+2 m) during Eastbound TMB transit and subsequently water recovered level to 102 m. There was no significant variation during Westbound TMB transit.

**C305 – PV146030**



There was a rise and fall in the water level (+1 m) during Westbound TMB transit and subsequently water recovered level to 102 m. There was no significant variation during Eastbound TMB transit.

**C305 – PV146040**



There was a rise in the water level (+7 m) during Eastbound TMB transit and a rise (+5 m) during Westbound TMB transit. Subsequently water recovered level to 85 m.

## INCLINOMETERS

- Instrument Type: Inclinometers
- Quantity: 6

Six Inclinometers have been installed. The figures below show the orientation of "A" and "B" AXIS and the distance of the instrument from the nearest tunnel drive.

Movements in A+ AXIS are always towards the expected AXIS, ie: towards the tunnel AXIS, and the B+ AXIS is clockwise +90° from the A+ axis (see orientation sketch, below right).

Orientation of the probe and casing:

A AXIS: the AXIS of the anticipated movement

A+ = the orientation of the casing groove into which the leading wheel of the inclinometer probe is located on the first run of a set of readings. This is also the orientation of the primary sensor

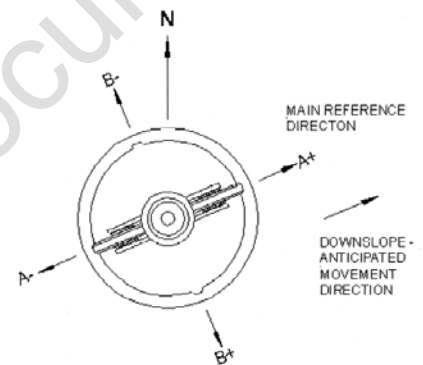
A- = the orientation of the casing groove into which the leading wheel of the inclinometer probe is located on the second run of a set of readings. This is also the orientation of the primary sensor

B+ = the orientation of the secondary sensor during the first run of a set of readings

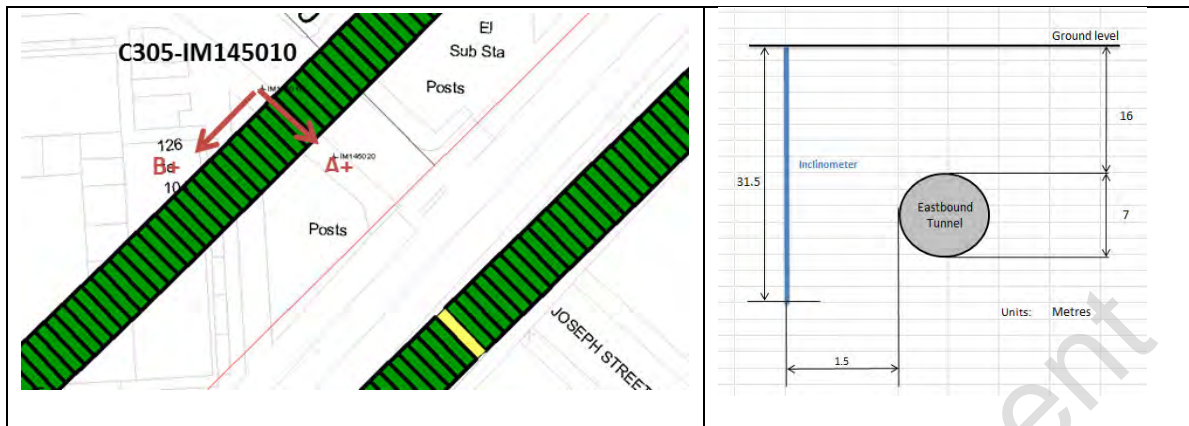
B- = the orientation of the secondary sensor during the second run of a set of readings

The first reading of the baseline is an average of the three commissioning readings taken prior baseline readings.

Corrections, due to the change of the different probes along the time when the readings were taken, have been applied when using different probes on the raw data. This correction is calculated as the following way. An average of the raw readings along the inclinometer is obtained in each case. Then the difference between the average values before and after the change of the probes is calculated. This difference is applied to the readings taken with the different probe in each direction.



C305-IM145010



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 1026 (Project chainage – 12506)	06/12/2013
Westbound Drive-Z	Ring 1040 (Project chainage – 12656)	06/05/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

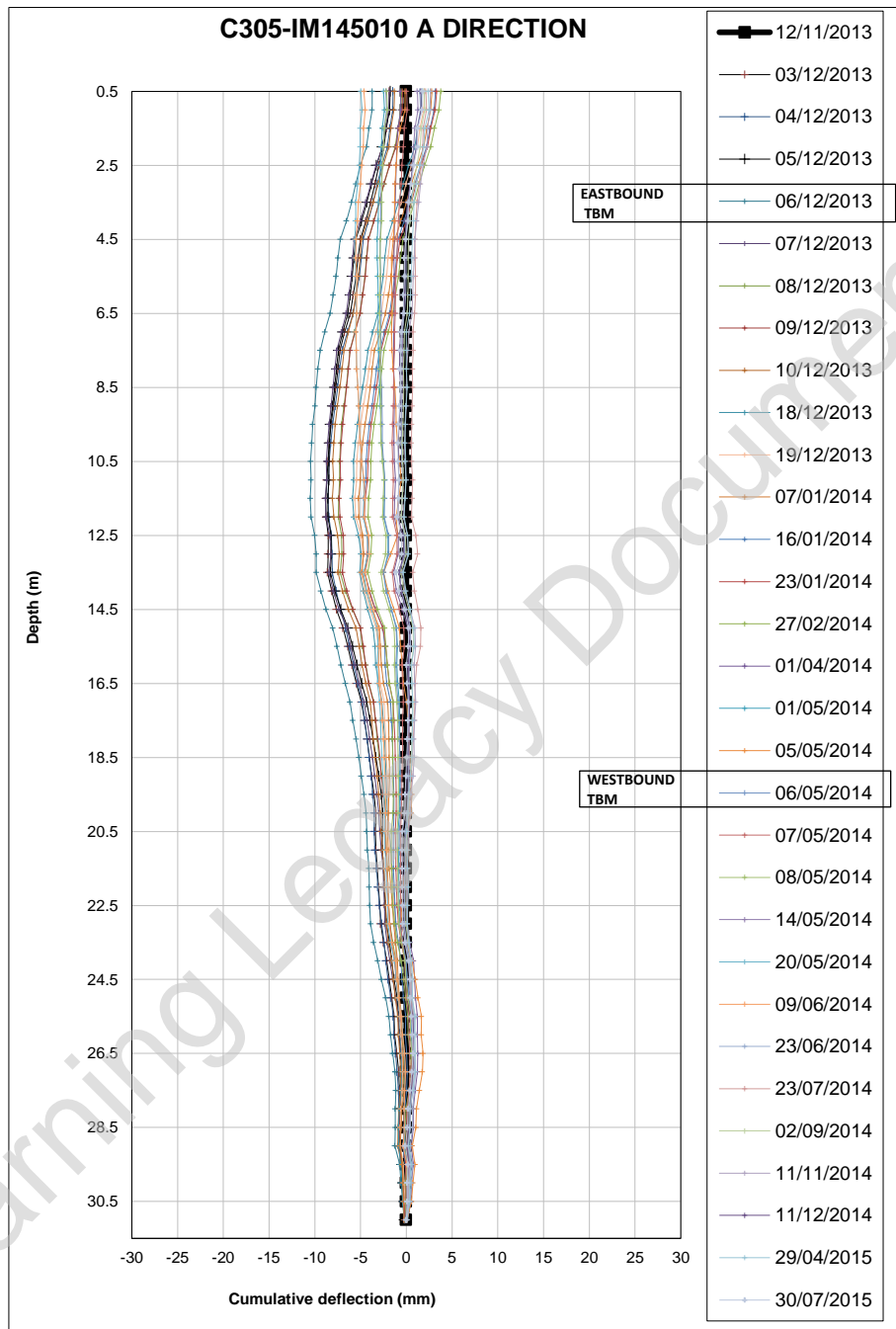
For the inclinometer C305-IM145010 different probes have been used. Related correction factors are presented in the table below:

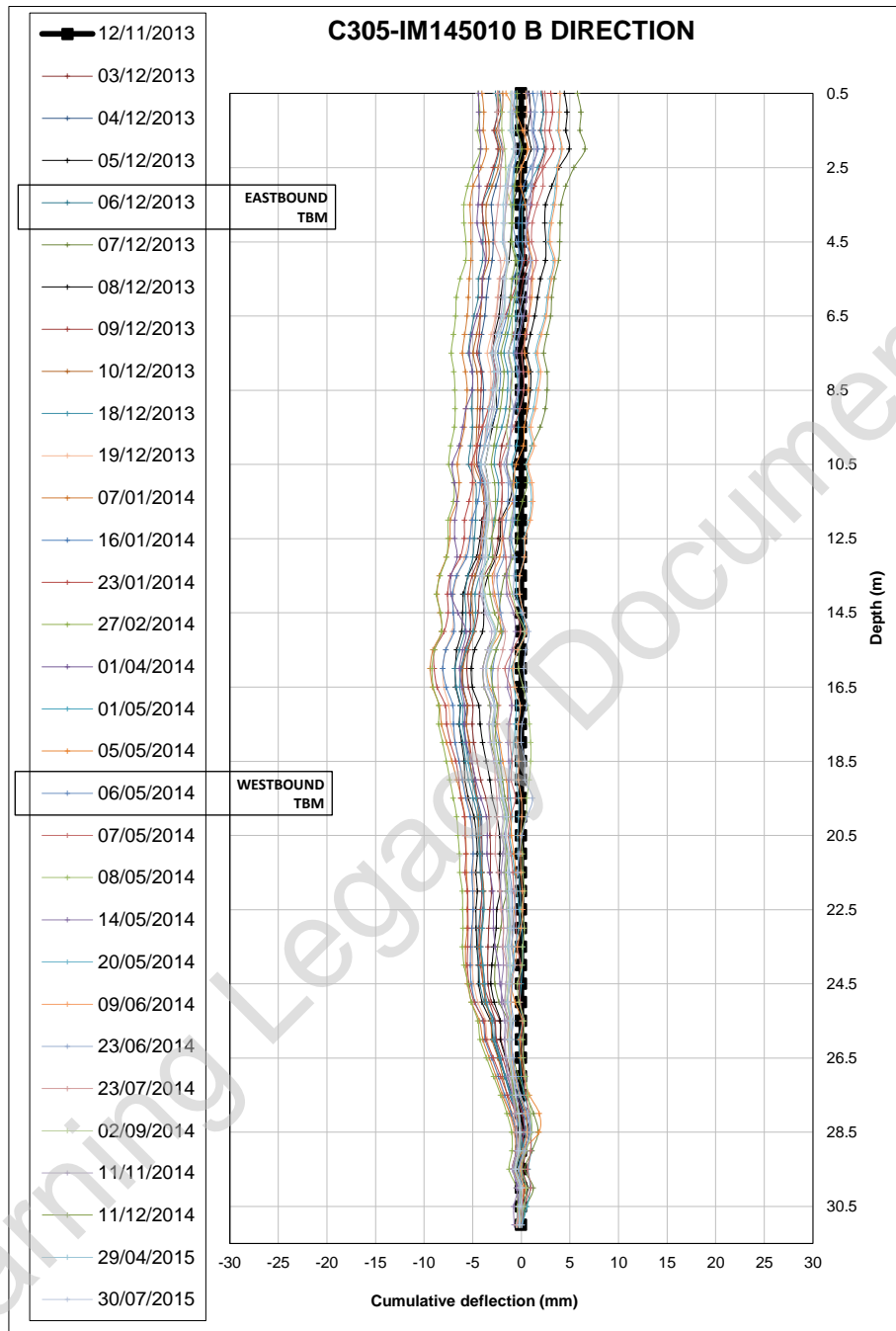
ID Sensor	C305-IM145010	
Serial number	DI1244/DI1217	DI1217/1144940
Date	03/12/2013	01/04/2014
A+	162	-164
A-	162	-184
B+	-139	156
B-	-110	147

An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

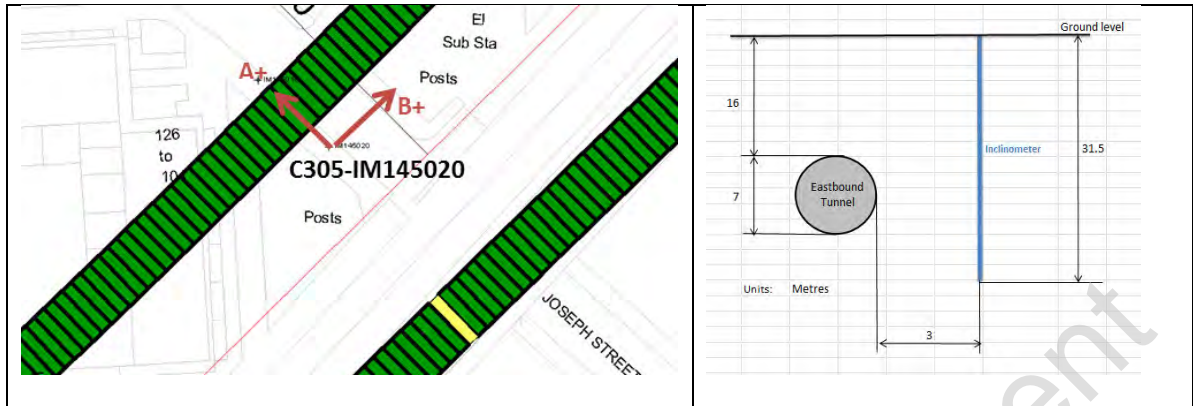
There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM145010.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”.





C305-IM145020



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 1025 (Project chainage – 12507)	06/12/2013
Westbound Drive-Z	Ring 1041 (Project chainage – 12655)	06/05/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

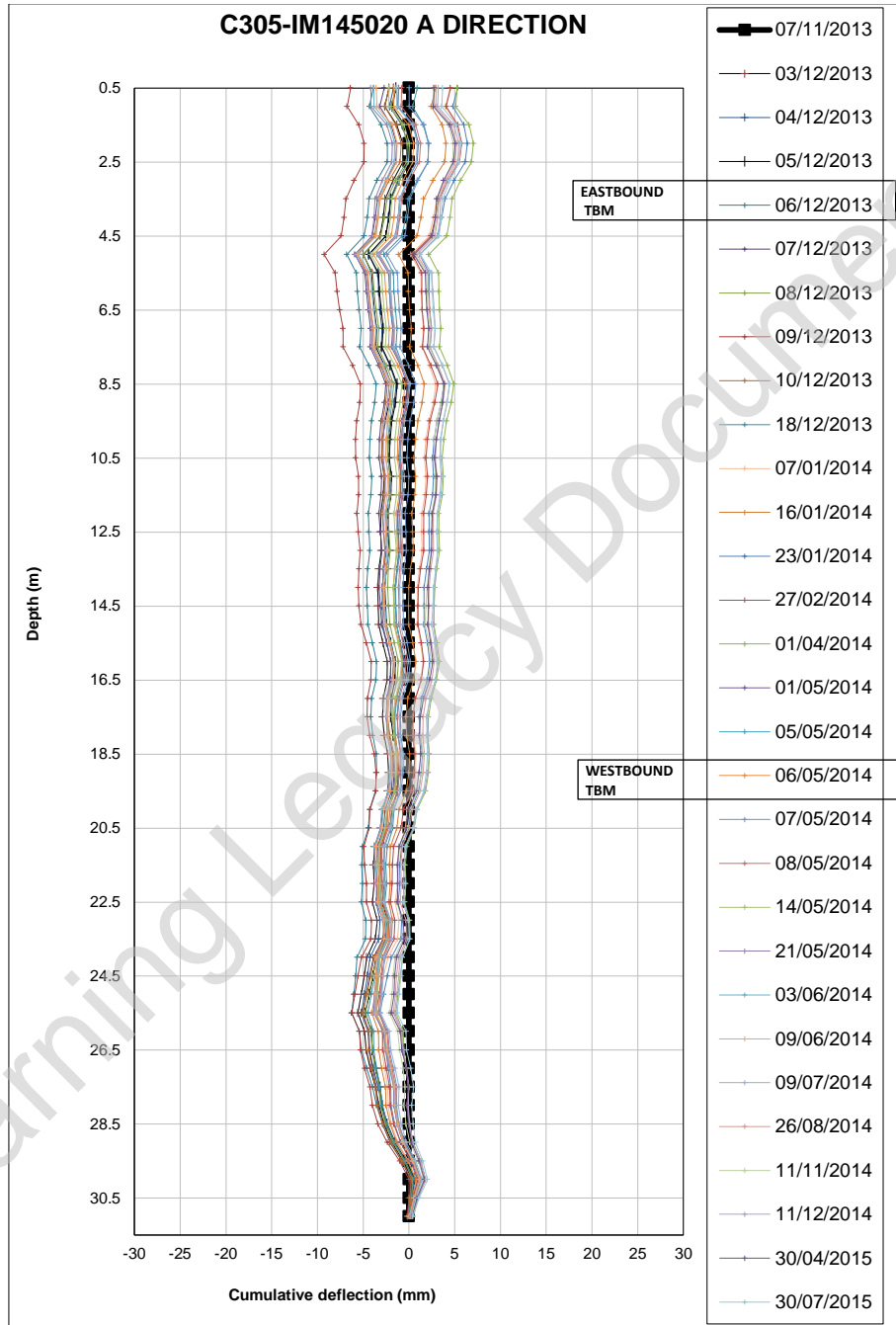
For the inclinometer C305-IM145020 different probes have been used. Related correction factors are presented in the table below:

ID Sensor	C305-IM145020	
Serial number	DI1244/DI1217	DI1217/1144940
Date	03/12/2013	01/04/2014
A+	156	-163
A-	179	-174
B+	-136	164
B-	-116	144

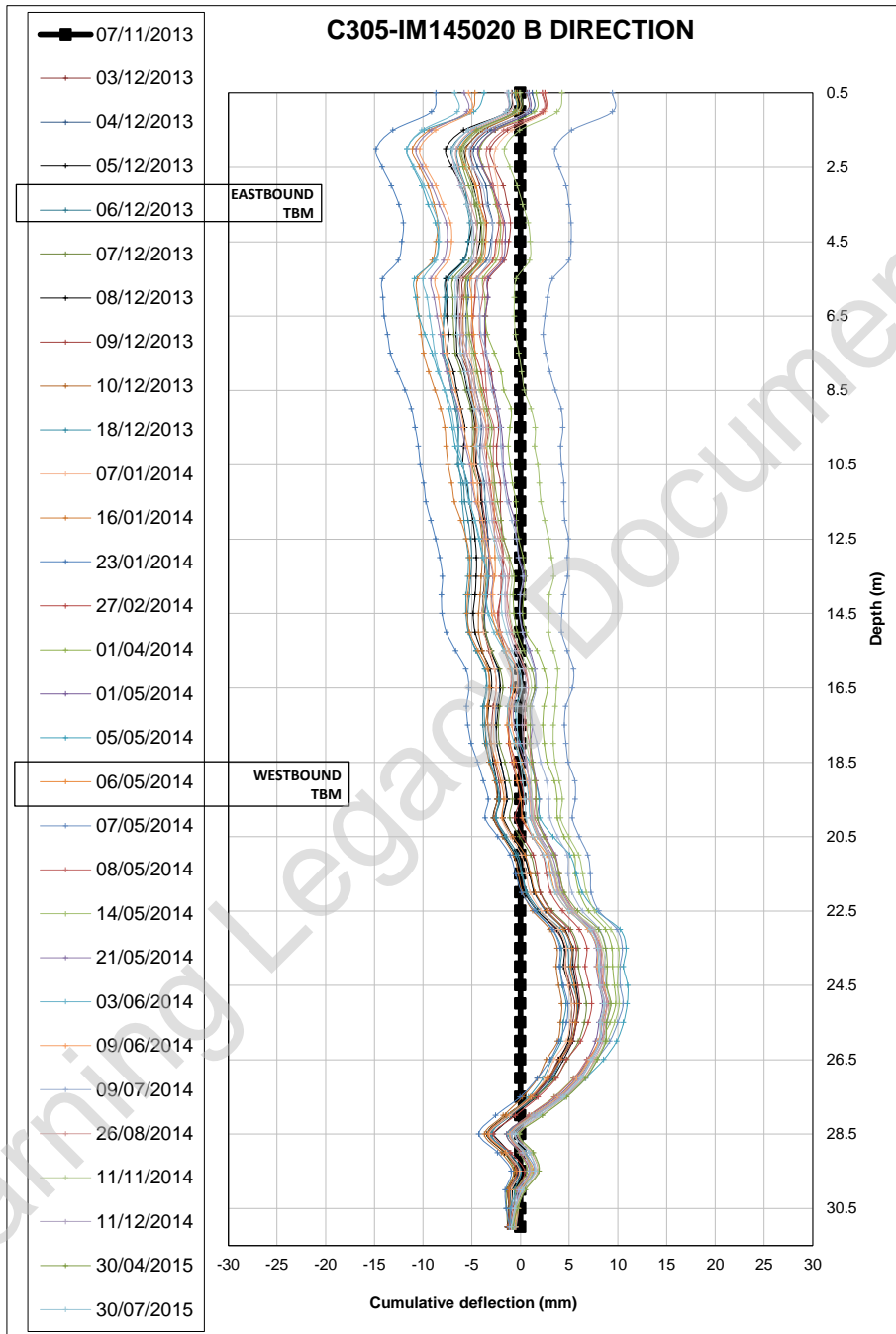
An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM145020.

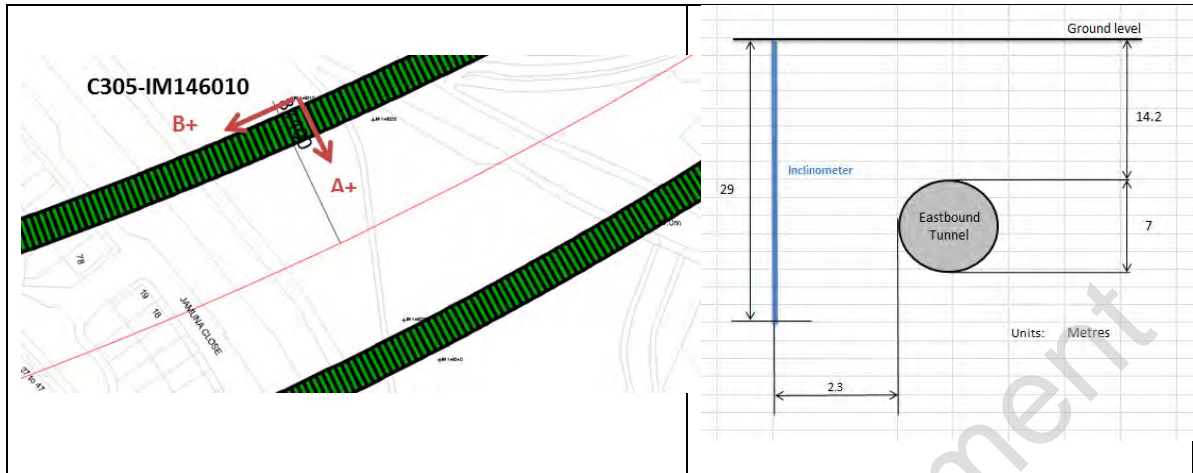
Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”







C305-IM146010



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 1263 (Project chainage – 12127)	07/01/2013
Westbound Drive-Z	Ring 1290 (Project chainage – 12258)	16/05/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

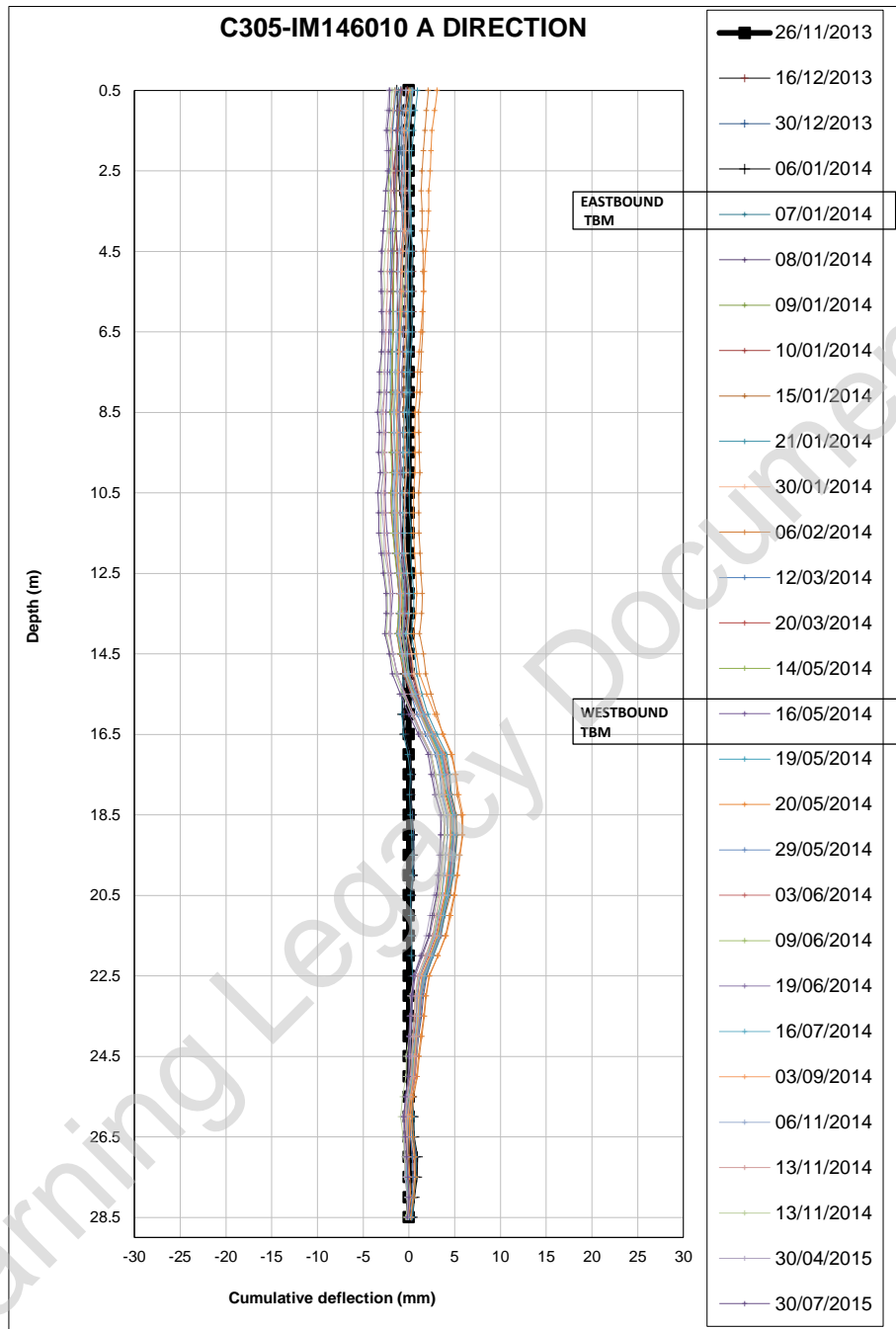
For the inclinometer C305-IM146010 different probes have been used. Related correction factors are presented in the table below:

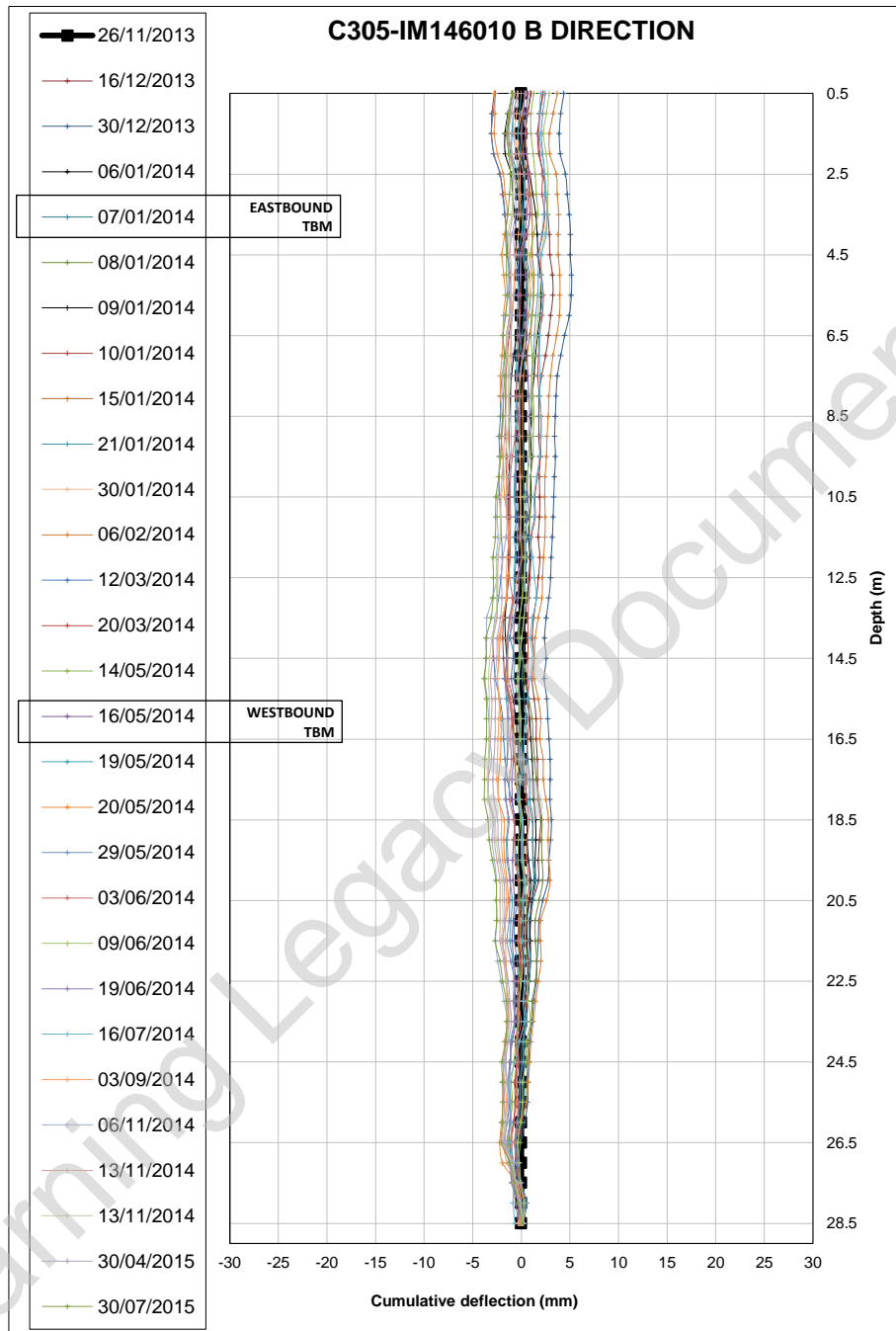
ID Sensor	C305-IM146010	
Serial number	DI1244/DI1217	DI1217/1144940
Date	16/12/2013	20/03/2014
A+	160	-168
A-	165	-176
B+	-140	171
B-	-123	150

An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

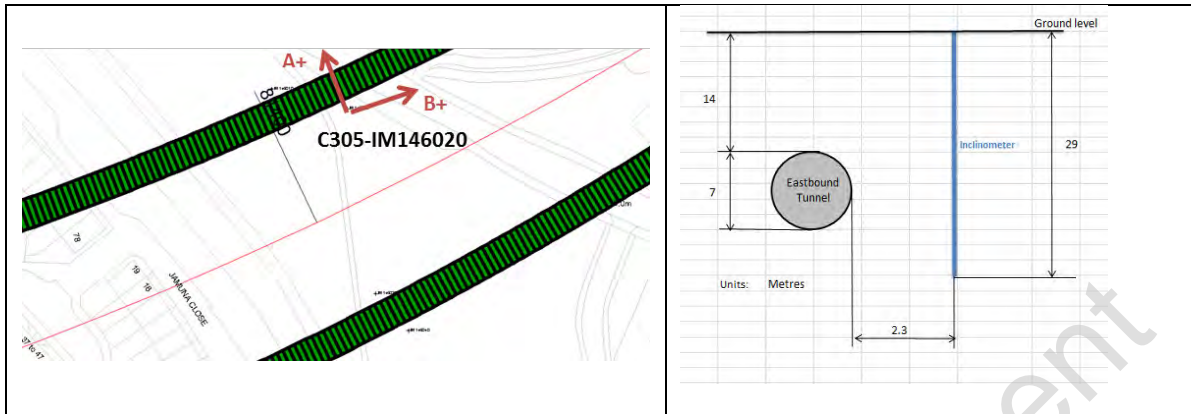
There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM146010.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”





C305-IM146020



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 1254 (Project chainage – 12141)	07/01/2014
Westbound Drive-Z	Ring 1279 (Project chainage – 12275)	16/05/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

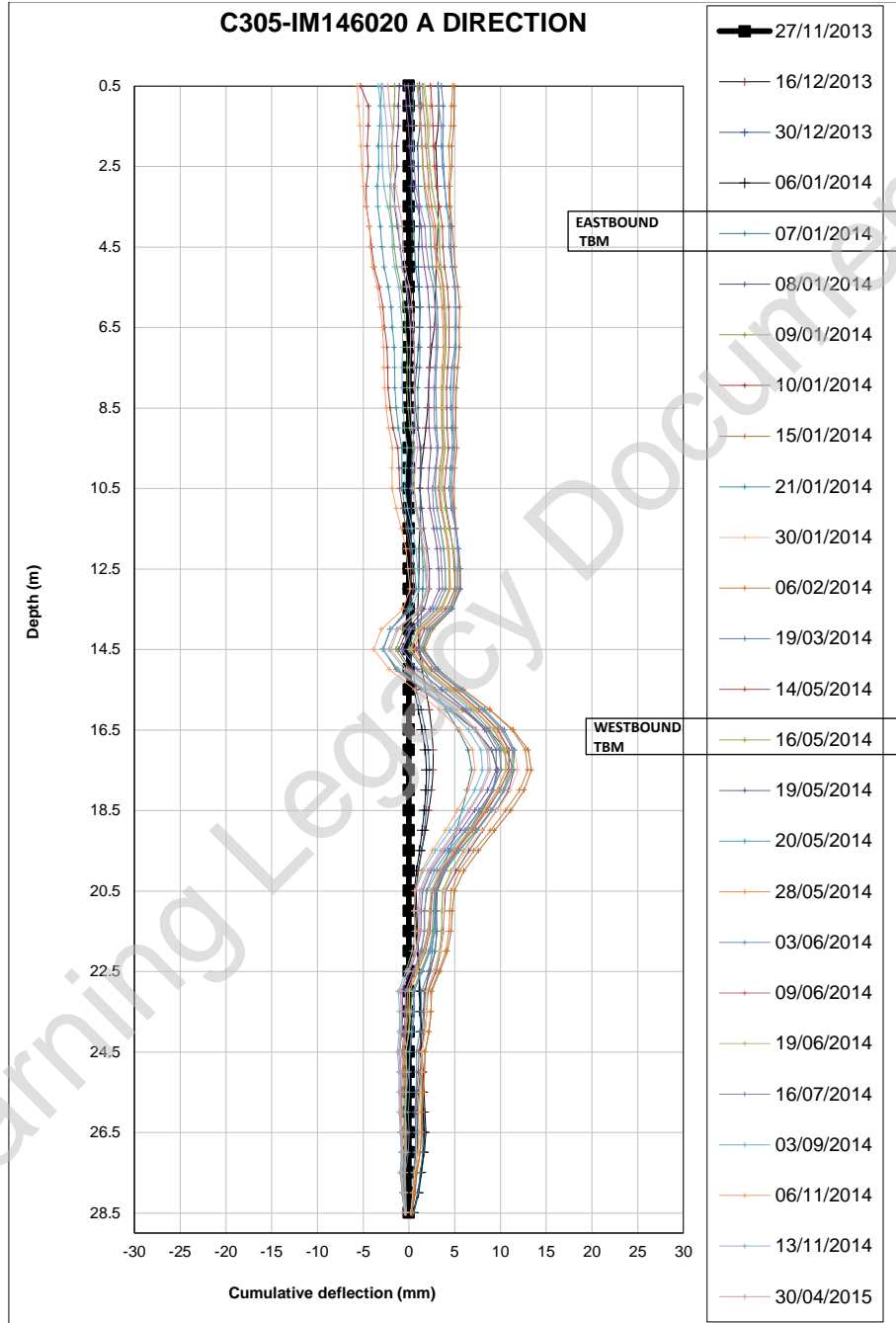
For the inclinometer C305-IM146020 different probes have been used. Related correction factors are presented in the table below:

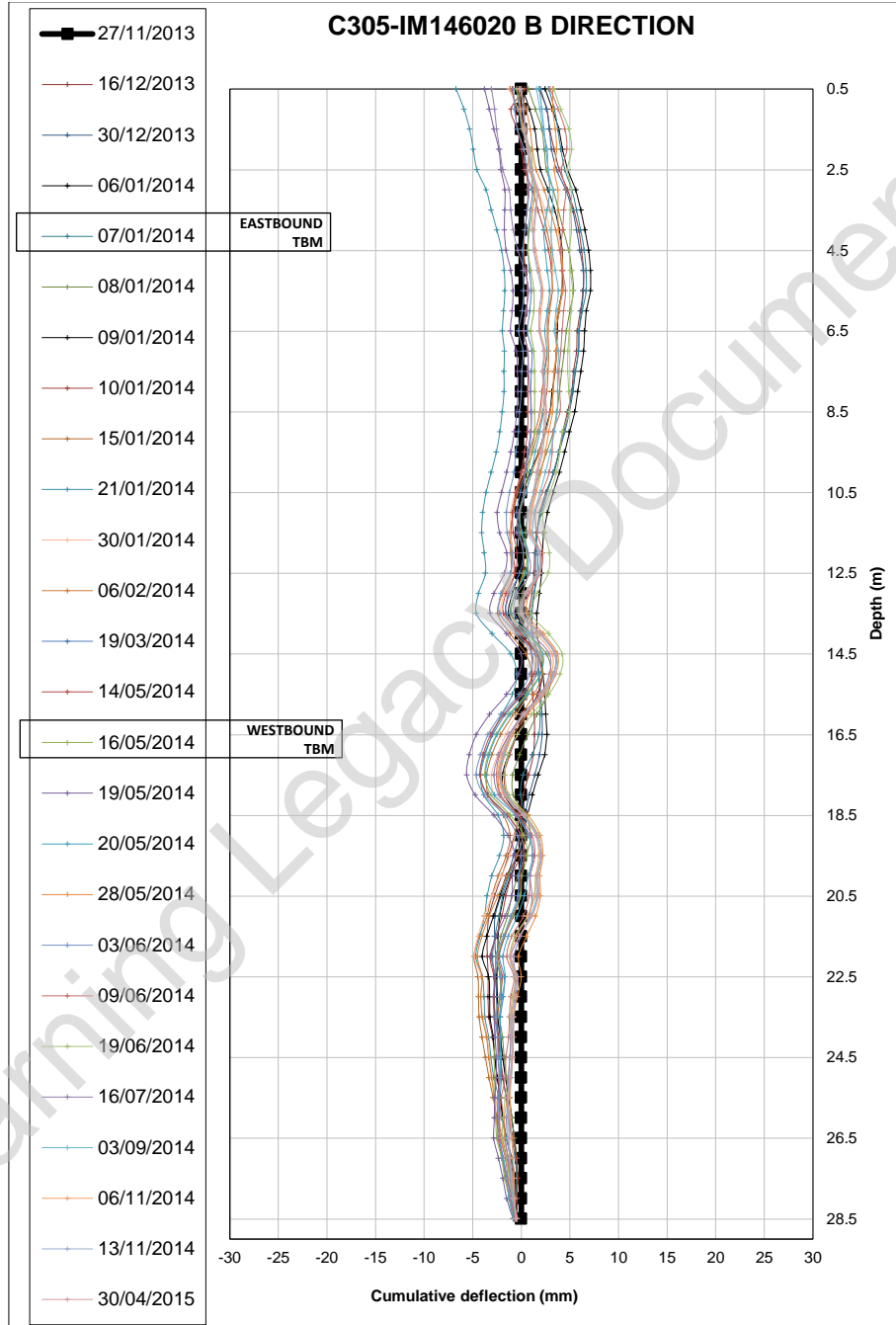
ID Sensor	C305-IM146020	
Serial number	DI1244/DI1217	DI1217/1144940
Date	16/12/2013	19/03/2014
A+	163	-158
A-	159	-175
B+	-137	158
B-	-122	156

An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

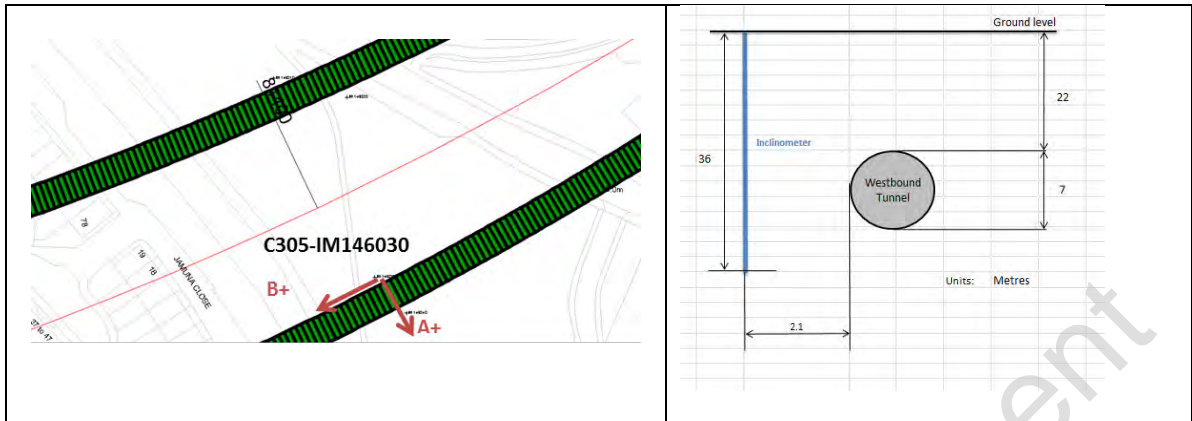
There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM146020.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”.





C305-IM146030



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 1262 (Project chainage – 12128)	07/01/2014
Westbound Drive-Z	Ring 1288 (Project chainage – 12261)	17/05/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

For the inclinometer C305-IM146030 different probes have been used. Related correction factors are presented in the table below:

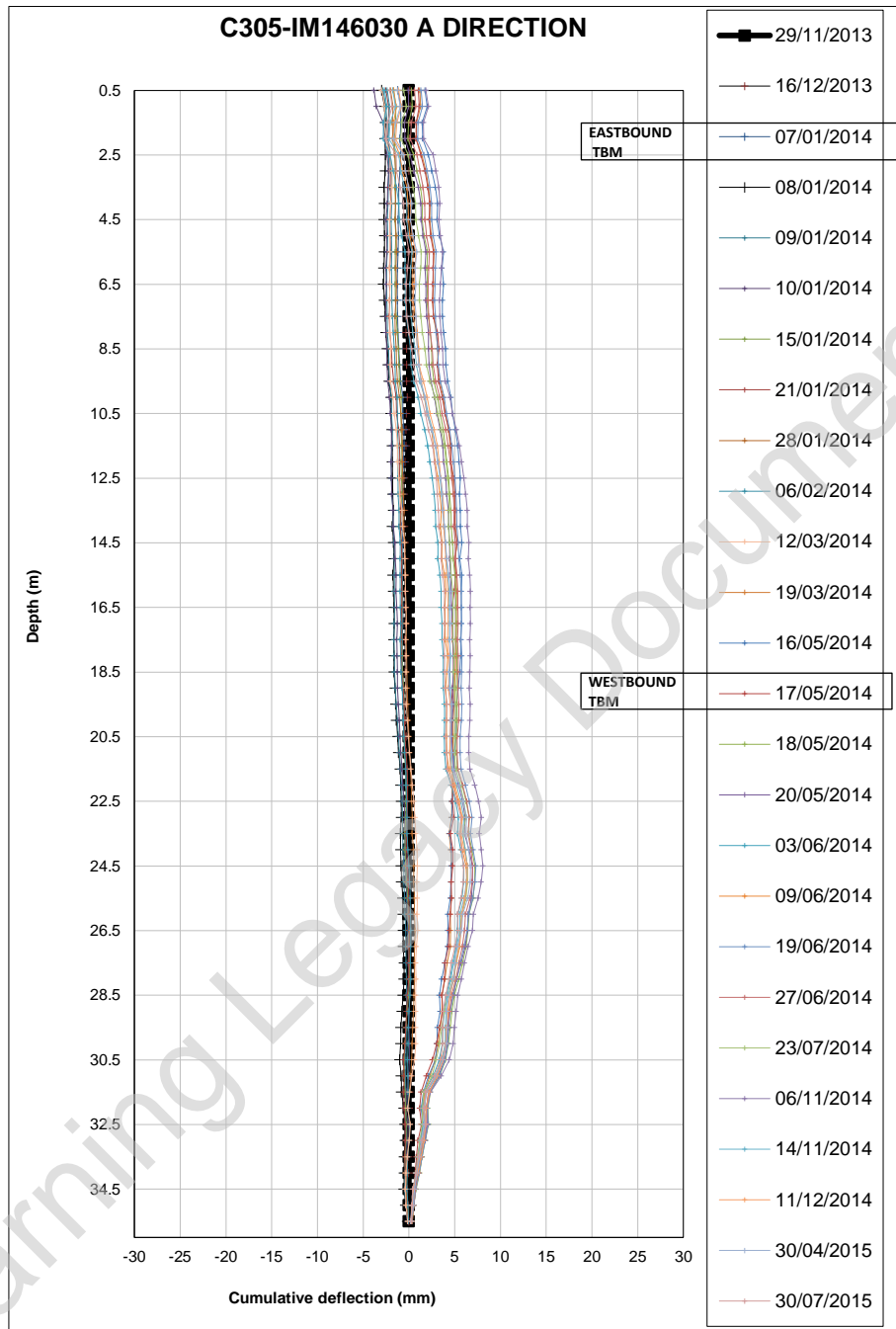
<b>ID Sensor</b>	C305-IM146030
<b>Serial number</b>	DI1217/1144940
<b>Date</b>	19/03/2014
A+	-174
A-	-172
B+	140
B-	151

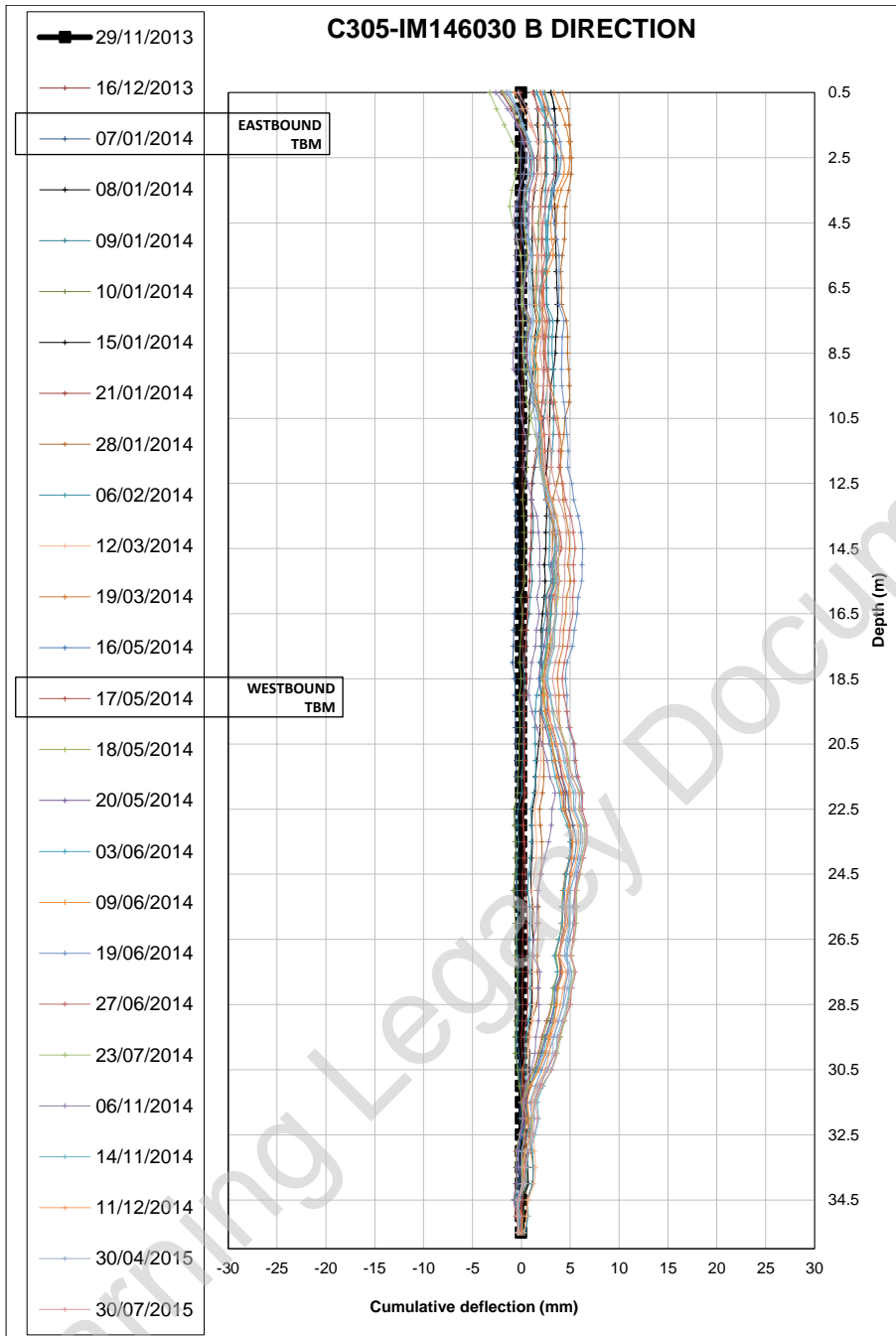
An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM146030.

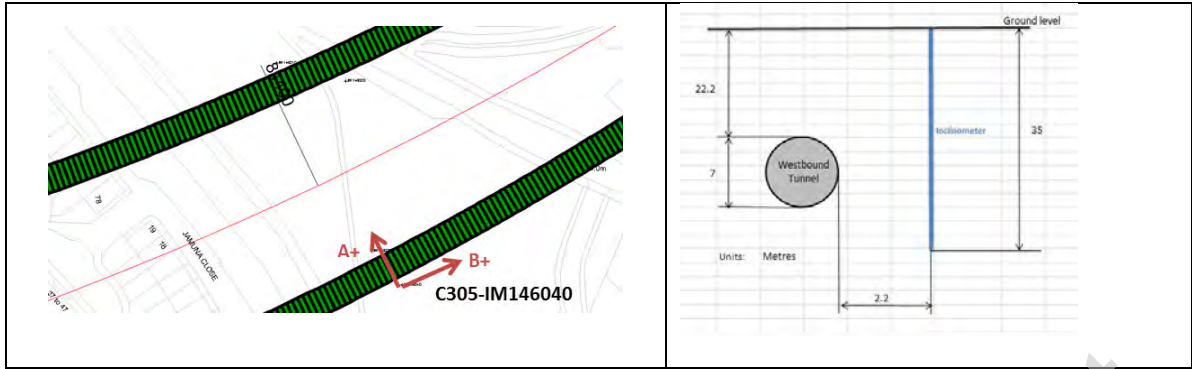
Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”.







C305-IM146040



The dates when the TBMs were immediately adjacent to the inclinometer are as follows:

Eastbound Drive-Z	Ring 1261 (Project chainage – 12130)	08/01/2014
Westbound Drive-Z	Ring 1286 (Project chainage – 12264)	16/05/2014

No correction has been applied to the AXIS probe readings for zero shifts. It plays no part in the deflection or profile calculation and has no effect on the accuracy of the probe. No corrections have been applied for systematic errors.

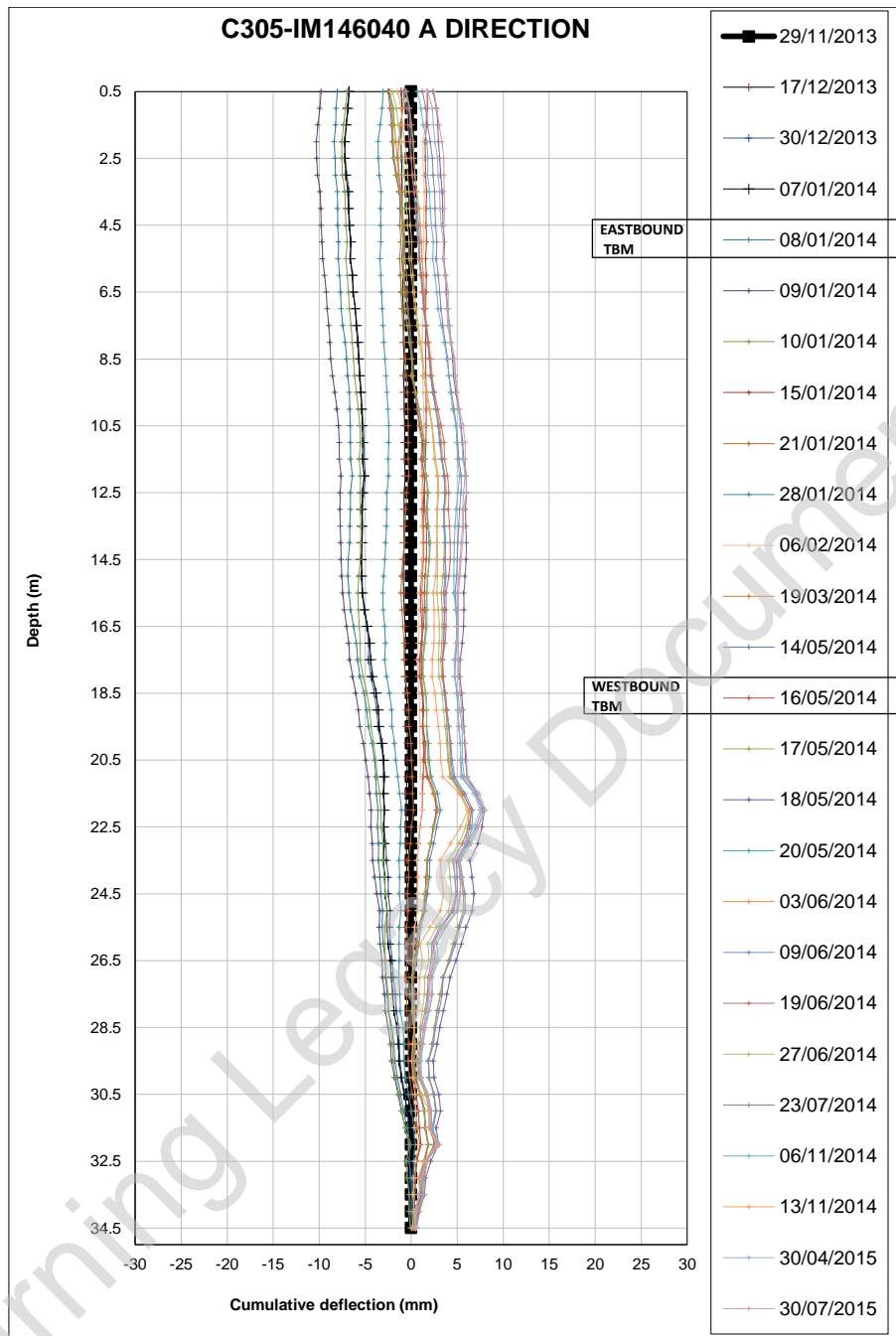
For the inclinometer C305-IM146040 different probes have been used. Related correction factors are presented in the table below:

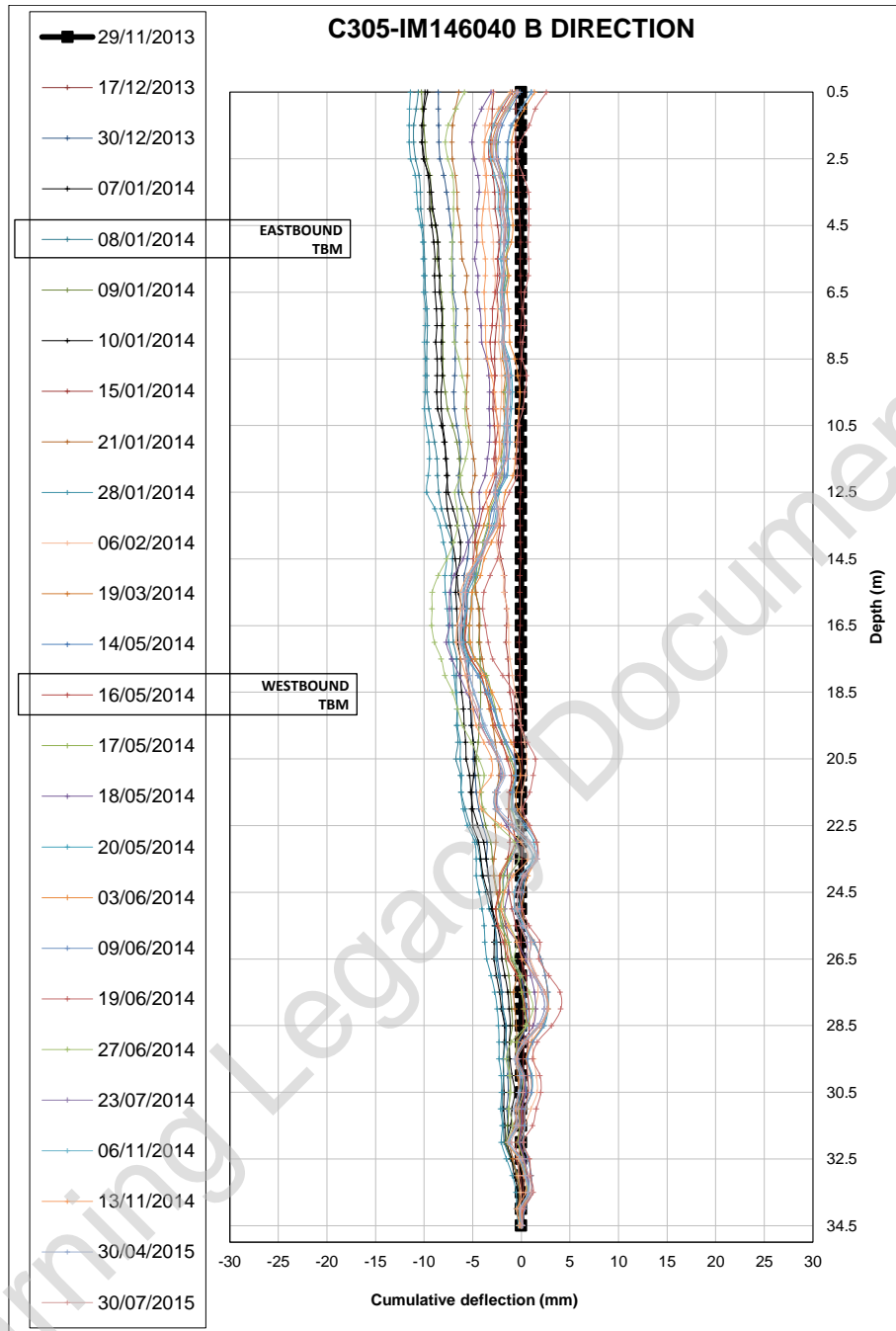
<b>ID Sensor</b>	C305-IM146040
<b>Serial number</b>	DI1217/1144940
<b>Date</b>	19/03/2014
A+	-164
A-	-183
B+	161
B-	156

An evaluation of the data “checksum” has been carried out in order to find errors or erroneous readings. The two values obtained in diametrically opposite AXISs and at the same depth have been added and checked that these values vary by about +/- 20 digits around the average value. This interval can be larger for the AXIS B due to the required wheel tolerance in the track. That procedure has been carried out during the course of the survey.

There was no significant effect due to the TBMs transit in the readings for the inclinometer C305-IM146040.

Note: In a meeting between the PM, the Contractor & the Designer, dated 17 March 2016, it was agreed that DSJV will provide a report on inclinometers (“*INCLINOMETERS C-305 CHECKSUM AND TWISTING SPIRAL VERIFICATION: C305-DSJ-C2-RGN-CRG03-50373*”), which will include all raw data on excel sheet with dates of different probes used etc.”





**SUB-AREA 6**

The instrumentation is located between Grand Union Canal (Regent’s Canal) and Whitehorse Road, as shown in the figure below, and comprises the following:

- 222 Levelling points
- 55 Sockets
- 12 Shallow datum
- 8 3D Prisms and Retro Targets
- 5 Piezometers





Note:

NICHE 3: DEWATERING/ CONSTRUCTION KEY DATES

Dewatering 23<sup>rd</sup> of June 2014 to 5<sup>th</sup> of February 2015

Niche construction: July 2014 to September 2014

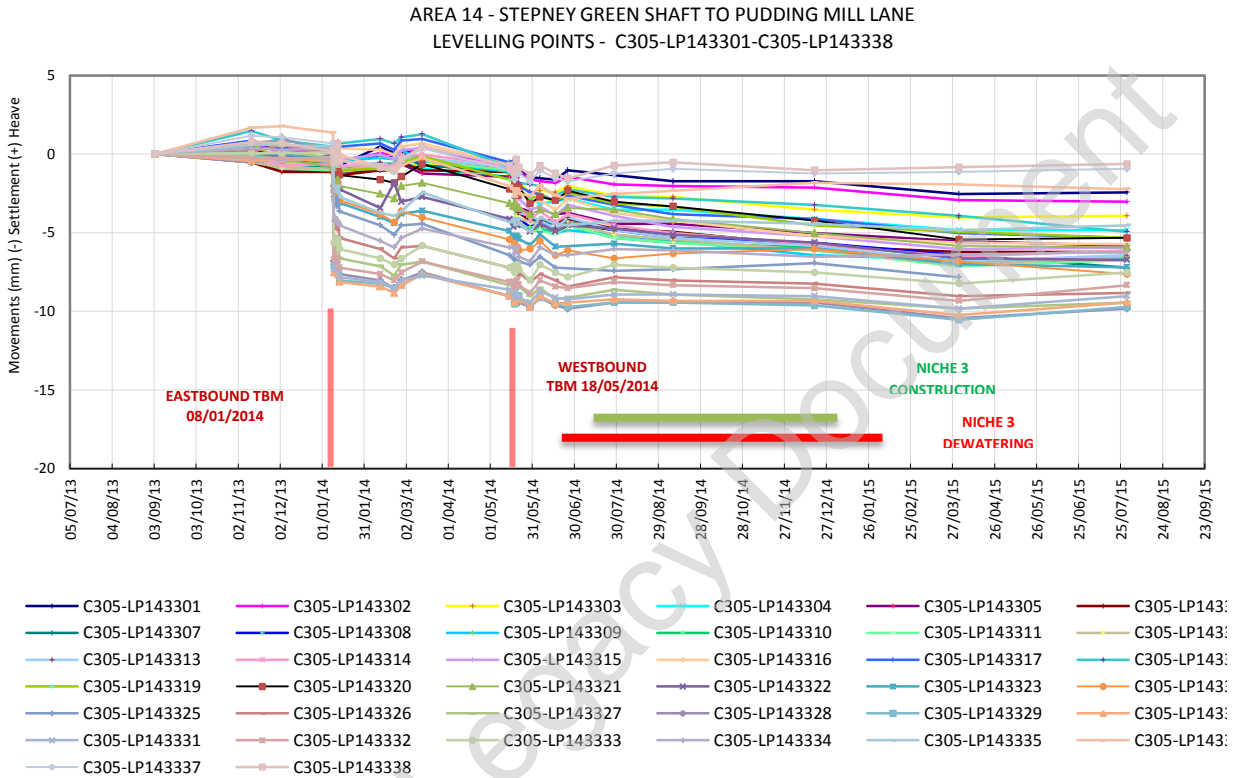
Sump construction: September 2014 to January 2015

GRAPHS KEY		
Niche 3 Dewatering	23 <sup>rd</sup> June 2014 to 5 <sup>th</sup> of February 2015	
Niche construction	July 2014 to January 2015	

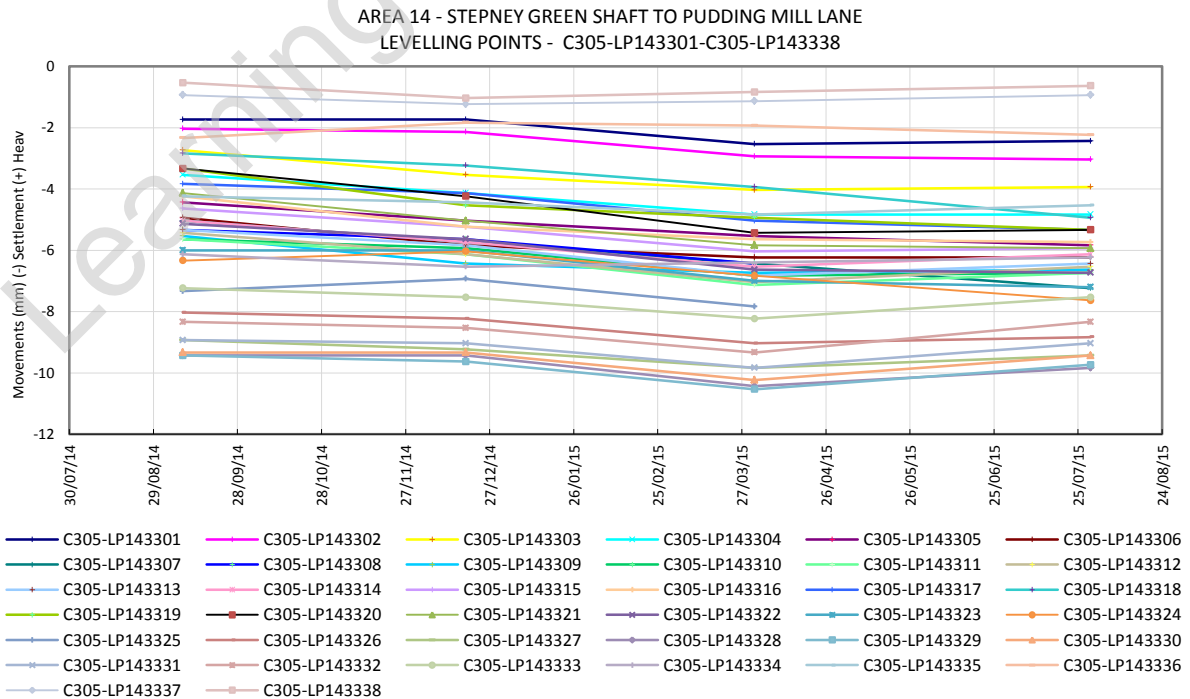
**LEVELLING POINTS**

**C305-LP143301 – C305-LP143338**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -7.3 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.4 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

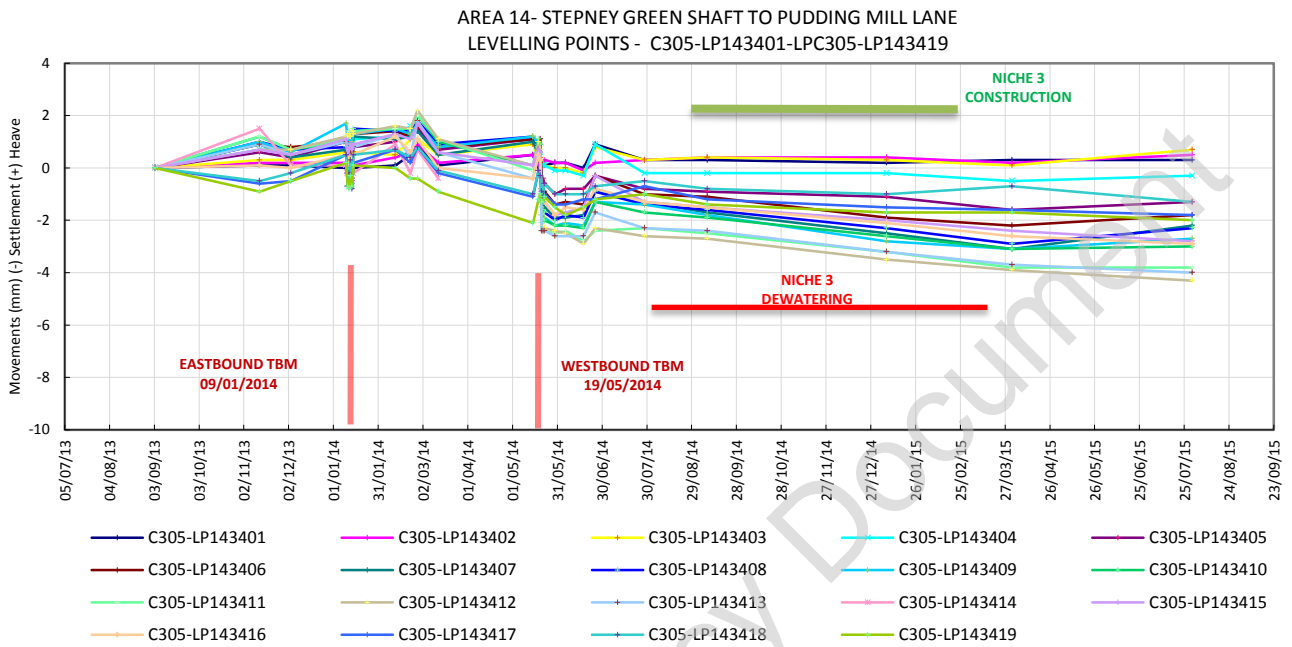
	Registered movement (mm)				mm/year
	08/09/2014	18/12/2014	31/03/2015	29/07/2015	
C305-LP143301	-1.73	-1.73	-2.53	-2.43	-0.972
C305-LP143302	-2.03	-2.13	-2.93	-3.03	-1.281
C305-LP143303	-2.73	-3.53	-4.03	-3.93	-1.361
C305-LP143304	-3.53	-4.13	-4.83	-4.83	-1.537
C305-LP143305	-4.43	-5.03	-5.53	-5.83	-1.584
C305-LP143306	-4.93	-5.83	-6.23	-6.23	-1.431
C305-LP143307	-5.03	-5.73	-6.43	-7.23	-2.478
C305-LP143308	-5.33	-5.63	-6.43	#N/A	-1.971
C305-LP143309	-5.53	-6.43	-6.73	-6.63	-1.191
C305-LP143310	-5.63	-5.93	-6.83	-6.73	-1.404
C305-LP143311	-5.63	-6.13	-7.13	-6.73	-1.422
C305-LP143312	-5.43	-6.13	-7.03	-6.53	-1.380
C305-LP143313	-5.33	-5.83	-6.83	-6.43	-1.422
C305-LP143314	-5.03	-5.73	-6.53	-6.13	-1.351
C305-LP143315	-4.63	-5.23	-6.03	-5.93	-1.567
C305-LP143316	-4.23	-5.23	-5.63	-5.73	-1.635
C305-LP143317	-3.83	-4.13	-5.03	-5.33	-1.825
C305-LP143318	-2.83	-3.23	-3.93	-4.93	-2.391
C305-LP143319	-3.33	-4.53	-4.93	-5.33	-2.149
C305-LP143320	-3.33	-4.23	-5.43	-5.33	-2.403
C305-LP143321	-4.13	-5.03	-5.83	-5.93	-2.075
C305-LP143322	-5.13	-5.63	-6.63	-6.73	-1.947
C305-LP143323	-6.00	-6.00	-7.00	-7.20	-1.557
C305-LP143324	-6.33	-6.03	-6.83	-7.63	-1.621
C305-LP143325	-7.33	-6.93	-7.83	#N/A	-0.902
C305-LP143326	-8.03	-8.23	-9.03	-8.83	-1.065
C305-LP143327	-8.93	-9.23	-9.83	-9.43	-0.685
C305-LP143328	-9.43	-9.43	-10.43	-9.83	-0.715
C305-LP143329	-9.43	-9.63	-10.53	-9.73	-0.569
C305-LP143330	-9.33	-9.33	-10.23	-9.43	-0.371
C305-LP143331	-8.93	-9.03	-9.83	-9.03	-0.335
C305-LP143332	-8.33	-8.53	-9.33	-8.33	-0.224
C305-LP143333	-7.23	-7.53	-8.23	-7.53	-0.504
C305-LP143334	-6.13	-6.53	#N/A	-6.23	-0.013
C305-LP143335	-4.23	-4.43	-4.83	-4.53	-0.421
C305-LP143336	-2.33	-1.83	-1.93	-2.23	0.046
C305-LP143337	-0.93	-1.23	-1.13	-0.93	0.047
C305-LP143338	-0.53	-1.03	-0.83	-0.63	-0.016
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

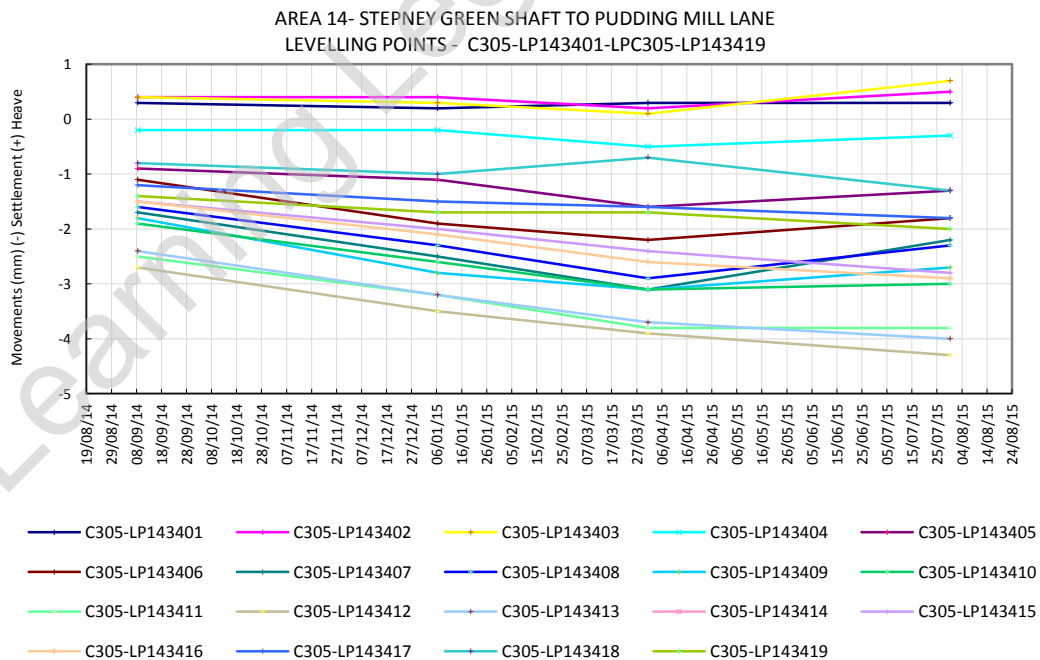


**C305-LP143401 – C305-LP143419**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -2 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -4 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



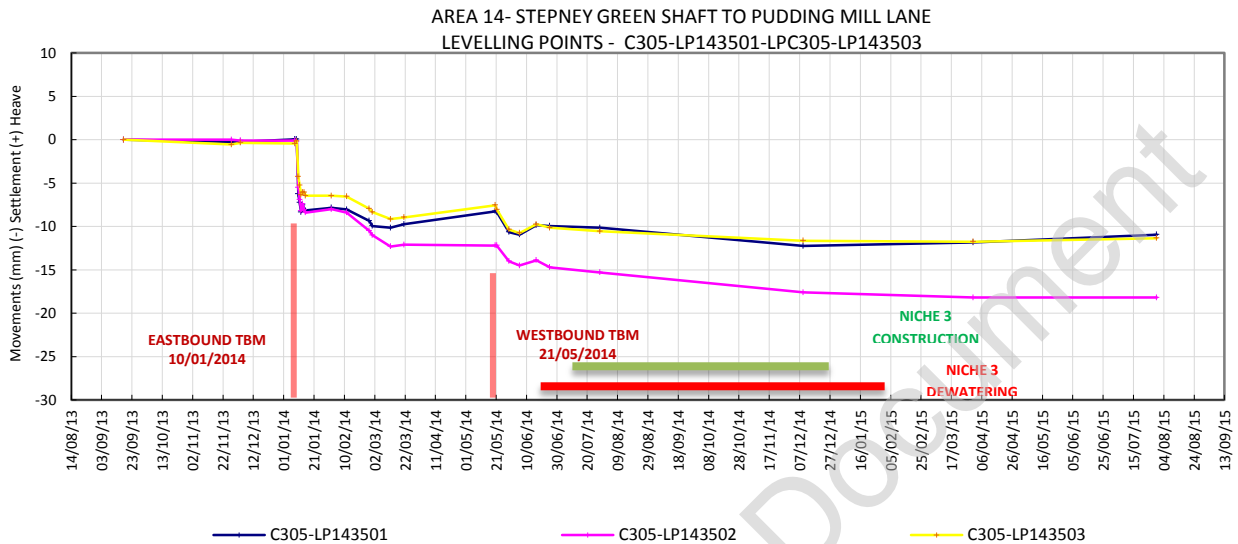
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	08/09/2014	06/01/2015	31/03/2015	30/07/2015	
C305-LP143401	0.30	0.20	0.30	0.30	0.027
C305-LP143402	0.40	0.40	0.20	0.50	0.051
C305-LP143403	0.40	0.30	0.10	0.70	0.262
C305-LP143404	-0.20	-0.20	-0.50	-0.30	-0.187
C305-LP143405	-0.90	-1.10	-1.60	-1.30	-0.557
C305-LP143406	-1.10	-1.90	-2.20	-1.80	-0.817
C305-LP143407	-1.70	-2.50	-3.10	-2.20	-0.688
C305-LP143408	-1.60	-2.30	-2.90	-2.30	-0.899
C305-LP143409	-1.80	-2.80	-3.10	-2.70	-1.028
C305-LP143410	-1.90	-2.60	-3.10	-3.00	-1.294
C305-LP143411	-2.50	-3.20	-3.80	-3.80	-1.532
C305-LP143412	-2.70	-3.50	-3.90	-4.30	-1.794
C305-LP143413	-2.40	-3.20	-3.70	-4.00	-1.821
C305-LP143414	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP143415	-1.50	-2.00	-2.40	-2.80	-1.478
C305-LP143416	-1.50	-2.10	-2.60	-2.90	-1.610
C305-LP143417	-1.20	-1.50	-1.60	-1.80	-0.659
C305-LP143418	-0.80	-1.00	-0.70	-1.30	-0.445
C305-LP143419	-1.40	-1.70	-1.70	-2.00	-0.632
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

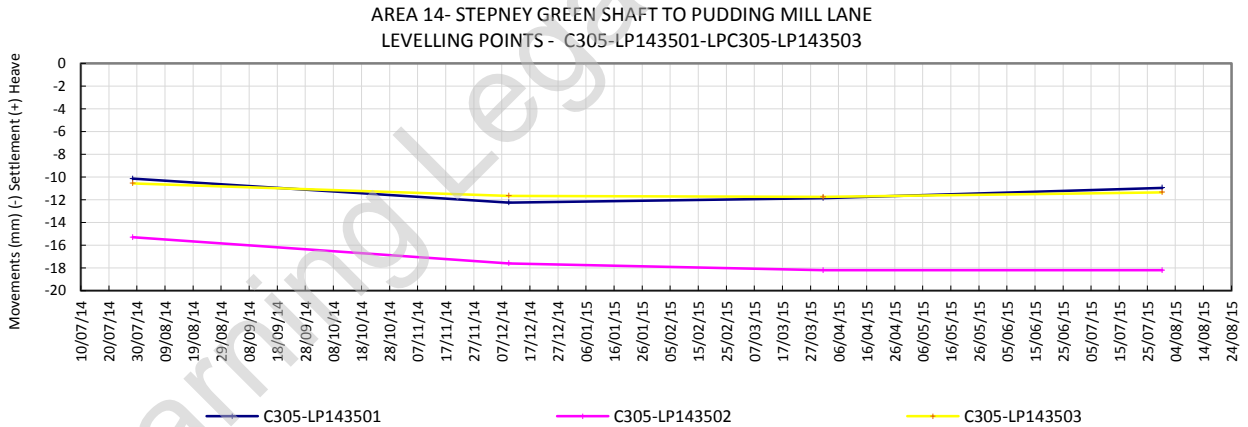
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP143501 – C305-LP143503**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -12.3 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -18 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



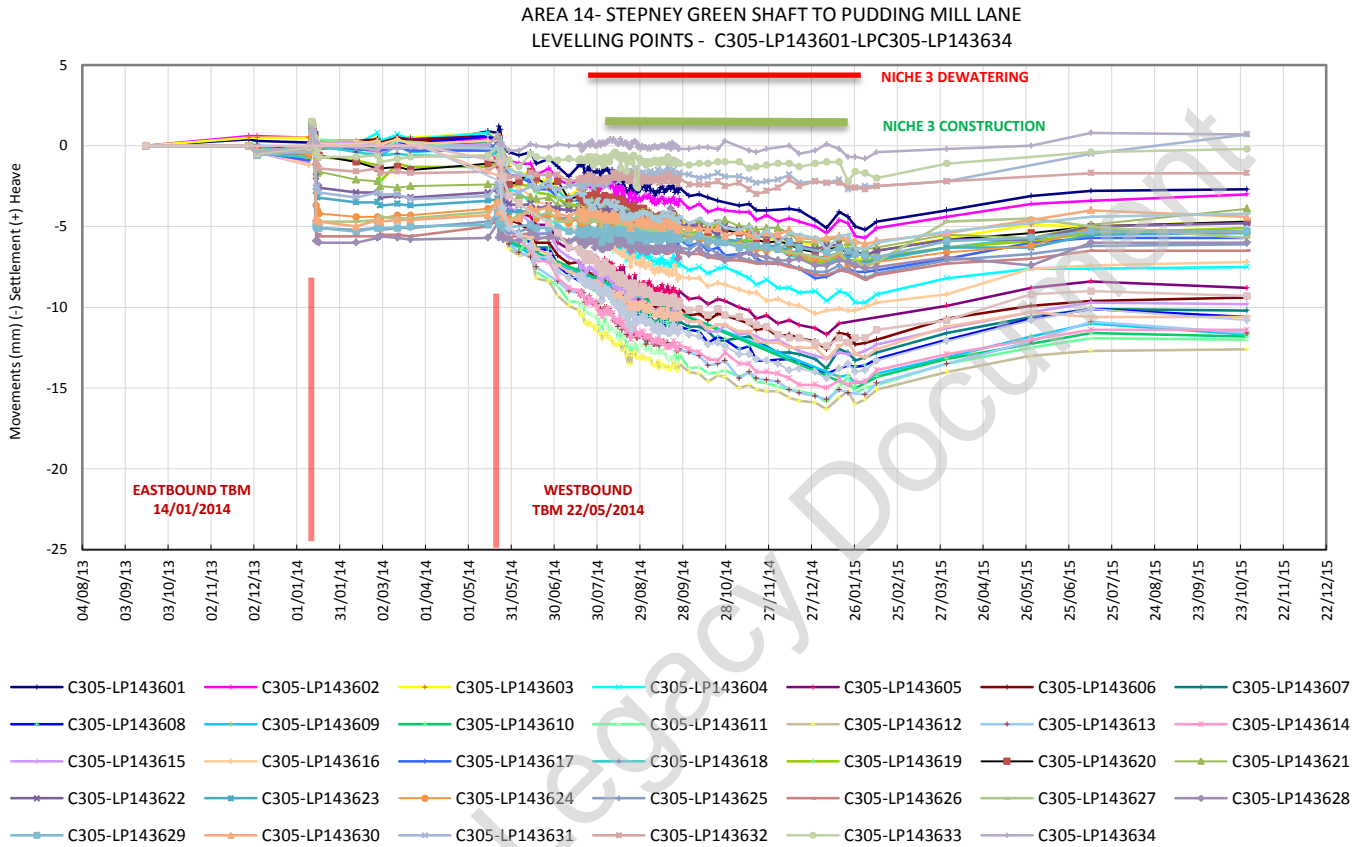
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	28/07/2014	09/12/2014	31/03/2015	30/07/2015	
C305-LP143501	-10.15	-12.25	-11.85	-10.95	-0.665
C305-LP143502	-15.30	-17.60	-18.20	-18.20	-2.842
C305-LP143503	-10.55	-11.65	-11.75	-11.35	-0.780
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	67%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

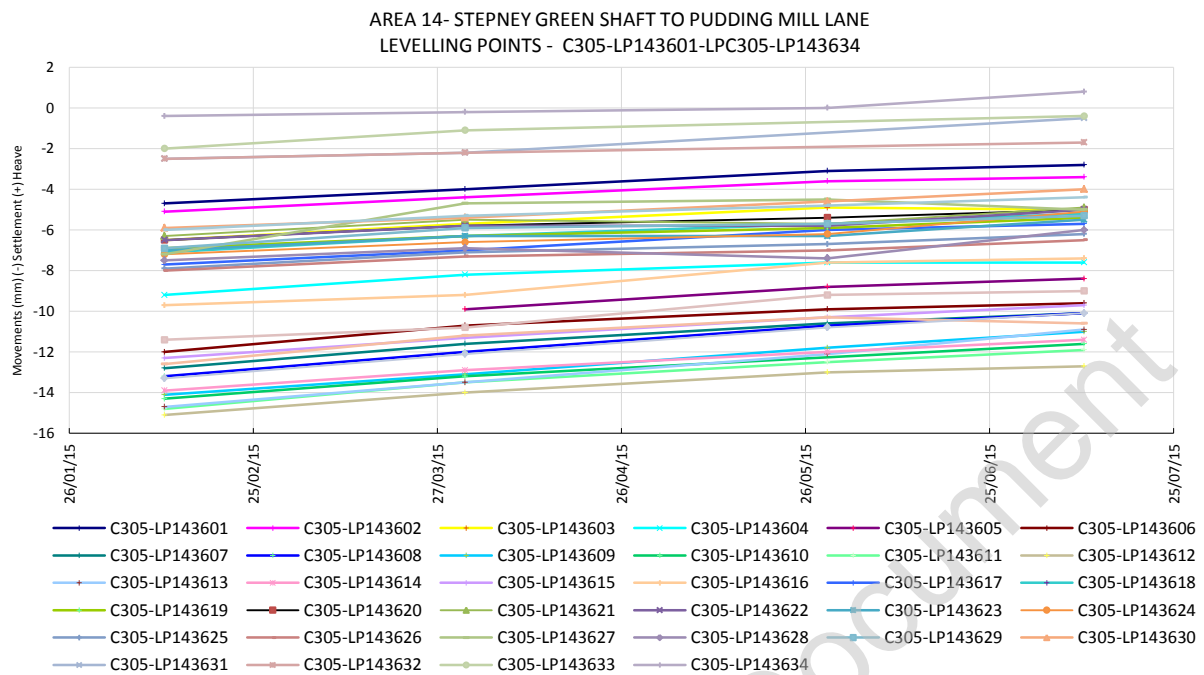
The percentage of the levelling points with a settlement rate less than 3 mm/year is 100%.

**C305-LP143601 – C305-LP143634**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -5.3 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -12.7 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

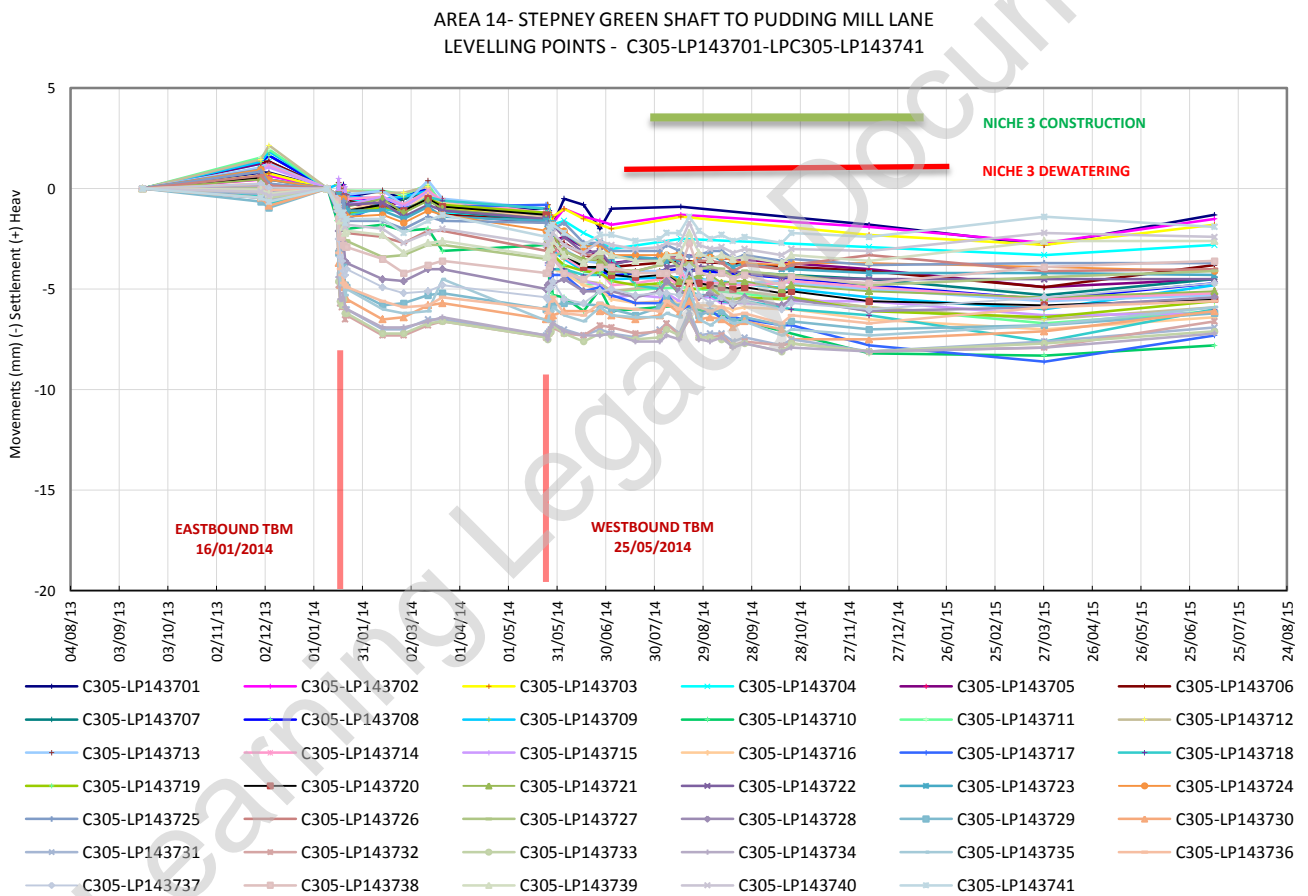
	Registered movement (mm)				mm/year
	31/03/2015	29/05/2015	10/07/2015	27/10/2015	
C305-LP143601	-4.00	-3.10	-2.80	-2.70	2.056
C305-LP143602	-4.40	-3.60	-3.40	-3.00	2.264
C305-LP143603	-5.70	-4.90	-5.00	-4.70	1.497
C305-LP143604	-8.20	-7.60	-7.60	-7.50	1.041
C305-LP143605	-9.90	-8.80	-8.40	-8.80	1.627
C305-LP143606	-10.70	-9.90	-9.60	-9.40	2.095
C305-LP143607	-11.60	-10.60	-10.10	-10.20	2.225
C305-LP143608	-12.00	-10.70	-10.10	-10.60	2.122
C305-LP143609	-13.10	-11.80	-11.00	-11.70	2.148
C305-LP143610	-13.20	#N/A	-11.60	-11.80	2.390
C305-LP143611	-13.50	-12.50	-11.90	-12.00	2.420
C305-LP143612	-14.00	-13.00	-12.70	-12.60	2.199
C305-LP143613	-13.50	-12.10	-10.90	-11.60	3.071
C305-LP143614	-12.90	-12.00	-11.40	-11.40	2.459
C305-LP143615	-11.30	-10.30	-9.70	-9.80	2.420
C305-LP143616	-9.20	-7.60	-7.40	-7.20	3.046
C305-LP143617	-7.00	-6.00	-5.70	-5.70	2.017
C305-LP143618	-6.30	-5.70	-5.20	-5.30	1.652
C305-LP143619	-6.30	-5.90	-5.40	-5.10	2.094
C305-LP143620	-5.80	-5.40	-5.00	-4.70	1.899
C305-LP143621	-5.50	-5.70	-4.90	-3.90	3.095
C305-LP143622	-5.80	-5.80	-5.00	-4.80	1.925
C305-LP143623	-6.30	-6.30	-5.50	-5.40	1.743
C305-LP143624	-6.60	-6.20	-5.10	-5.40	2.172
C305-LP143625	-7.10	-6.70	-6.20	-6.10	1.730
C305-LP143626	-7.30	-7.00	-6.50	-6.50	1.405
C305-LP143627	-4.70	-4.50	-5.00	-5.70	-1.964
C305-LP143628	-6.90	-7.40	-6.00	-6.00	2.015
C305-LP143629	-5.90	-5.70	-5.30	-5.30	1.067
C305-LP143630	-5.40	-4.60	-4.00	-4.40	1.588
C305-LP143631	-2.20	#N/A	-0.50	0.70	5.025
C305-LP143632	-2.20	#N/A	-1.70	-1.70	0.857
C305-LP143633	-1.10	#N/A	-0.40	-0.20	1.551

	Registered movement (mm)				mm/year
	31/03/2015	29/05/2015	10/07/2015	27/10/2015	
C305-LP143634	-0.20	0.00	0.80	0.70	1.665
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

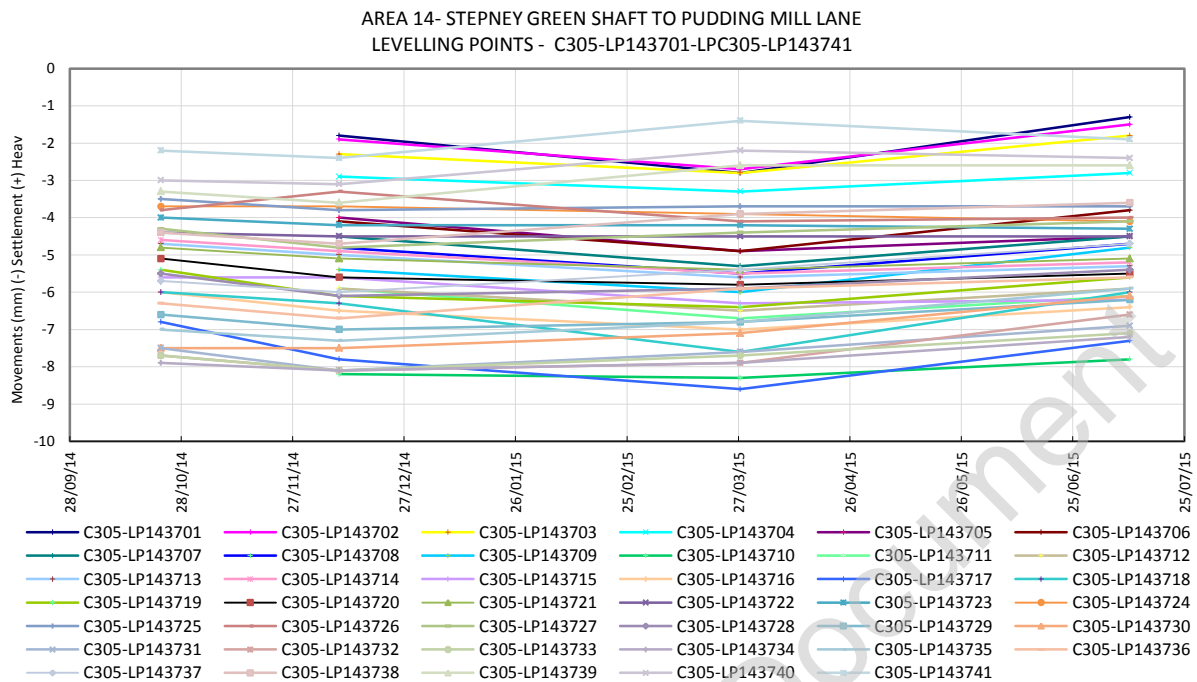
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

**C305-LP143701 – C305-LP143741**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -6.9 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.6 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

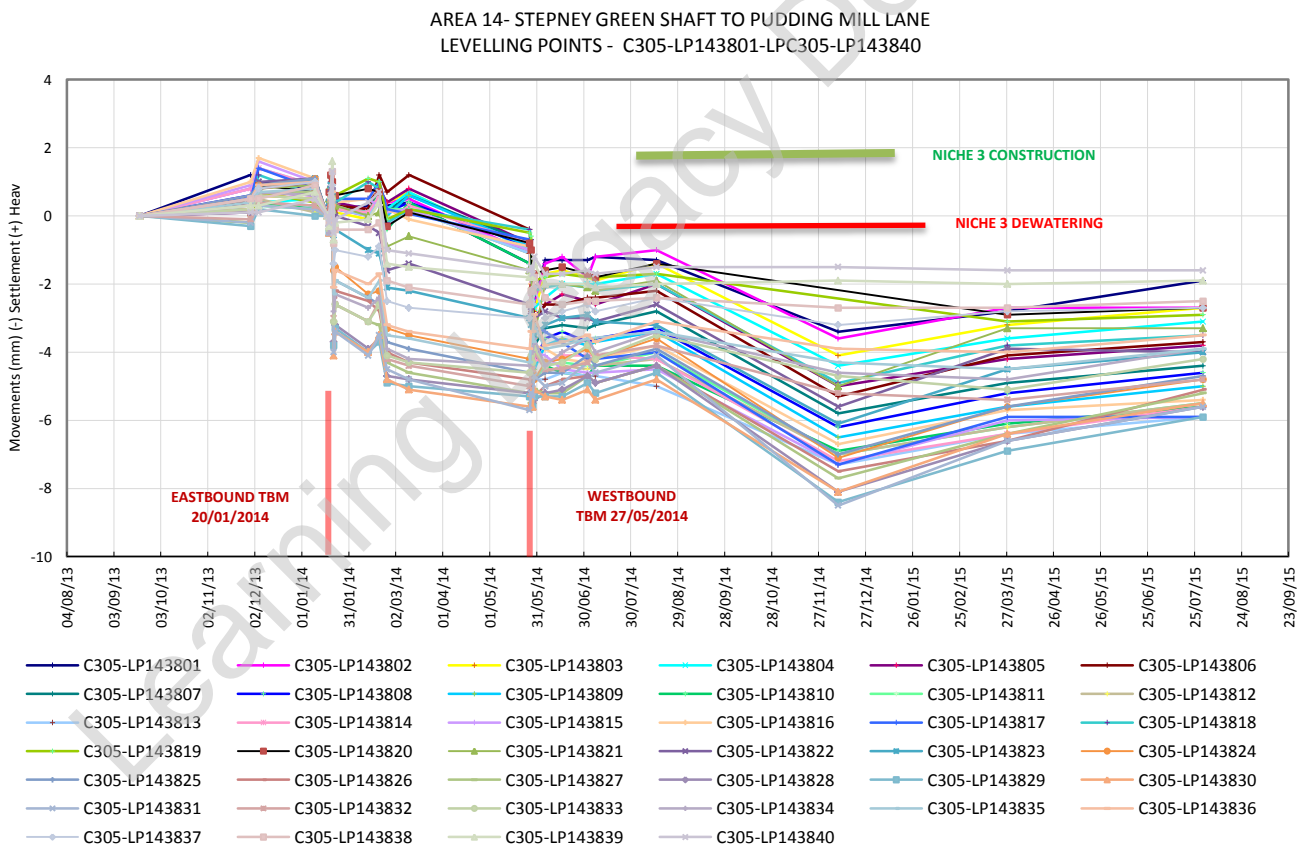
	Registered movement (mm)				mm/year
	22/10/2014	09/12/2014	27/03/2015	10/07/2015	
C305-LP143701	#N/A	-1.80	-2.80	-1.30	0.836
C305-LP143702	#N/A	-1.90	-2.70	-1.50	0.669
C305-LP143703	#N/A	-2.30	-2.80	-1.80	0.845
C305-LP143704	#N/A	-2.90	-3.30	-2.80	0.164
C305-LP143705	#N/A	-4.00	-4.90	-4.50	-0.868
C305-LP143706	#N/A	-4.10	-4.90	-3.80	0.498
C305-LP143707	#N/A	-4.50	-5.30	-4.50	-0.013
C305-LP143708	#N/A	-4.80	-5.50	-4.70	0.159
C305-LP143709	#N/A	-5.40	-6.00	-4.80	1.014
C305-LP143710	#N/A	-8.20	-8.30	-7.80	0.681
C305-LP143711	#N/A	-5.90	-6.70	-6.10	-0.355
C305-LP143712	#N/A	-5.90	-6.50	-5.90	-0.010
C305-LP143713	-4.70	-5.00	-5.60	-5.30	-0.917
C305-LP143714	-4.60	-4.90	-5.50	-5.20	-0.917
C305-LP143715	-5.60	-5.60	-6.30	-6.20	-1.029
C305-LP143716	-6.00	-6.50	-7.00	-6.40	-0.570
C305-LP143717	-6.80	-7.80	-8.60	-7.30	-0.680
C305-LP143718	-6.00	-6.30	-7.60	-6.00	-0.388
C305-LP143719	-5.40	-6.10	-6.40	-5.60	-0.188
C305-LP143720	-5.10	-5.60	-5.80	-5.50	-0.463
C305-LP143721	-4.80	-5.10	-5.40	-5.10	-0.420
C305-LP143722	-4.40	-4.50	-4.50	-4.50	-0.104
C305-LP143723	-4.00	-4.20	-4.20	-4.30	-0.338
C305-LP143724	-3.70	-3.70	-3.90	-4.10	-0.591
C305-LP143725	-3.50	-3.80	-3.70	-3.70	-0.147
C305-LP143726	-3.80	-3.30	-4.10	-4.00	-0.673
C305-LP143727	-4.30	-4.80	-4.40	-4.10	0.530
C305-LP143728	-5.50	-6.10	-5.90	-5.40	0.354
C305-LP143729	-6.60	-7.00	-6.80	-6.20	0.693
C305-LP143730	-7.50	-7.50	-7.10	-6.10	1.960
C305-LP143731	-7.50	-8.10	-7.60	-6.90	1.111
C305-LP143732	-7.70	-8.10	-7.90	-6.60	1.602
C305-LP143733	-7.70	-8.10	-7.70	-7.10	1.024
C305-LP143734	-7.90	-8.10	-7.90	-7.20	1.031
C305-LP143735	-7.00	-7.30	-6.80	-5.90	1.683

	Registered movement (mm)				mm/year
	22/10/2014	09/12/2014	27/03/2015	10/07/2015	
C305-LP143736	-6.30	-6.70	-5.90	-5.60	1.297
C305-LP143737	-5.70	-6.00	-5.40	-4.70	1.589
C305-LP143738	-4.40	-4.70	-3.90	-3.60	1.401
C305-LP143739	-3.30	-3.60	-2.60	-2.60	1.342
C305-LP143740	-3.00	-3.10	-2.20	-2.40	1.126
C305-LP143741	-2.20	-2.40	-1.40	-1.90	0.798
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

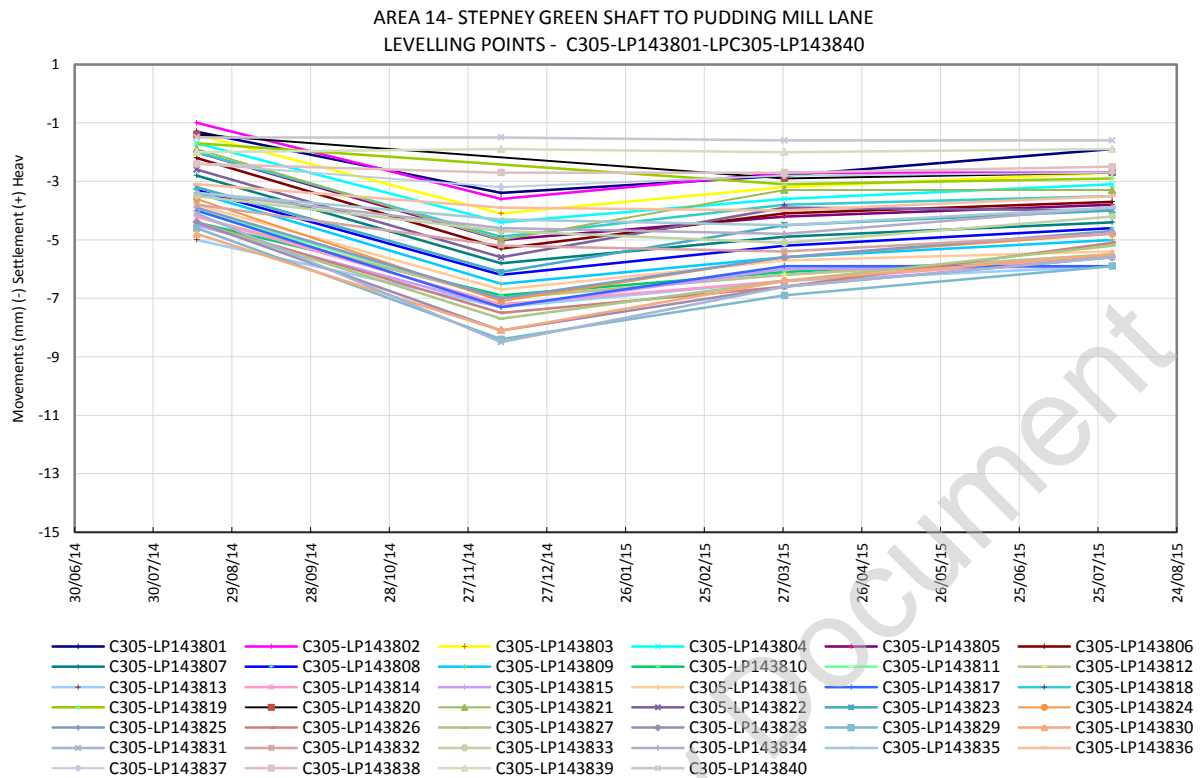
**C305-LP143801 – C305-LP143840**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -4.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.5 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.





The table below lists the annual settlement rate for the levelling points in this array.

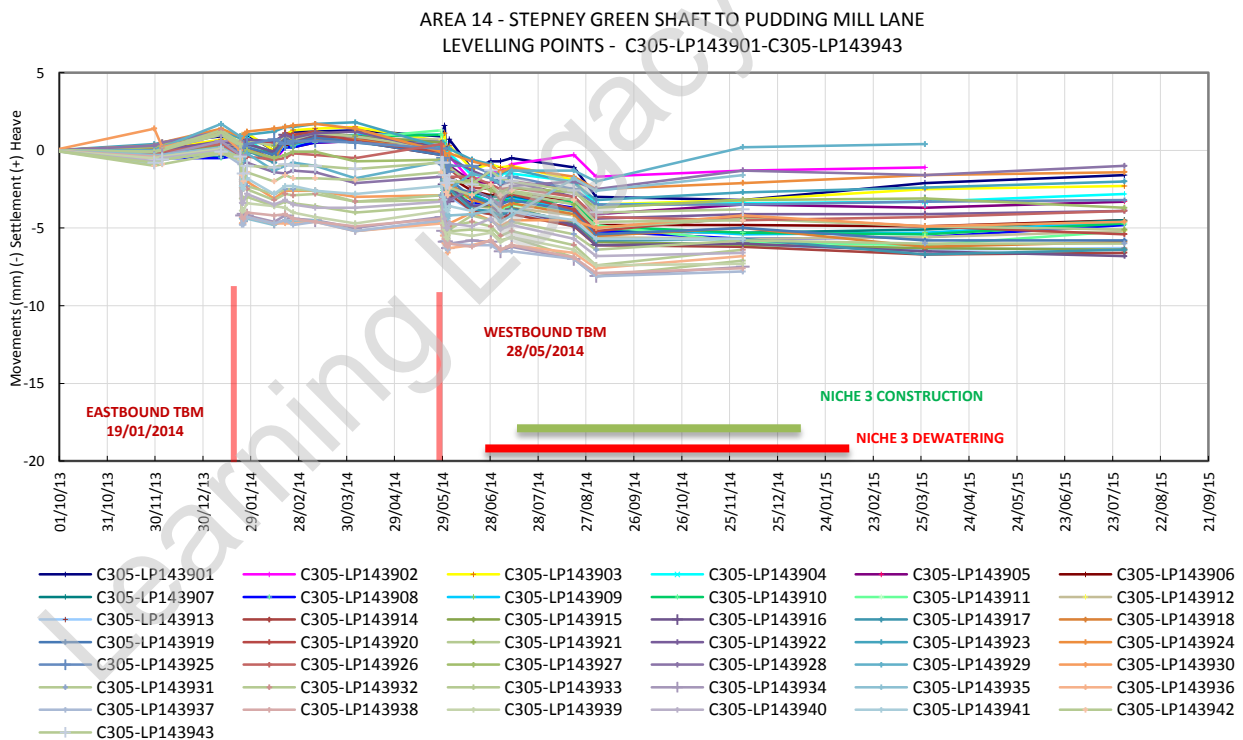
	Registered movement (mm)				mm/year
	15/08/2014	09/12/2014	27/03/2015	30/07/2015	
C305-LP143801	-1.30	-3.40	-2.80	-1.90	-0.359
C305-LP143802	-1.00	-3.60	-2.70	-2.70	-1.325
C305-LP143803	-1.40	-4.10	-3.20	-2.70	-0.936
C305-LP143804	-1.70	-4.40	-3.60	-3.10	-1.061
C305-LP143805	-2.00	-5.00	-4.20	-3.80	-1.440
C305-LP143806	-2.20	-5.30	-4.10	-3.70	-1.034
C305-LP143807	-2.80	-5.80	-4.90	-4.40	-1.218
C305-LP143808	-3.30	-6.20	-5.20	-4.60	-0.902
C305-LP143809	-3.40	-6.50	-5.60	-5.00	-1.216
C305-LP143810	-4.40	-6.90	-6.10	-5.60	-0.872
C305-LP143811	-4.00	-7.00	-6.20	-5.50	-1.150
C305-LP143812	-4.20	-7.00	-6.20	-5.50	-0.962
C305-LP143813	-5.00	-7.30	-6.40	-5.90	-0.559
C305-LP143814	-4.20	-7.20	-6.40	-5.60	-1.053
C305-LP143815	-4.50	-7.30	-6.00	-5.90	-0.917
C305-LP143816	-3.80	-6.70	-5.70	-5.40	-1.192
C305-LP143817	-4.00	-7.30	-5.90	-5.90	-1.359
C305-LP143818	-2.00	-4.90	-3.80	-3.50	-1.067
C305-LP143819	-1.70	#N/A	-3.10	-2.90	-1.377
C305-LP143820	-1.40	#N/A	-2.90	-2.70	-1.488
C305-LP143821	-1.90	-5.00	-3.30	-3.30	-0.796
C305-LP143822	-2.60	-5.60	-3.90	-4.00	-0.798
C305-LP143823	-3.20	-6.10	-4.50	-4.00	-0.249
C305-LP143824	-3.60	-7.10	-5.60	-4.80	-0.650
C305-LP143825	-3.90	-7.00	-5.60	-4.70	-0.301
C305-LP143826	-4.40	-7.50	-6.60	-5.10	-0.346
C305-LP143827	-4.40	-7.70	-6.40	-5.20	-0.324
C305-LP143828	-4.40	-8.10	-6.60	-5.60	-0.645
C305-LP143829	-4.60	-8.40	-6.90	-5.90	-0.739

	Registered movement (mm)				mm/year
	15/08/2014	09/12/2014	27/03/2015	30/07/2015	
C305-LP143830	-4.80	-8.10	-6.40	-5.50	-0.115
C305-LP143831	-4.10	-8.50	-6.60	-5.60	-0.804
C305-LP143832	-3.80	-5.20	-5.40	-4.80	-0.989
C305-LP143833	-3.50	-4.70	-5.10	-4.20	-0.761
C305-LP143834	-3.40	-4.60	-4.80	-3.90	-0.511
C305-LP143835	-3.40	-4.30	-4.50	-3.90	-0.518
C305-LP143836	-3.10	-3.90	-4.00	-3.50	-0.395
C305-LP143837	-2.40	-3.20	-2.80	-2.70	-0.157
C305-LP143838	-2.40	-2.70	-2.70	-2.50	-0.089
C305-LP143839	-2.00	-1.90	-2.00	-1.90	0.066
C305-LP143840	-1.50	-1.50	-1.60	-1.60	-0.125
Rate less than -2.5 mm/year				<b>% less 2 mm/ year</b>	100%
Rate greater than -3.5 mm/year				<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

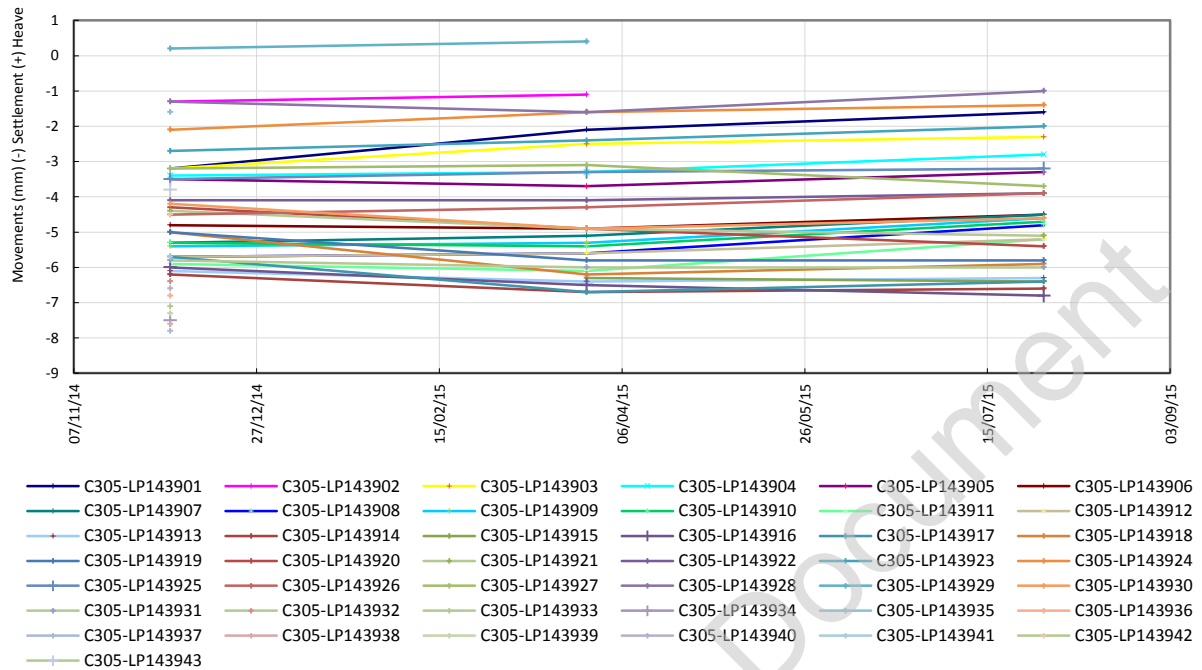
### C305-LP143901 – C305-LP143943

The graph presented below shows the levelling point readings from this array. A maximum settlement of -4.7 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -7.9 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP143901-C305-LP143943



The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)			mm/year
	03/12/2014	27/03/2015	30/07/2015	
C305-LP143901	-3.20	-2.10	-1.60	2.427
C305-LP143902	-1.30	-1.10	#N/A	0.640
C305-LP143903	-3.20	-2.50	-2.30	1.361
C305-LP143904	-3.40	-3.30	-2.80	0.925
C305-LP143905	-3.50	-3.70	-3.30	0.319
C305-LP143906	-4.80	-4.90	-4.50	0.469
C305-LP143907	-5.30	-5.10	-4.50	1.230
C305-LP143908	-5.70	-5.60	-4.80	1.390
C305-LP143909	-5.40	-5.30	-4.60	1.235
C305-LP143910	-5.30	-5.40	-4.70	0.934
C305-LP143911	-5.90	-6.10	-5.20	1.094
C305-LP143912	-5.70	-5.60	-5.20	0.770
C305-LP143913	-6.10	-6.40	-6.30	-0.296
C305-LP143914	-6.20	-6.70	-6.60	-0.596
C305-LP143915	#N/A	-6.30	-6.40	-0.292
C305-LP143916	-6.00	-6.50	-6.80	-1.216
C305-LP143917	-5.70	-6.70	-6.40	-1.037
C305-LP143918	-5.00	-6.20	-5.90	-1.338
C305-LP143919	-5.00	-5.80	-5.80	-1.202
C305-LP143920	-4.30	-4.90	-5.40	-1.676
C305-LP143921	-4.40	-4.90	-5.10	-1.061
C305-LP143922	-4.10	-4.10	-3.90	0.310
C305-LP143923	-2.70	-2.40	-2.00	1.070
C305-LP143924	-2.10	-1.60	-1.40	1.061
C305-LP143925	-3.50	-3.30	-3.20	0.455
C305-LP143926	-4.50	-4.30	-3.90	0.920
C305-LP143927	-3.20	-3.10	-3.70	-0.779
C305-LP143928	-1.30	-1.60	-1.00	0.479
C305-LP143929	0.20	0.40	#N/A	0.640
C305-LP143930	-4.20	-4.90	-4.60	-0.587

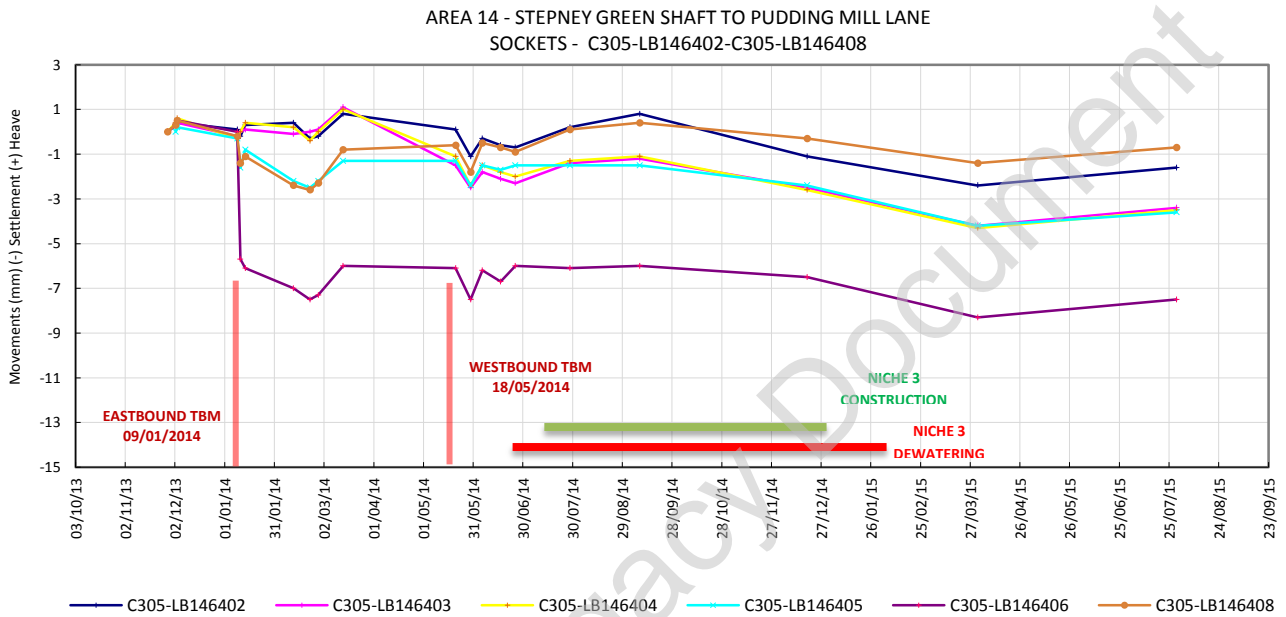
	Registered movement (mm)			mm/year
	03/12/2014	27/03/2015	30/07/2015	
C305-LP143931	-5.80	-6.00	-6.00	-0.300
C305-LP143932	-6.40	#N/A	#N/A	#N/A
C305-LP143933	-7.10	#N/A	#N/A	#N/A
C305-LP143934	-7.50	#N/A	#N/A	#N/A
C305-LP143935	-1.60	#N/A	#N/A	#N/A
C305-LP143936	-6.80	#N/A	#N/A	#N/A
C305-LP143937	-7.80	#N/A	#N/A	#N/A
C305-LP143938	-7.60	#N/A	#N/A	#N/A
C305-LP143939	-7.30	#N/A	#N/A	#N/A
C305-LP143940	-6.60	#N/A	#N/A	#N/A
C305-LP143941	-5.70	#N/A	#N/A	#N/A
C305-LP143942	-4.50	#N/A	#N/A	#N/A
C305-LP143943	-3.80	#N/A	#N/A	#N/A
	Rate less than -2.5 mm/year		<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year		<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%.

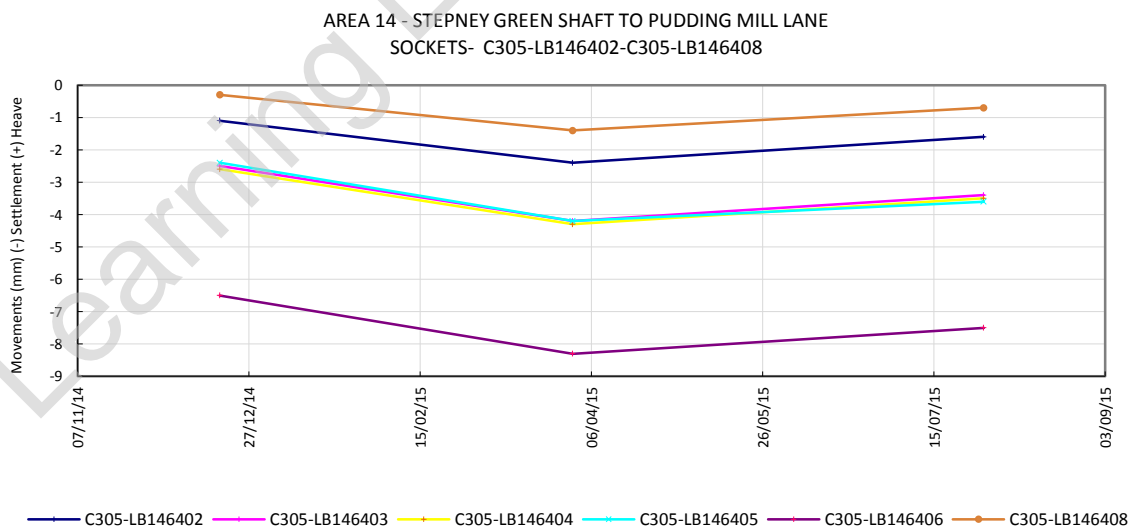
**SOCKETS**

**C305-LB146402 – C305-LB146408**

The graph presented below shows the socket readings from this array. A maximum settlement of -7.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.3 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



The table below lists the annual settlement rate for the sockets in this array.

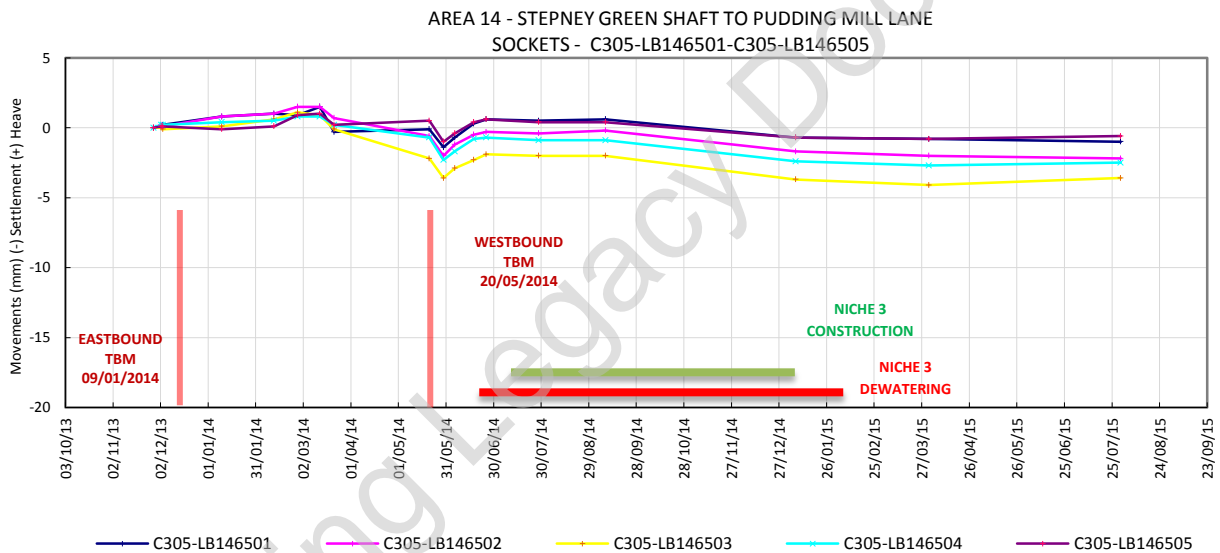
	Registered movement (mm)			mm/year
	18/12/2014	31/03/2015	29/07/2015	
C305-LB146402	-1.10	-2.40	-1.60	-0.729

	Registered movement (mm)			mm/year
	18/12/2014	31/03/2015	29/07/2015	
C305-LB146403	-2.50	-4.20	-3.40	-1.366
C305-LB146404	-2.60	-4.30	-3.50	-1.366
C305-LB146405	-2.40	-4.20	-3.60	-1.860
C305-LB146406	-6.50	-8.30	-7.50	-1.525
C305-LB146408	-0.30	-1.40	-0.70	-0.579
	Rate less than -2.5 mm/year		% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	100%

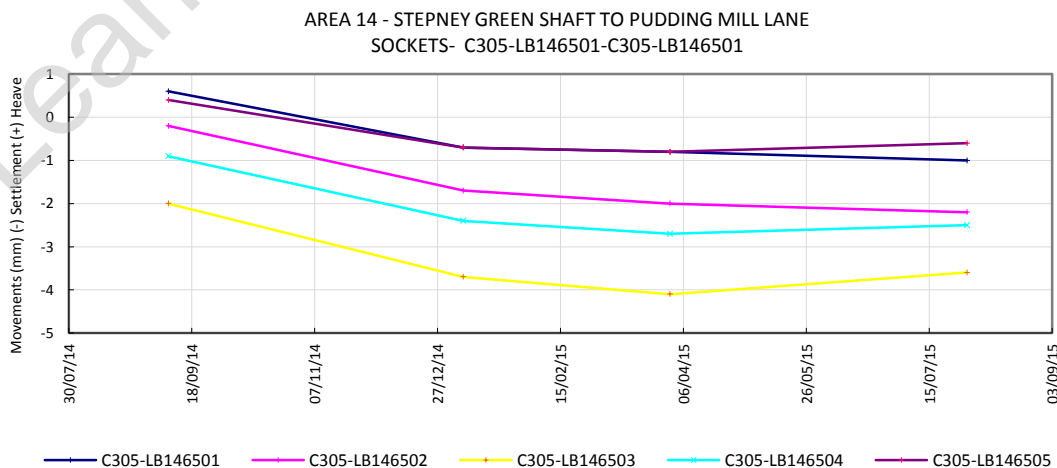
The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

### C305-LB146501 – C305-LB146505

The graph presented below shows the socket readings from this array. A maximum settlement of 0 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -4.1 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



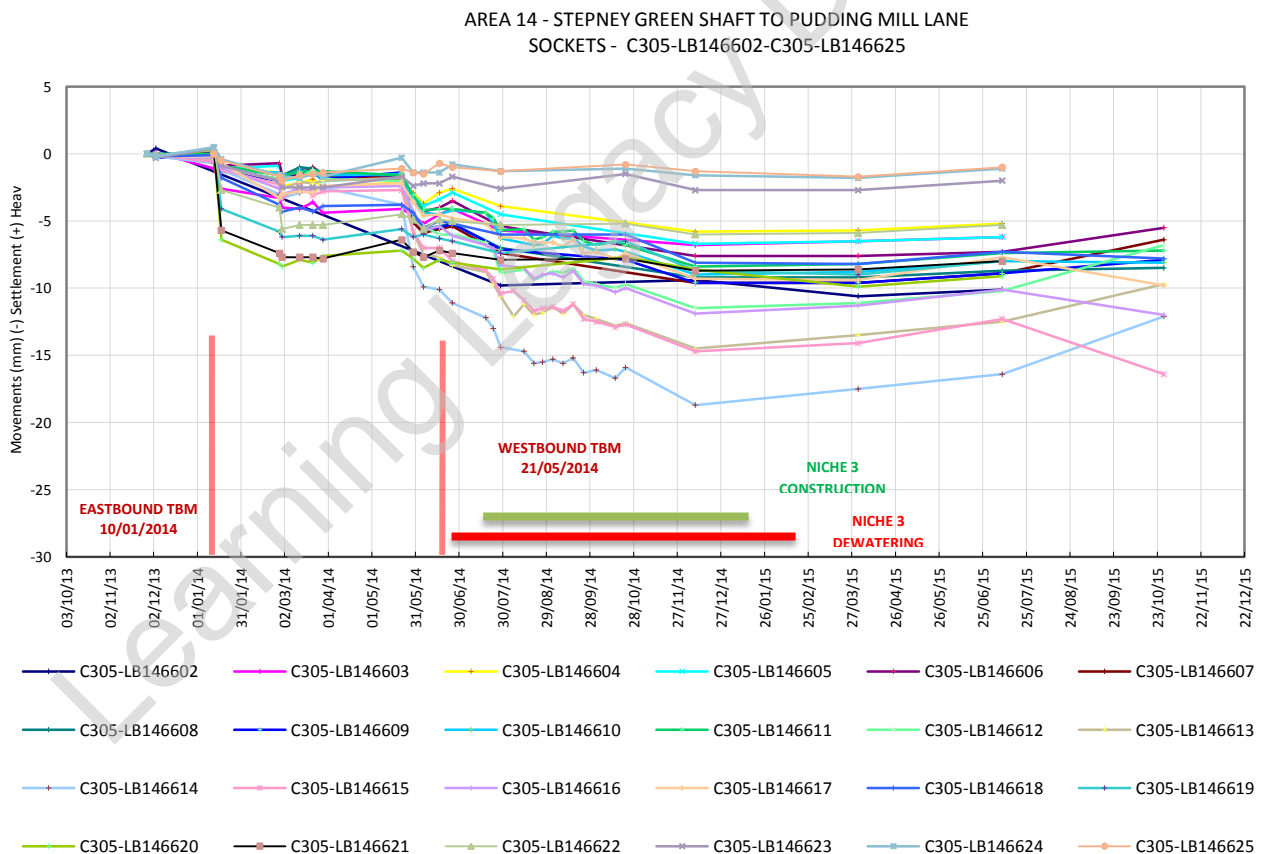
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	08/09/2014	06/01/2015	31/03/2015	30/07/2015	
C305-LB146501	0.60	-0.70	-0.80	-1.00	-1.711
C305-LB146502	-0.20	-1.70	-2.00	-2.20	-2.186
C305-LB146503	-2.00	-3.70	-4.10	-3.60	-1.791
C305-LB146504	-0.90	-2.40	-2.70	-2.50	-1.764
C305-LB146505	0.40	-0.70	-0.80	-0.60	-1.079
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

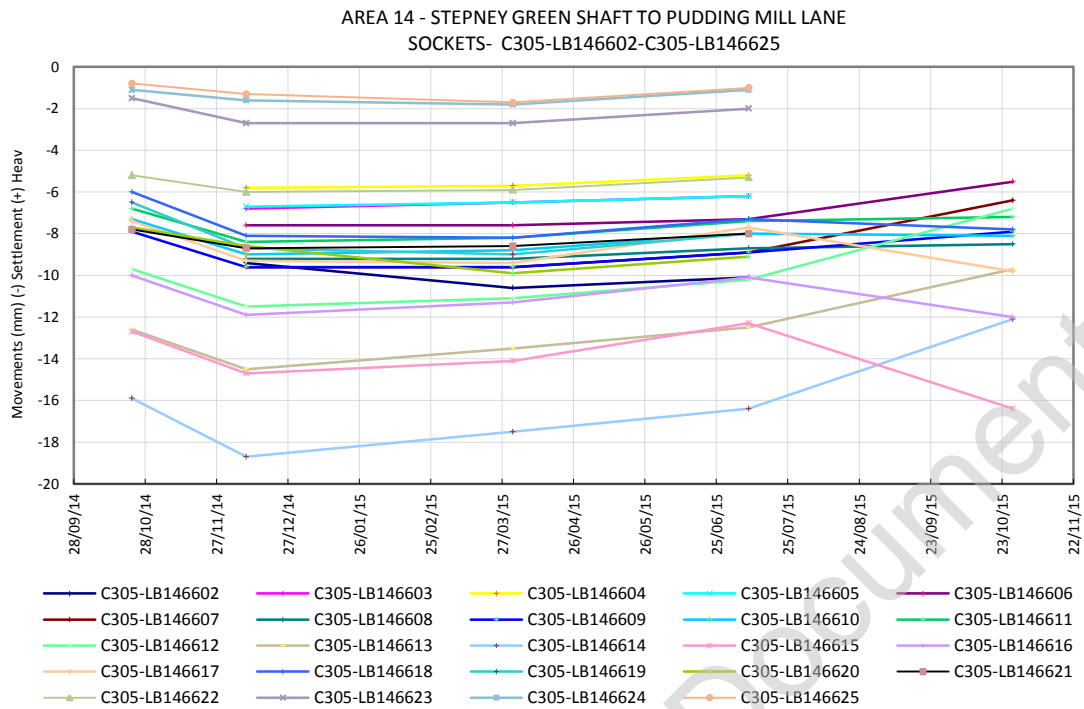
The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

### C305-LB146602 – C305-LB146625

The graph presented below shows the socket readings from this array. A maximum settlement of -7.7 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -18.7 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



The table below lists the annual settlement rate for the sockets in this array.

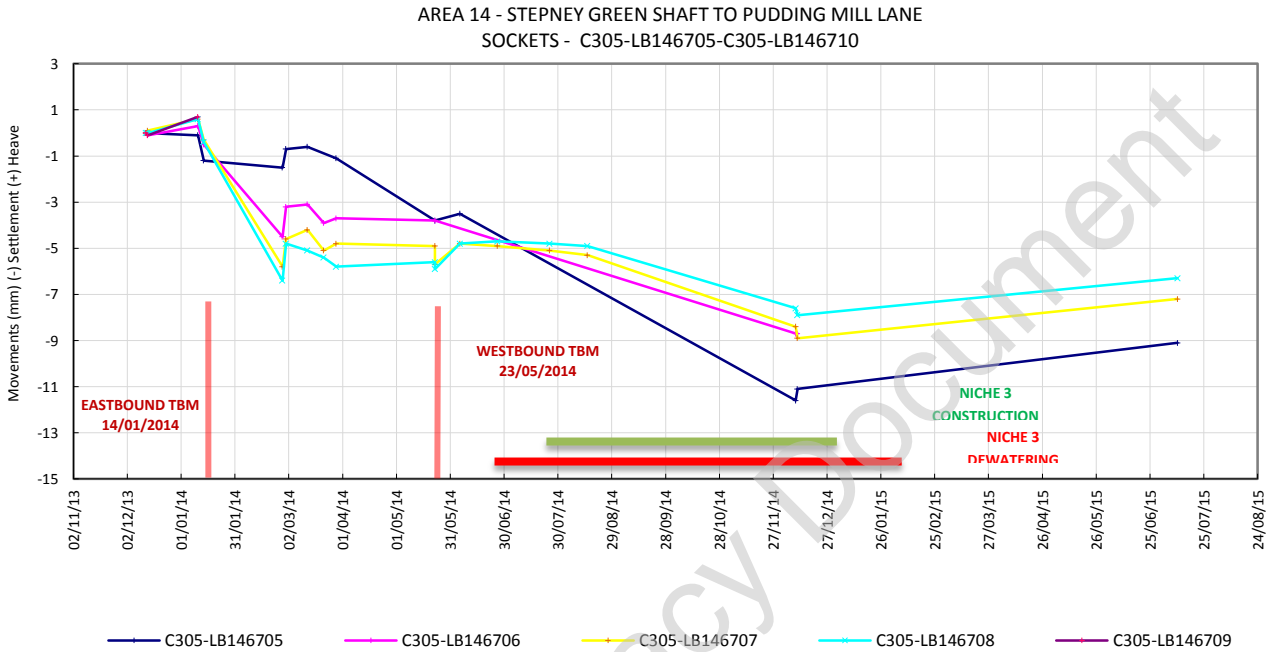
	Registered movement (mm)					mm/year
	22/10/2014	09/12/2014	31/03/2015	08/07/2015	27/10/2015	
C305-LB146602	#N/A	-9.40	-10.60	-10.10	#N/A	-1.269
C305-LB146603	#N/A	-6.80	-6.50	-6.20	#N/A	1.036
C305-LB146604	#N/A	-5.80	-5.70	-5.20	#N/A	1.022
C305-LB146605	#N/A	-6.70	-6.50	-6.20	#N/A	0.860
C305-LB146606	#N/A	-7.60	-7.60	-7.30	-5.50	2.267
C305-LB146607	#N/A	-9.60	-9.60	-8.90	-6.40	3.532
C305-LB146608	#N/A	-9.20	-9.20	-8.70	-8.50	0.883
C305-LB146609	-7.90	-9.60	-9.60	-8.90	-7.90	0.493
C305-LB146610	-7.30	-9.00	-8.80	-8.00	-8.10	-0.048
C305-LB146611	-6.80	-8.40	-8.20	-7.40	-7.20	0.260
C305-LB146612	-9.70	-11.50	-11.10	-10.20	-6.80	3.050
C305-LB146613	-12.60	-14.50	-13.50	-12.50	-9.70	3.301
C305-LB146614	-15.90	-18.70	-17.50	-16.40	-12.10	4.256
C305-LB146615	-12.70	-14.70	-14.10	-12.30	-16.40	-1.844
C305-LB146616	-10.00	-11.90	-11.30	-10.10	-12.00	-0.707
C305-LB146617	-7.40	-9.30	-9.40	-7.70	-9.80	-1.082
C305-LB146618	-6.00	-8.10	-8.20	-7.30	-7.80	-0.862
C305-LB146619	-6.50	-8.70	-9.00	-8.00	#N/A	-1.535
C305-LB146620	-7.70	-8.60	-9.90	-9.10	#N/A	-2.096
C305-LB146621	-7.80	-8.70	-8.60	-8.00	#N/A	-0.010
C305-LB146622	-5.20	-6.00	-5.90	-5.30	#N/A	0.095
C305-LB146623	-1.50	-2.70	-2.70	-2.00	#N/A	-0.365
C305-LB146624	-1.10	-1.60	-1.80	-1.10	#N/A	0.037
C305-LB146625	-0.80	-1.30	-1.70	-1.00	#N/A	-0.297
	Rate less than -2.5 mm/year			% less 2 mm/ year	% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	% less 3 mm/ year	100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 100%

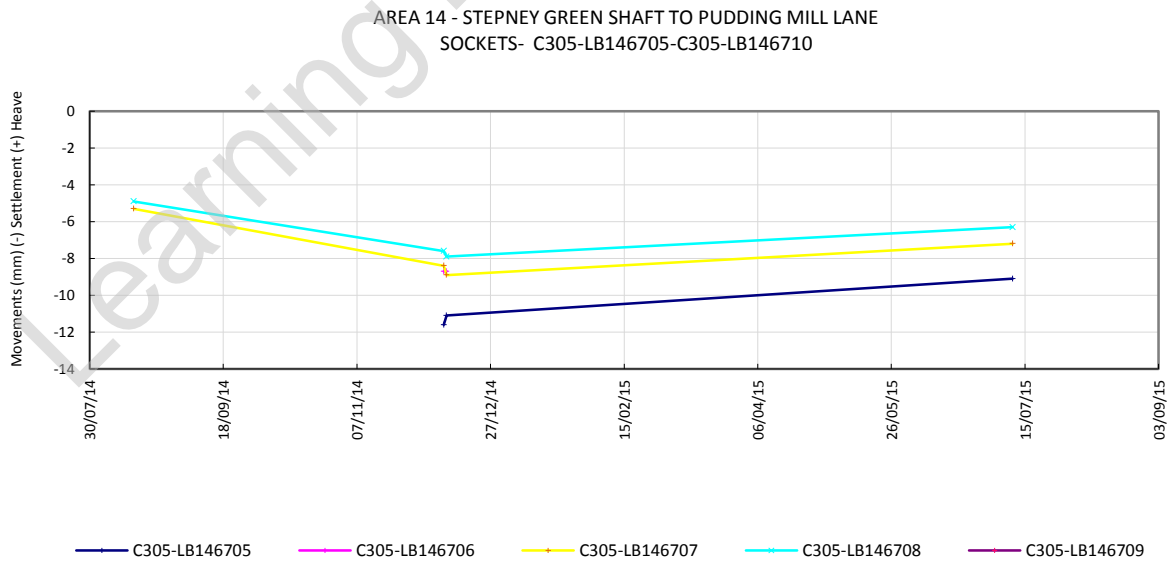


**C305-LB146705 – C305-LB146709**

The graph presented below shows the socket readings from this array. A maximum settlement of -6.4 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -11.6 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



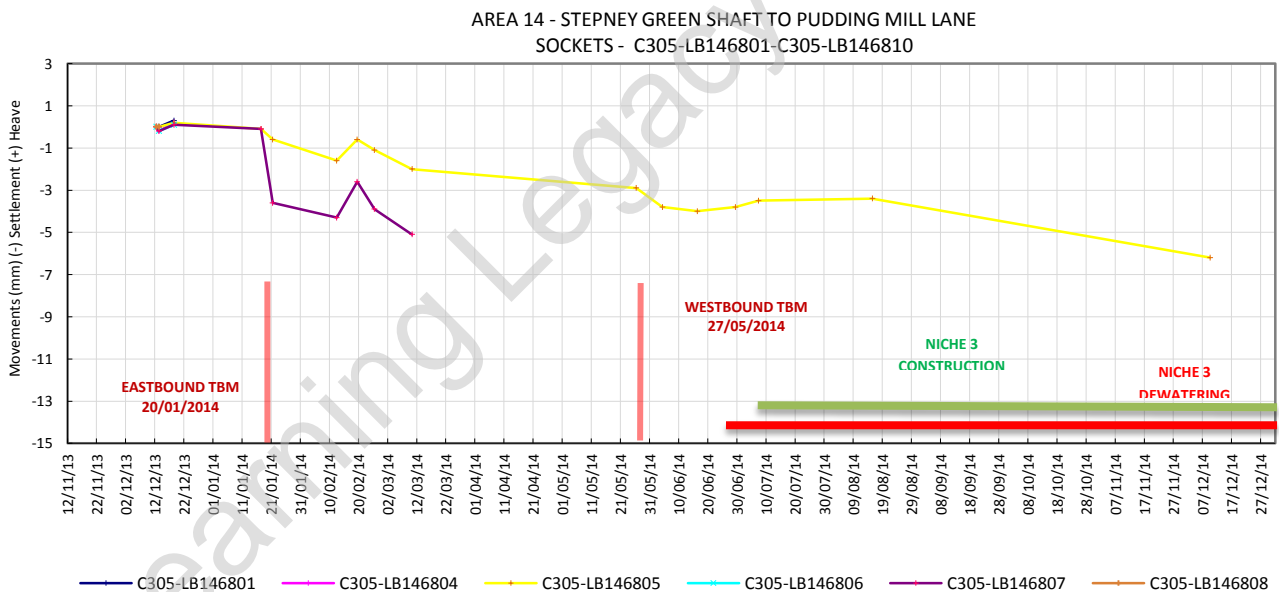
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	15/08/2014	09/12/2014	10/12/2014	10/07/2015	
C305-LB146705	#N/A	-11.60	-11.10	-9.10	3.870
C305-LB146706	#N/A	-8.70	-8.70	#N/A	#N/A
C305-LB146707	-5.30	-8.40	-8.90	-7.20	-1.279
C305-LB146708	-4.90	-7.60	-7.90	-6.30	-0.824
C305-LB146709	#N/A	#N/A	#N/A	#N/A	#N/A
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

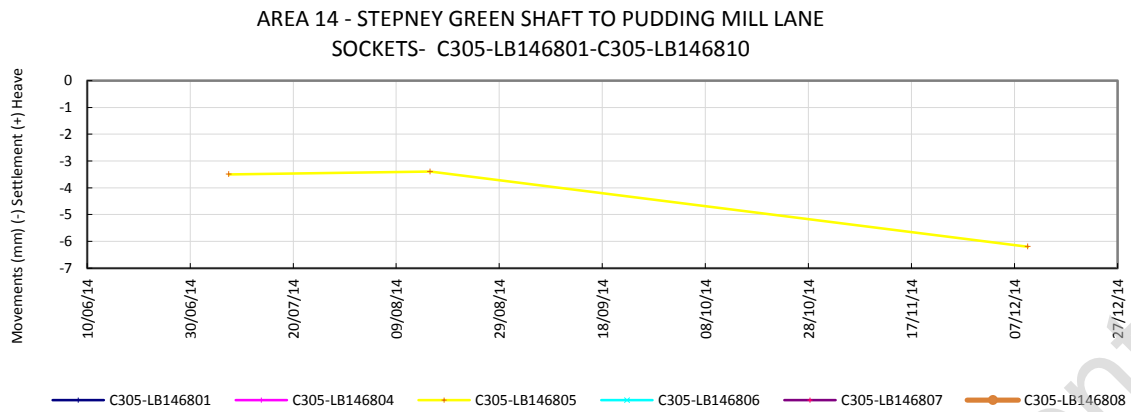
The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

### C305-LB146801 – C305-LB146808

The graph presented below shows the socket readings from this array. A maximum settlement of -5.1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.2 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



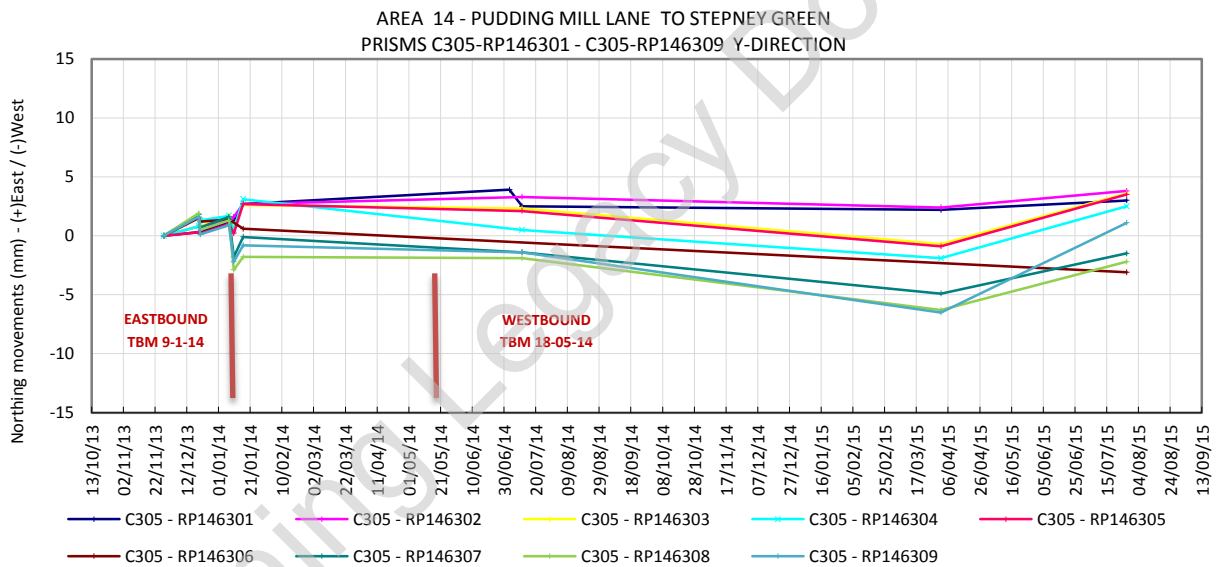
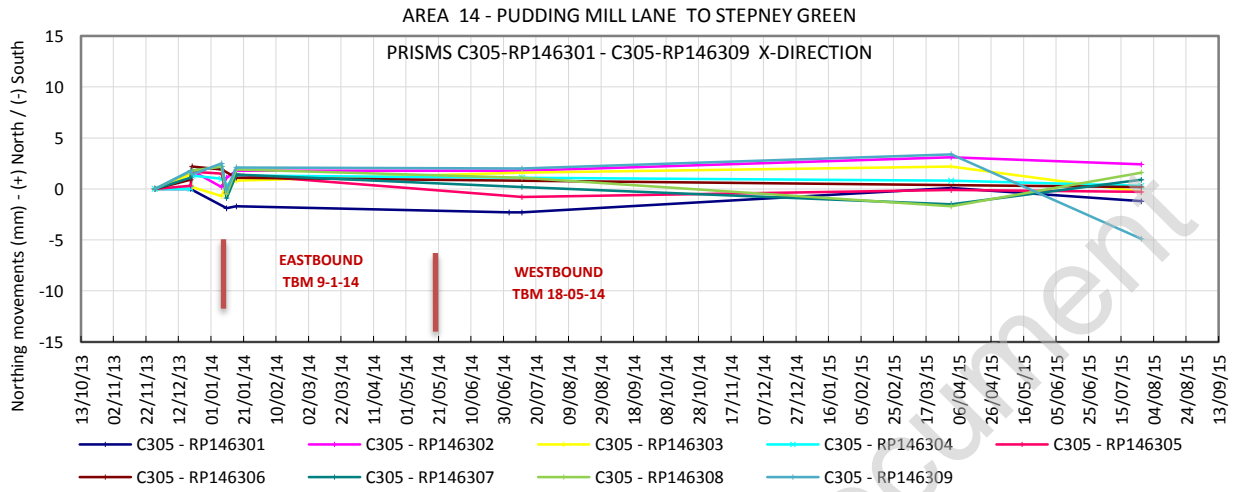
The table below lists the annual settlement rate for the sockets in this array.

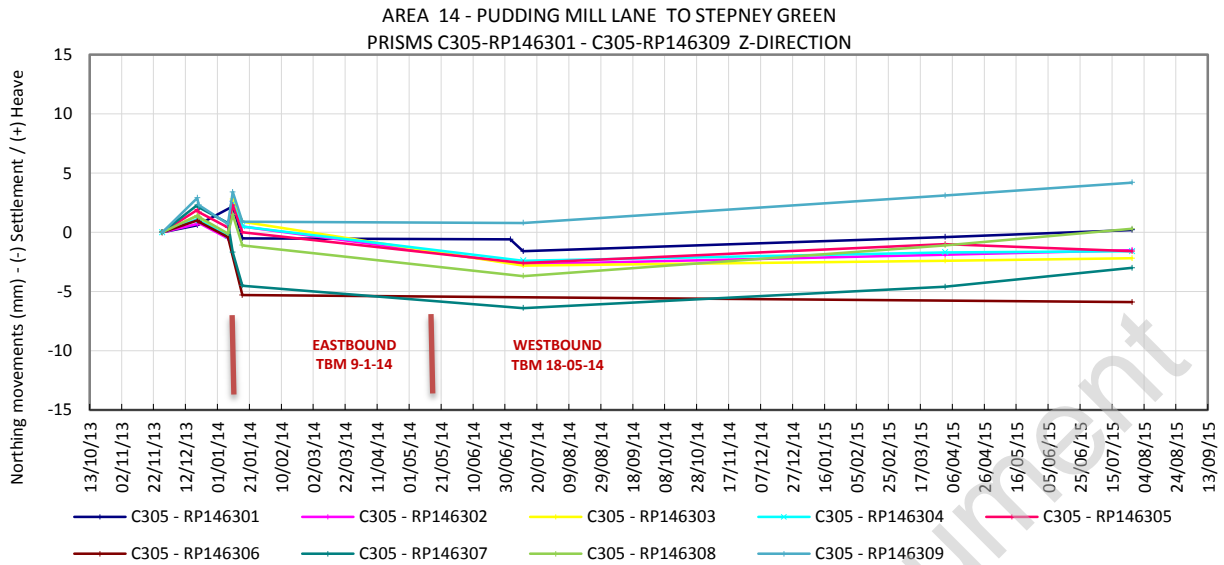
	Registered movement (mm)			mm/year
	07/07/2014	15/08/2014	09/12/2014	
C305-LB146801	#N/A	#N/A	#N/A	#N/A
C305-LB146804	#N/A	#N/A	#N/A	#N/A
C305-LB146805	-3.50	-3.40	-6.20	-8.81
C305-LB146806	#N/A	#N/A	#N/A	#N/A
C305-LB146807	#N/A	#N/A	#N/A	#N/A
C305-LB146808	#N/A	#N/A	#N/A	#N/A
	Rate less than -2.5 mm/year		<b>% less 2 mm/ year</b>	0%
	Rate greater than -3.5 mm/year		<b>% less 3 mm/ year</b>	0%

The percentage of the sockets with a settlement rate less than 2 mm/year is 0%.

3D PRISMS AND RETRO TARGETS

C305-RP146301 – C305-RP146309

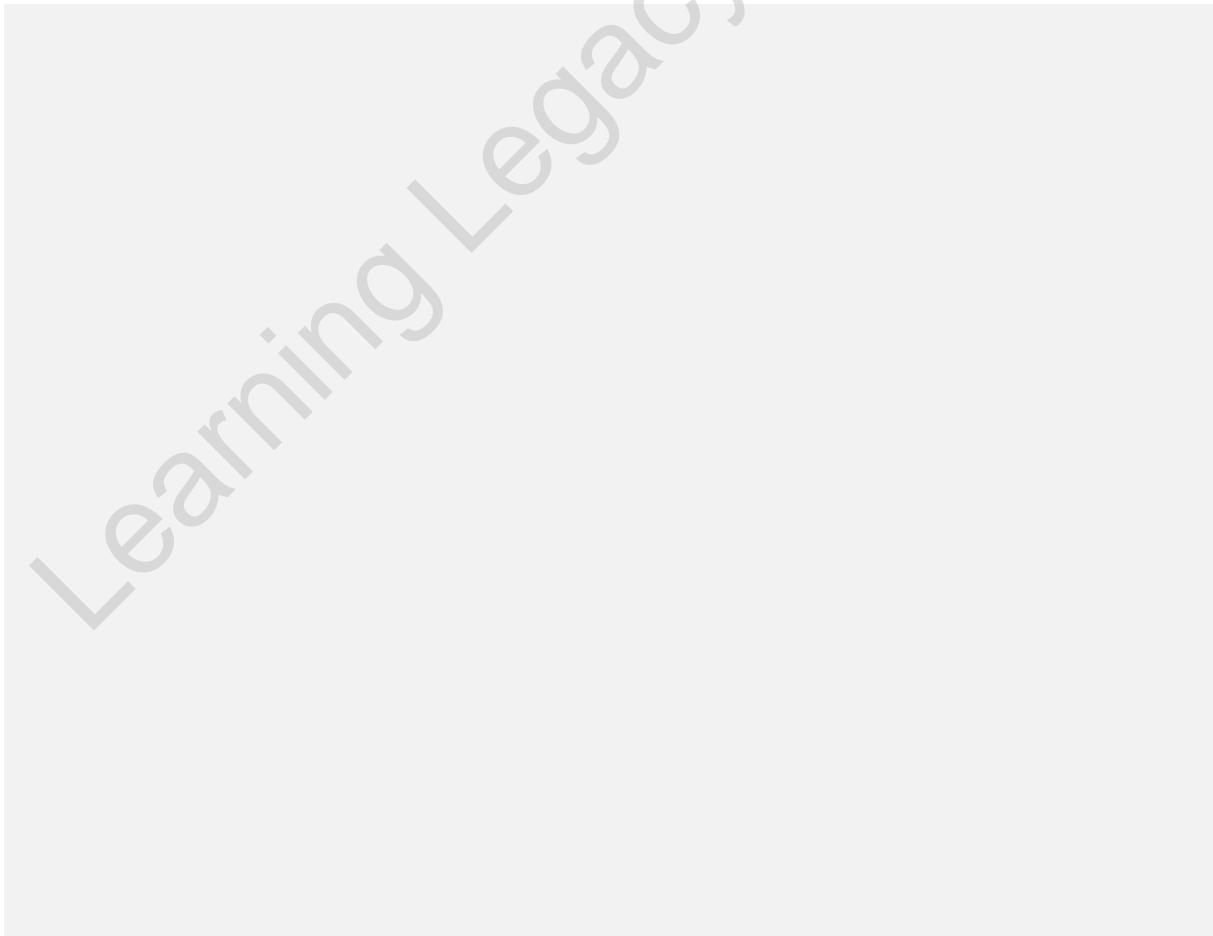




The X Axis shows a maximum movement of -4.9 mm after the Westbound TBM transit.

The Y Axis shows a maximum movement of -6.5 mm after the Westbound TBM transit.

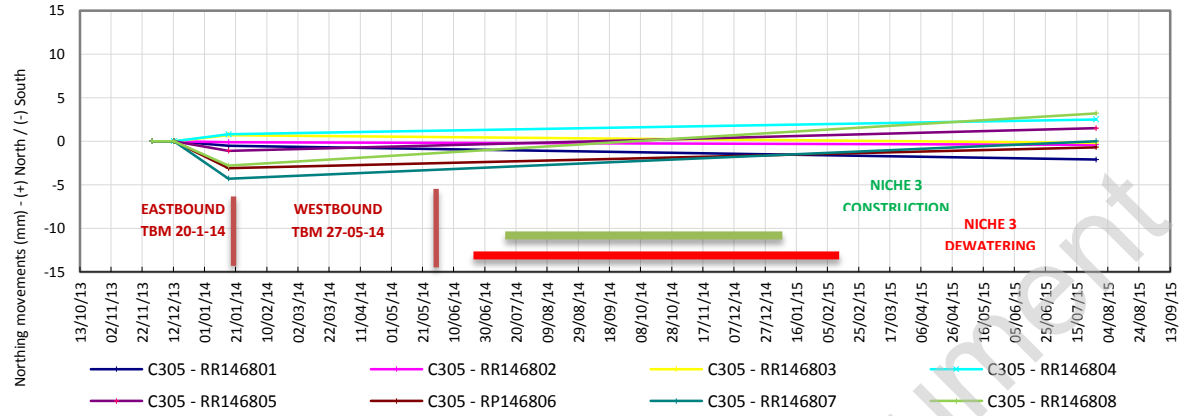
The Z Axis shows a maximum movement of -6.5 mm after the Westbound TBM transit.



**C305-RP146801 – C305-RP146808**

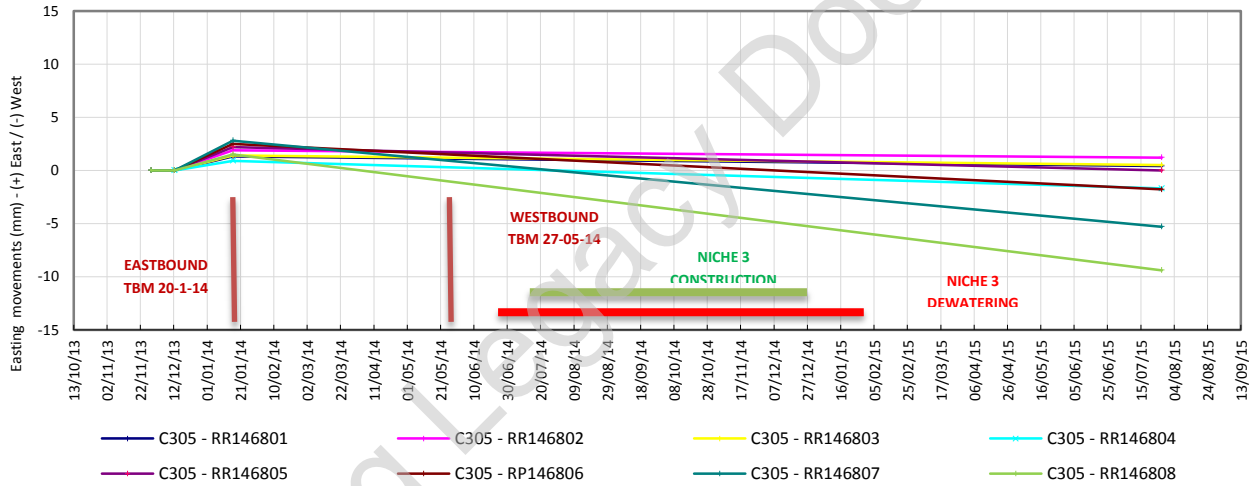
AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN

RETRO TARGETS AND PRISMS C305-RR146801 - C305-RR146808 X-DIRECTION



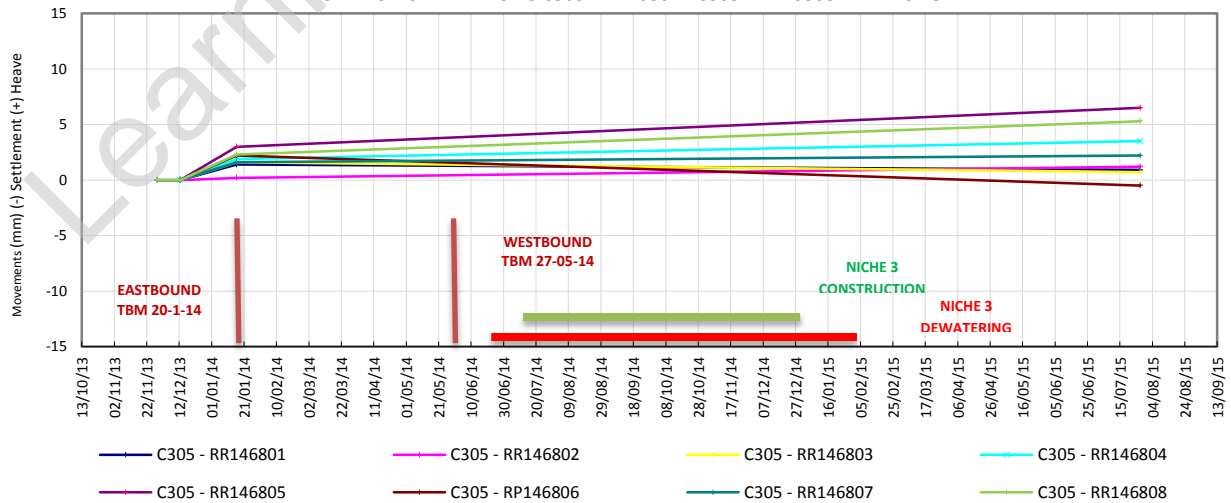
AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN

RETRO TARGETS AND PRISMS C305-RR146801 - C305-RR146808 Y-DIRECTION



AREA 14 - PUDDING MILL LANE TO STEPNEY GREEN

RETRO TARGETS AND PRISMS C305-RR146801 - C305-RR146808 Z-DIRECTION



The X Axis shows a maximum movement of 3.2 mm after the Westbound TBM transit.

The Y Axis shows a maximum movement of -9.4 mm after the Westbound TBM transit.

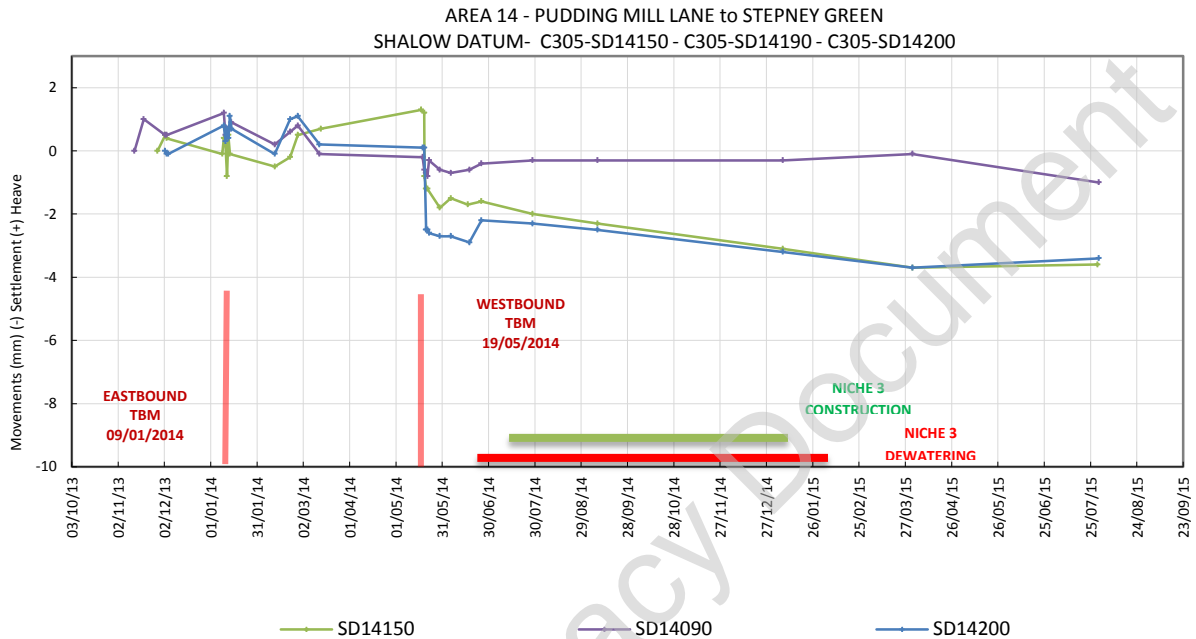
The Z Axis shows a maximum movement of 6.5 mm after the Westbound TBM transit.

Learning Legacy Document

**SHALLOW DATUM**

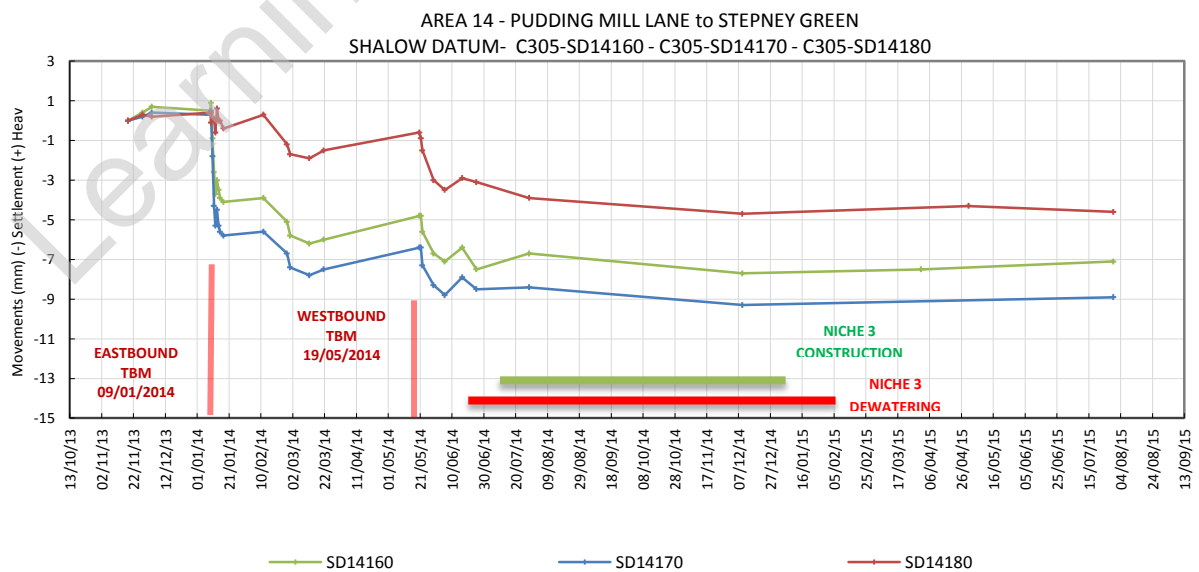
**C305-SD14150, C305-SD14190 and C305-SD14200**

The graph below shows the data of shallow datum: C305-SD14150, C305-SD14190 and C305-SD14200; there was a maximum settlement of -0.8 mm after the Eastbound TBM transit and a total maximum settlement of -3.7 mm after the Westbound TBM transit.



**C305-SD14160-C305, SD14170 and C305-SD14180**

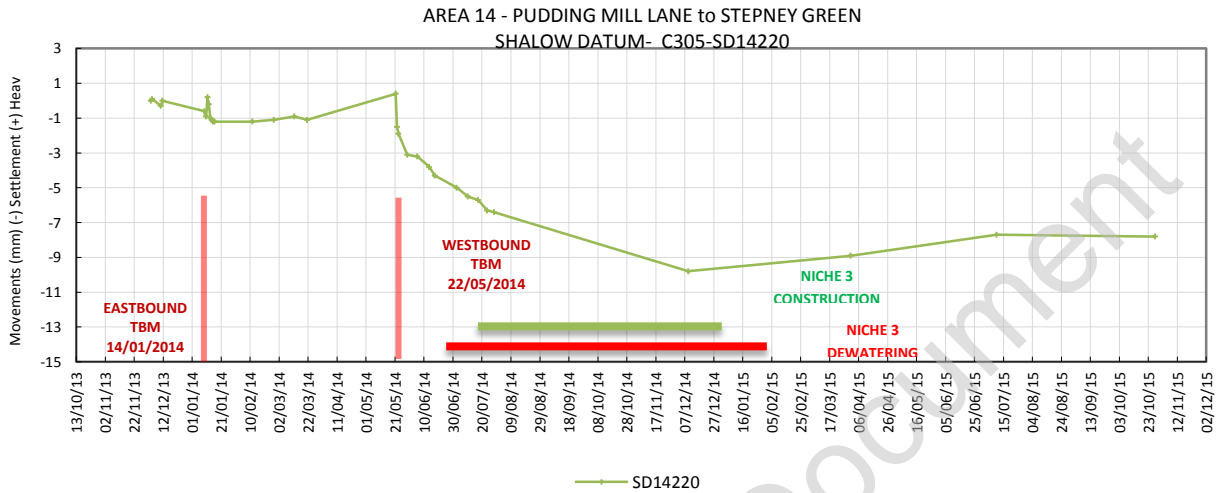
The graph below shows the data of shallow datum: C305-SD14160-C305, SD14170 and C305-SD14180; there was a maximum settlement of -7.8 mm after the Eastbound TBM transit and a total maximum settlement of -9.3 mm after the Westbound TBM transit.





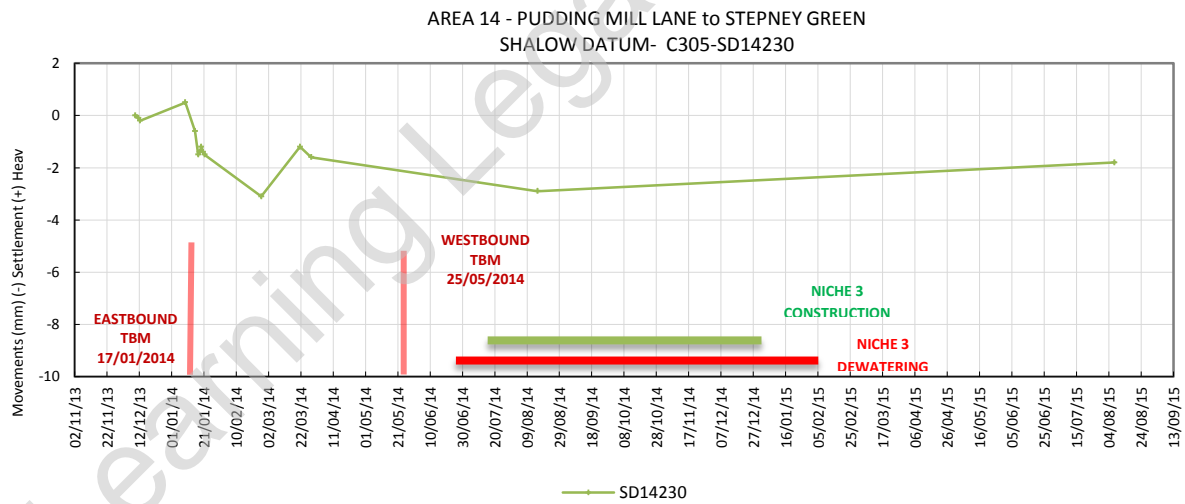
**C305-SD14220**

The graph below shows the data of shallow datum C305-SD14220; there was a maximum settlement of -1.2 mm after the Eastbound TBM transit and a total maximum settlement of -9.8 mm after the Westbound TBM transit.



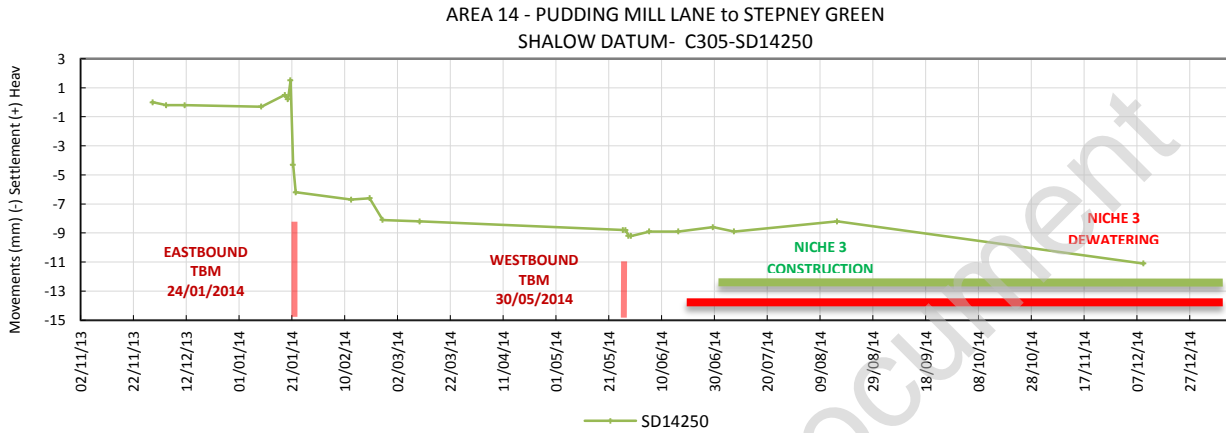
**C305-SD14230**

The graph below shows the data of shallow datum C305-SD14230; there was a maximum settlement of -3.1 mm after the Eastbound TBM transit and a maximum settlement of -2.9 mm after the Westbound TBM transit.



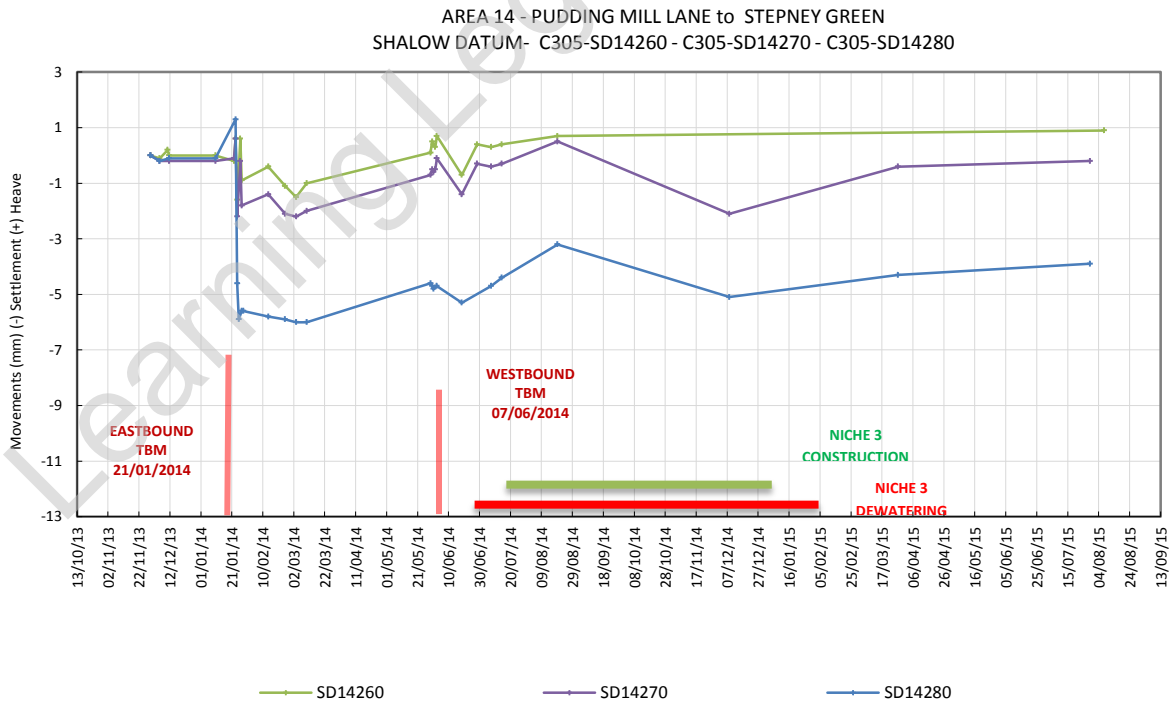
**C305-SD14250**

The graph below shows the data of shallow datum C305-SD14250 there was a maximum settlement of -8.2 mm after the Eastbound TBM transit, and a total maximum settlement of -11 mm after the Westbound TBM transit.



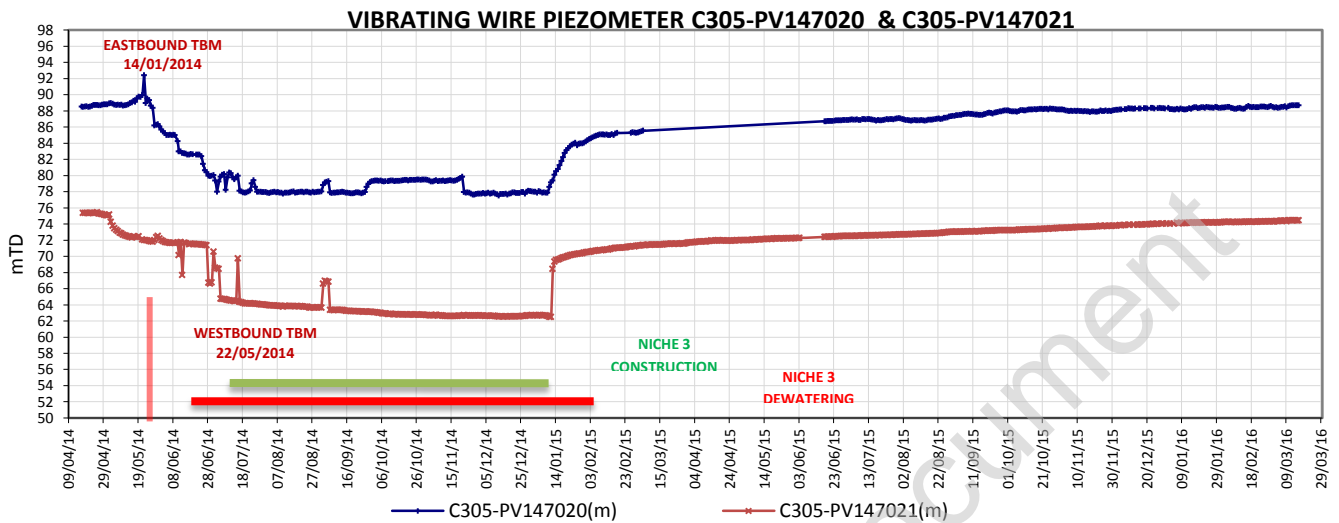
**C305-SD1426 0, C305-SD14270 and C305-SD14280**

The graph below shows the data of shallow datum: C305-SD14260, C305-SD14270 and C305-SD14280; there was a maximum settlement of -6 mm after the Eastbound TBM transit and a maximum settlement of -5.3 mm after the Westbound TBM transit.



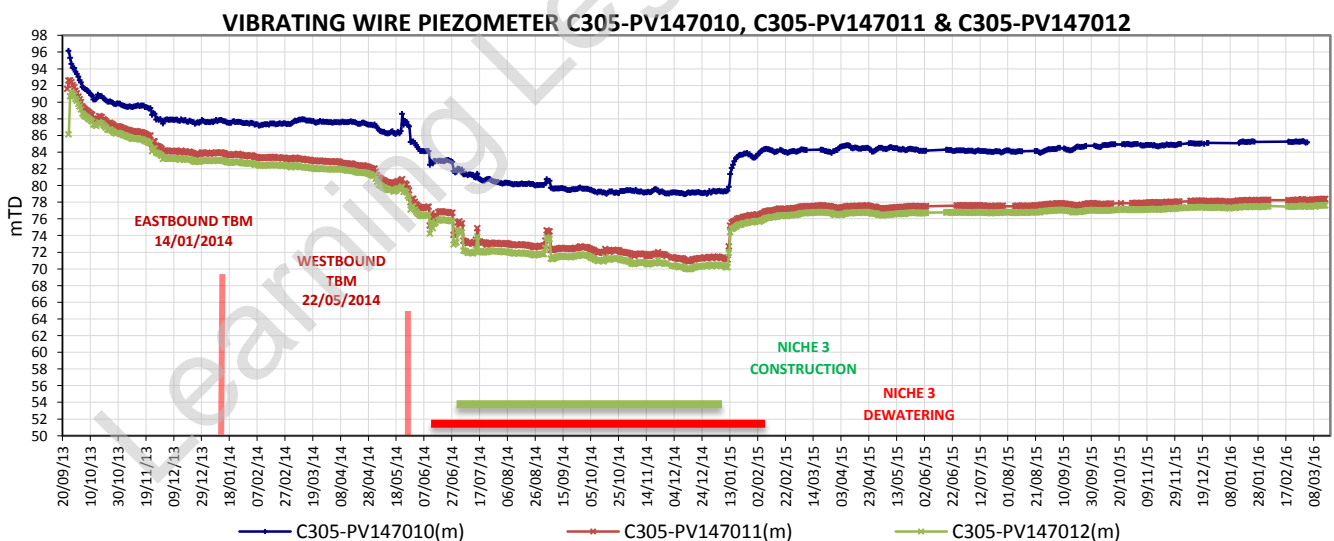
**PIEZOMETERS**

**C305-PV147020 & C305-PV147021**



There was a fall in the water level of piezometer PV147020 (-9 m) and PV147021 (-7 m) after Westbound transit. There was a rise in the water level (+7 m) in both piezometers after Niche 3 dewatering. Subsequently water level gradually increases up to 88.68 m and 74.64 m, respectively.

**C305-PV147010, C305-PV147011 & C305-PV147012**

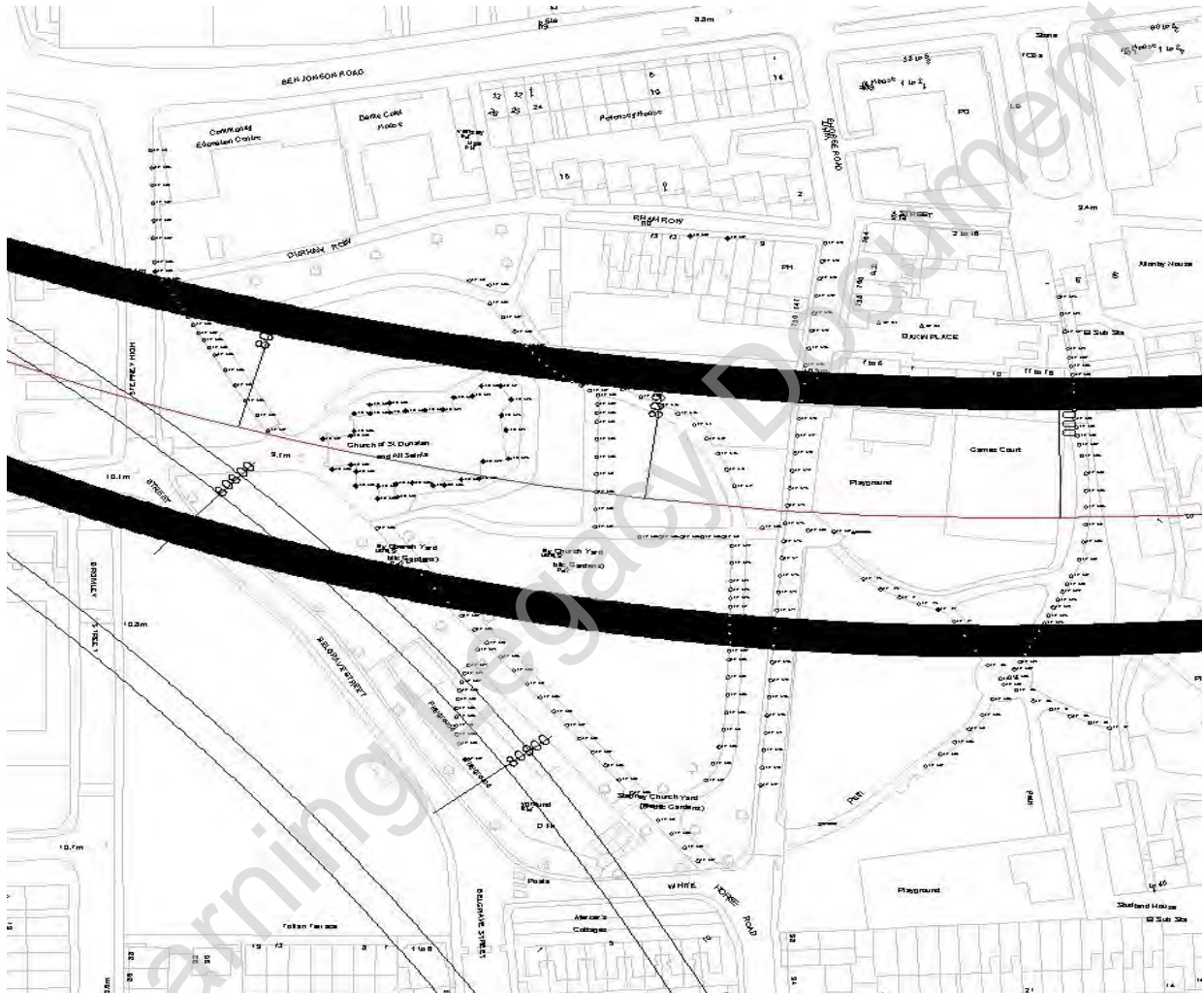


There was a fall in the water level of piezometer PV147010 (-8 m), PV147011 (-11 m) and PV147012 (-11 m) after TBMs transit and during Niche 3 dewatering. There was a rise in the water level (+6 m app) in all piezometers after Niche 3 dewatering. Subsequently water recovered level to 85.1 m, 78.4 m and 77.6 m, respectively.

## SUB-AREA 7

The instrumentation is located between Whitehorse Street and Stepney Green Area, as shown in the figure below, and comprises the following:

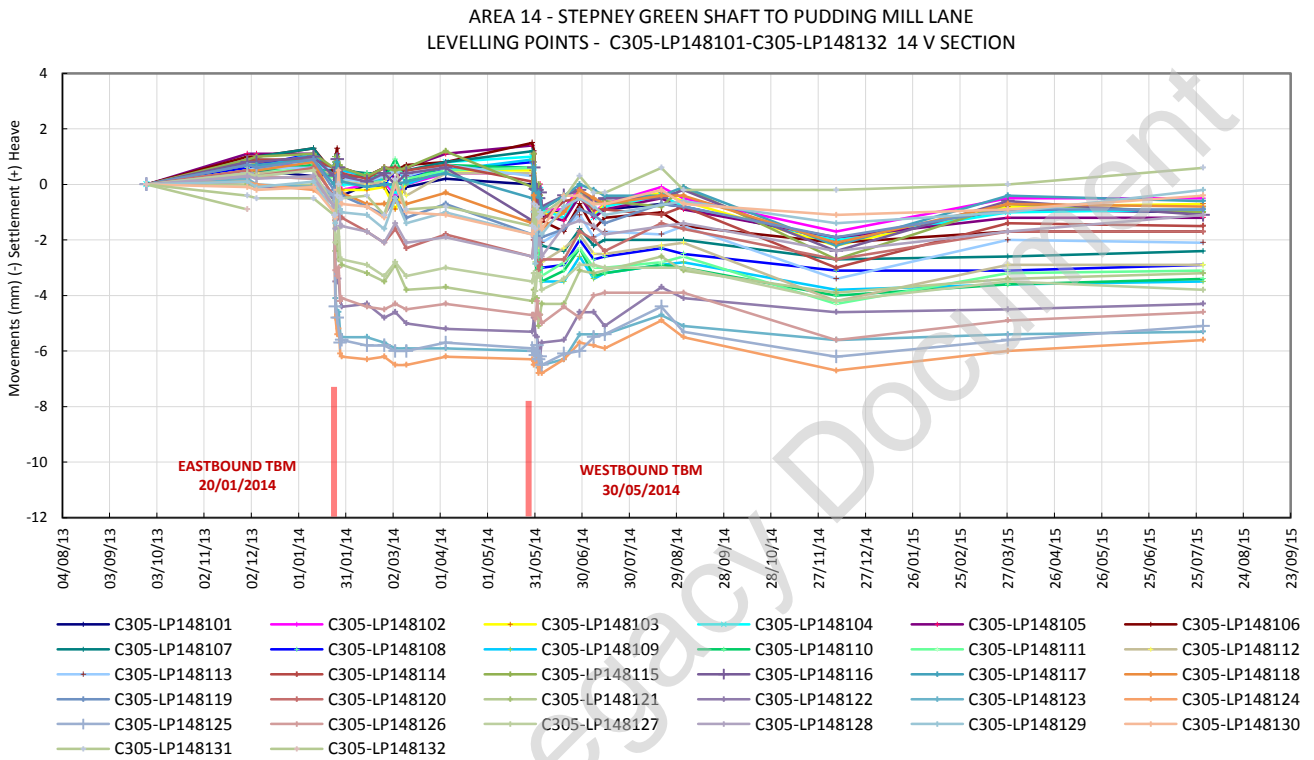
- 153 Levelling points
- 33 Sockets
- 3 Shallow datum



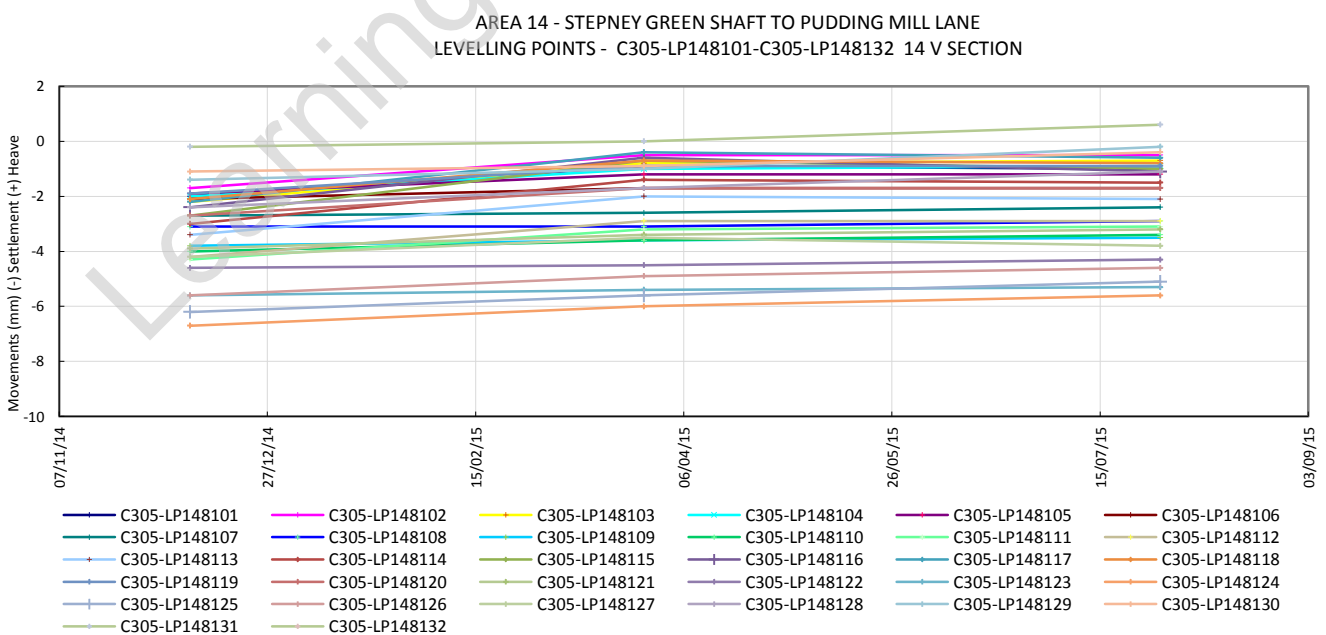
**LEVELLING POINTS**

**C305-LP148101 – C305-LP148132**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -6 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.8 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

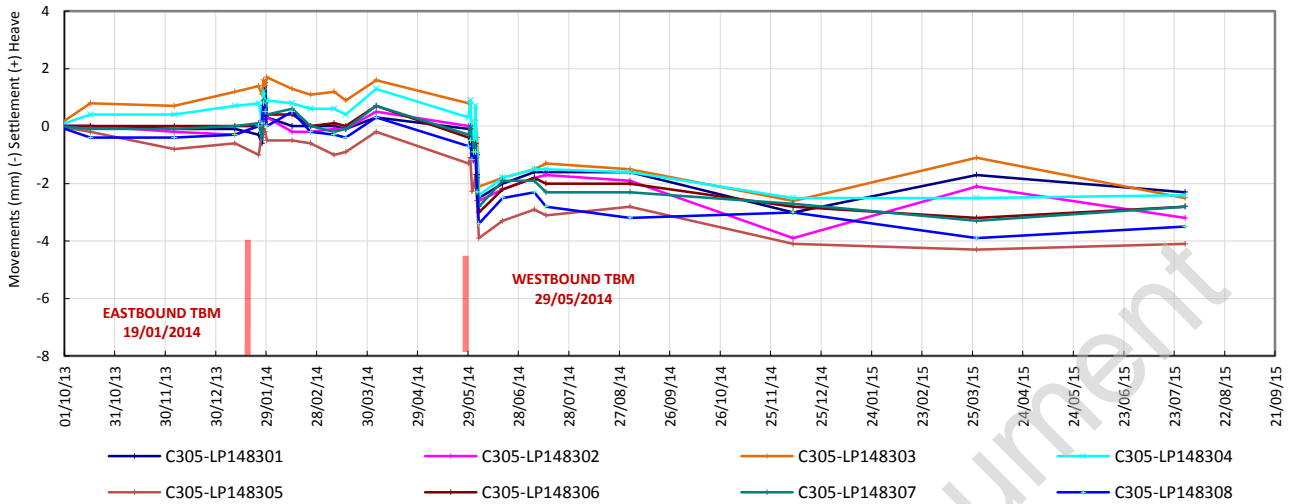
	Registered movement (mm)			mm/year
	08/12/2014	27/03/2015	29/07/2015	
C305-LP148101	-2.00	-0.90	-1.00	1.524
C305-LP148102	-1.70	-0.50	-0.50	1.837
C305-LP148103	-2.20	-0.80	-0.70	2.303
C305-LP148104	-2.00	-1.00	-0.90	1.690
C305-LP148105	-1.90	-1.20	-1.20	1.071
C305-LP148106	-2.10	-1.70	-1.70	0.612
C305-LP148107	-2.70	-2.60	-2.40	0.473
C305-LP148108	-3.10	-3.10	-2.90	0.320
C305-LP148109	-3.80	-3.60	-3.50	0.466
C305-LP148110	-4.00	-3.60	-3.40	0.932
C305-LP148111	-4.30	-3.20	-3.10	1.844
C305-LP148112	-4.20	-2.90	-2.90	1.990
C305-LP148113	-3.40	-2.00	-2.10	1.983
C305-LP148114	-3.00	-1.40	-1.50	2.289
C305-LP148115	-2.70	-0.70	-1.00	2.582
C305-LP148116	-2.40	-0.60	-1.10	1.956
C305-LP148117	-2.20	-0.40	-0.60	2.436
C305-LP148118	-2.10	-0.70	-0.80	1.983
C305-LP148119	-1.90	-0.90	-0.90	1.531
C305-LP148120	-2.70	-1.70	-1.70	1.531
C305-LP148121	-3.90	-3.40	-3.20	1.085
C305-LP148122	-4.60	-4.50	-4.30	0.473
C305-LP148123	-5.60	-5.40	-5.30	0.466
C305-LP148124	-6.70	-6.00	-5.60	1.711
C305-LP148125	-6.20	-5.60	-5.10	1.717
C305-LP148126	-5.60	-4.90	-4.60	1.551
C305-LP148127	-4.20	-3.50	-3.80	0.592
C305-LP148128	-2.40	-1.70	-1.10	2.030
C305-LP148129	-1.40	-1.00	-0.20	1.891
C305-LP148130	-1.10	-0.90	-0.40	1.105
C305-LP148131	-0.20	0.00	0.60	1.265
C305-LP148132	#N/A	#N/A	#N/A	#N/A
	Rate less than -2.5 mm/year		% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%

### C305-LP148301 – C305-LP148308

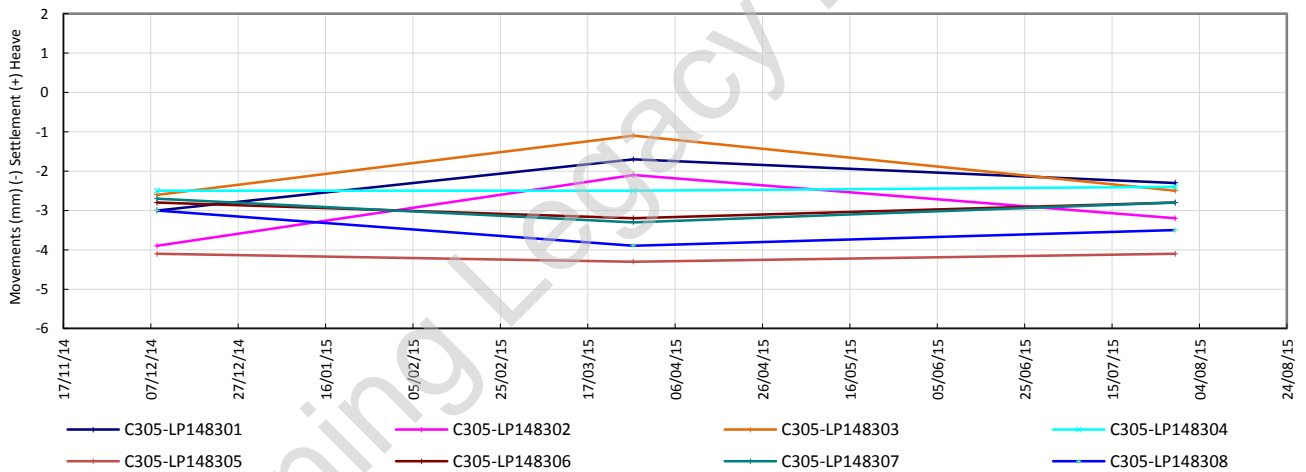
The graph presented below shows the levelling point readings from this array. A maximum settlement of -1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -4.3 mm after the Westbound TBM transit.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
LEVELLING POINTS - C305-LP148301-C305-LP148308



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
LEVELLING POINTS - C305-LP148301-C305-LP148308



The table below lists the annual settlement rate for the levelling points in this array.

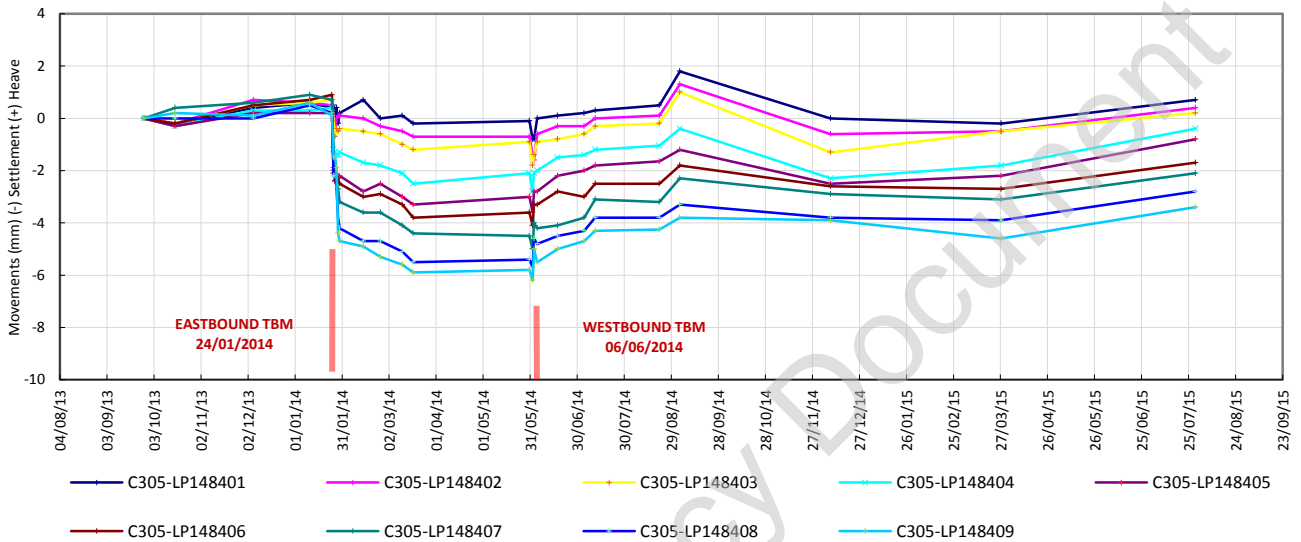
	Registered movement (mm)			mm/year
	08/12/2014	27/03/2015	29/07/2015	
C305-LP148301	-3.00	-1.70	-2.30	1.031
C305-LP148302	-3.90	-2.10	-3.20	0.998
C305-LP148303	-2.60	-1.10	-2.50	0.059
C305-LP148304	-2.50	-2.50	-2.40	0.160
C305-LP148305	-4.10	-4.30	-4.10	0.013
C305-LP148306	-2.80	-3.20	-2.80	0.027
C305-LP148307	-2.70	-3.30	-2.80	-0.120
C305-LP148308	-3.00	-3.90	-3.50	-0.739
	Rate less than -2.5 mm/year		% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%

**C305-LP148401 – C305-LP148409**

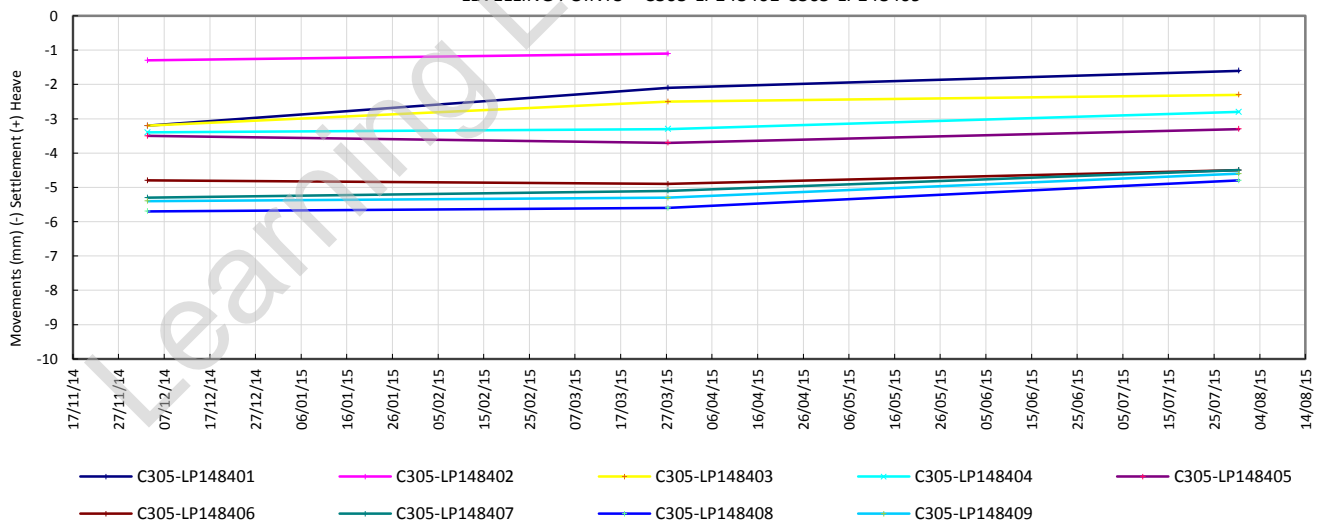
The graph presented below shows the levelling point readings from this array. A maximum settlement of -5.9 mm was recorded after the Eastbound TBM transit and a maximum settlement of -6.2 mm during the Westbound TBM transit.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP148401-C305-LP148409



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP148401-C305-LP148409





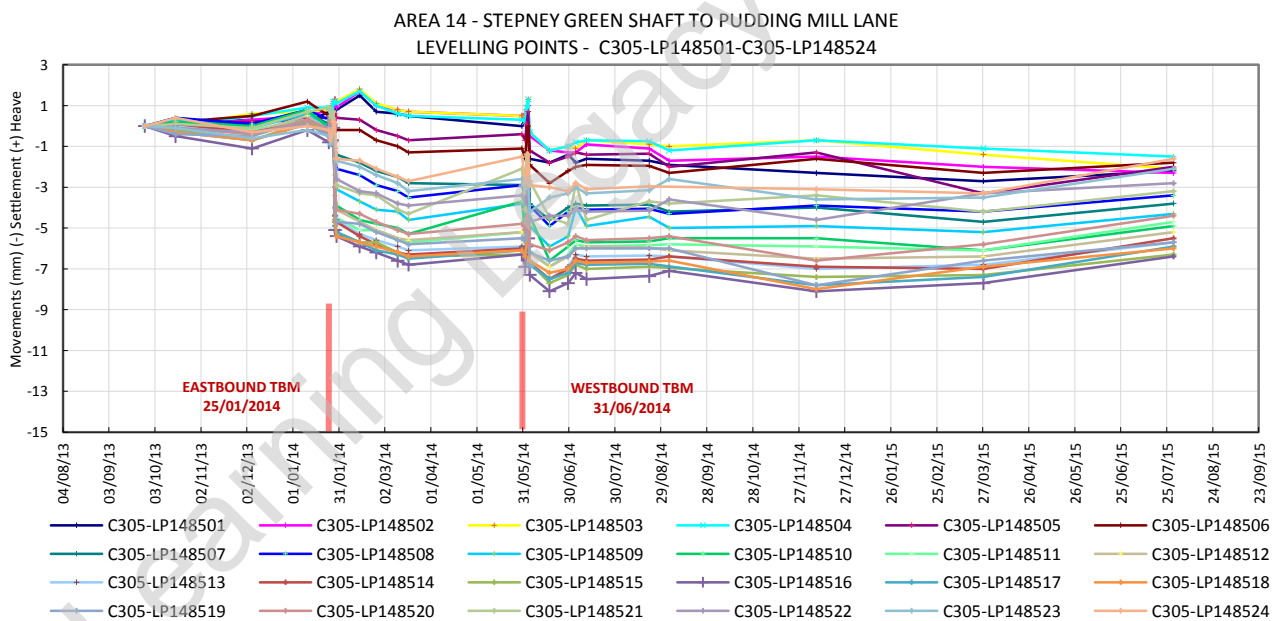
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)			mm/year
	03/12/2014	27/03/2015	30/07/2015	
C305-LP148401	-3.20	-2.10	-1.60	2.427
C305-LP148402	-1.30	-1.10	#N/A	#N/A
C305-LP148403	-3.20	-2.50	-2.30	1.361
C305-LP148404	-3.40	-3.30	-2.80	0.925
C305-LP148405	-3.50	-3.70	-3.30	0.319
C305-LP148406	-4.80	-4.90	-4.50	0.469
C305-LP148407	-5.30	-5.10	-4.50	1.230
C305-LP148408	-5.70	-5.60	-4.80	1.390
C305-LP148409	-5.40	-5.30	-4.60	1.235
	Rate less than -2.5 mm/year		% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year		% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%

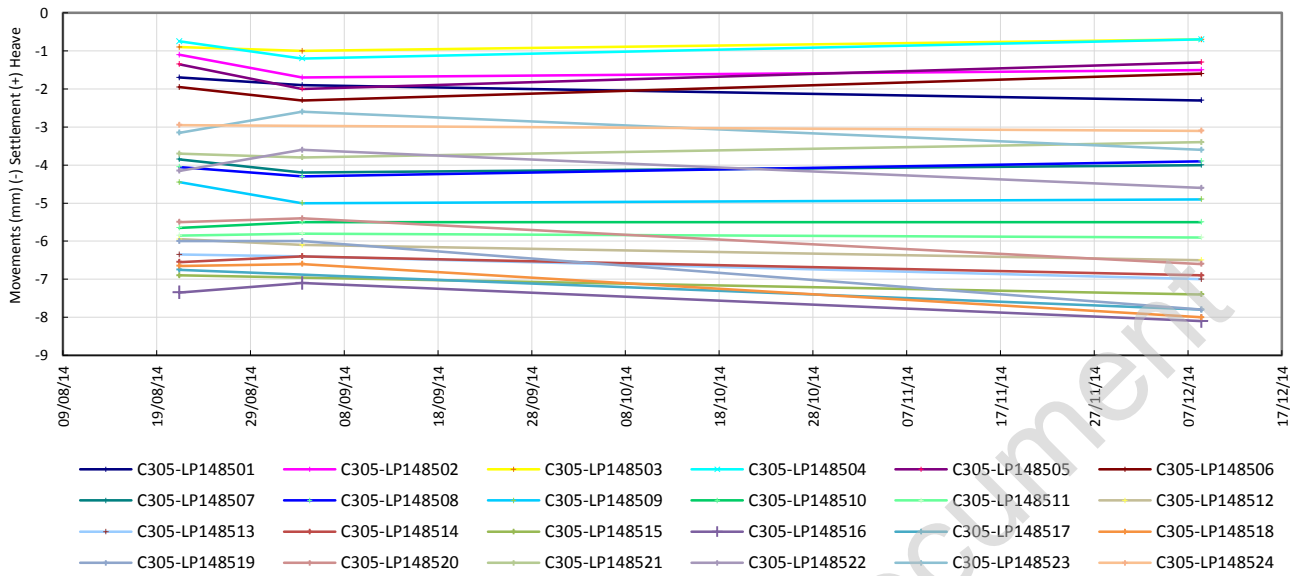
### C305-LP148501 – C305-LP148524

The graph presented below shows the levelling point readings from this array. A maximum settlement of -6.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.1 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP148501-C305-LP1485424



The table below lists the annual settlement rate for the levelling points in this array.

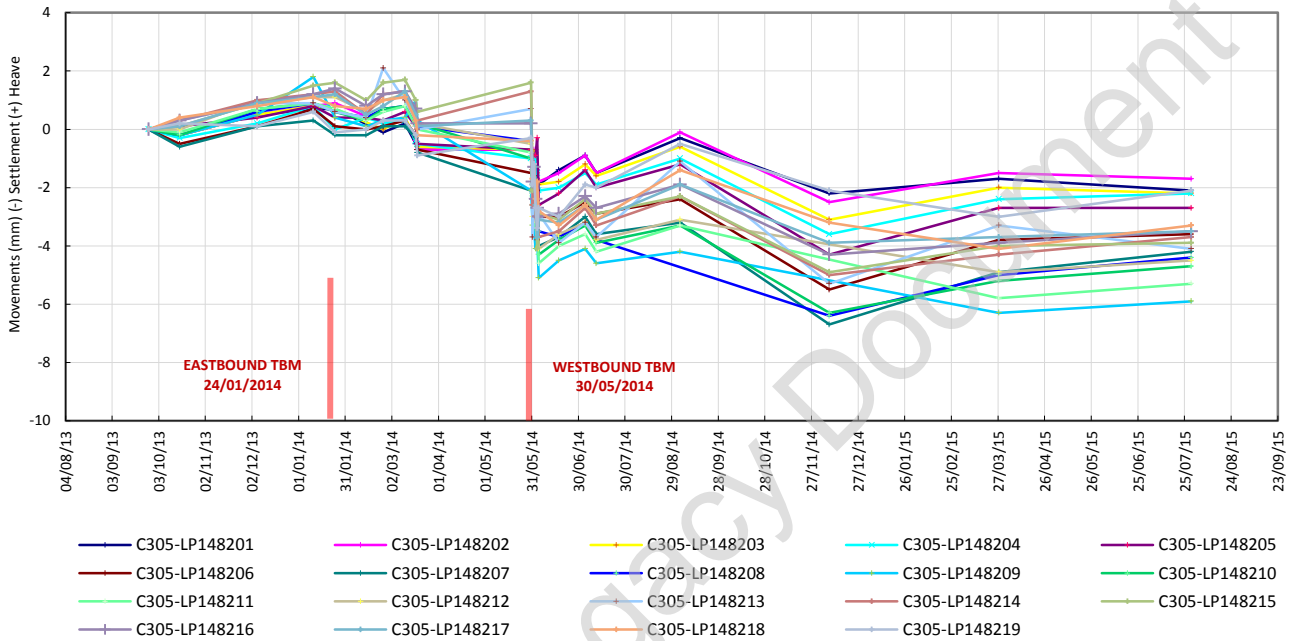
	Registered movement (mm)				mm/year
	21/08/2014	03/09/2014	08/12/2014	27/03/2015	
C305-LP148501	-1.70	-1.90	-2.30	-2.70	-1.583
C305-LP148502	-1.10	-1.70	-1.50	-2.00	-1.025
C305-LP148503	-0.90	-1.00	-0.70	-1.40	-0.649
C305-LP148504	-0.75	-1.20	-0.70	-1.10	-0.154
C305-LP148505	-1.35	-2.00	-1.30	-3.30	-2.516
C305-LP148506	-1.95	-2.30	-1.60	-2.30	-0.154
C305-LP148507	-3.85	-4.20	-4.00	-4.70	-1.089
C305-LP148508	-4.05	-4.30	-3.90	-4.20	0.019
C305-LP148509	-4.45	-5.00	-4.90	-5.20	-0.845
C305-LP148510	-5.65	-5.50	-5.50	-6.10	-0.798
C305-LP148511	-5.85	-5.80	-5.90	-6.10	-0.453
C305-LP148512	-5.95	-6.10	-6.50	-6.40	-0.741
C305-LP148513	-6.35	-6.40	-7.00	-6.80	-0.855
C305-LP148514	-6.55	-6.40	-6.90	-7.00	-0.941
C305-LP148515	-6.90	#N/A	-7.40	-7.30	#N/A
C305-LP148516	-7.35	-7.10	-8.10	-7.70	-0.982
C305-LP148517	-6.75	#N/A	-7.80	-7.40	#N/A
C305-LP148518	-6.65	-6.60	-8.00	-6.90	-0.824
C305-LP148519	-6.00	-6.00	-7.80	-6.60	-1.464
C305-LP148520	-5.50	-5.40	-6.60	-5.80	-0.875
C305-LP148521	-3.70	-3.80	-3.40	-4.20	-0.620
C305-LP148522	-4.15	-3.60	-4.60	-3.30	0.746
C305-LP148523	-3.15	-2.60	-3.60	-3.50	-1.153
C305-LP148524	-2.95	#N/A	-3.10	-3.30	#N/A
	Rate less than -2.5 mm/year			% less 2 mm/ year	95%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 95%

**C305-LP148201 – C305-LP148219**

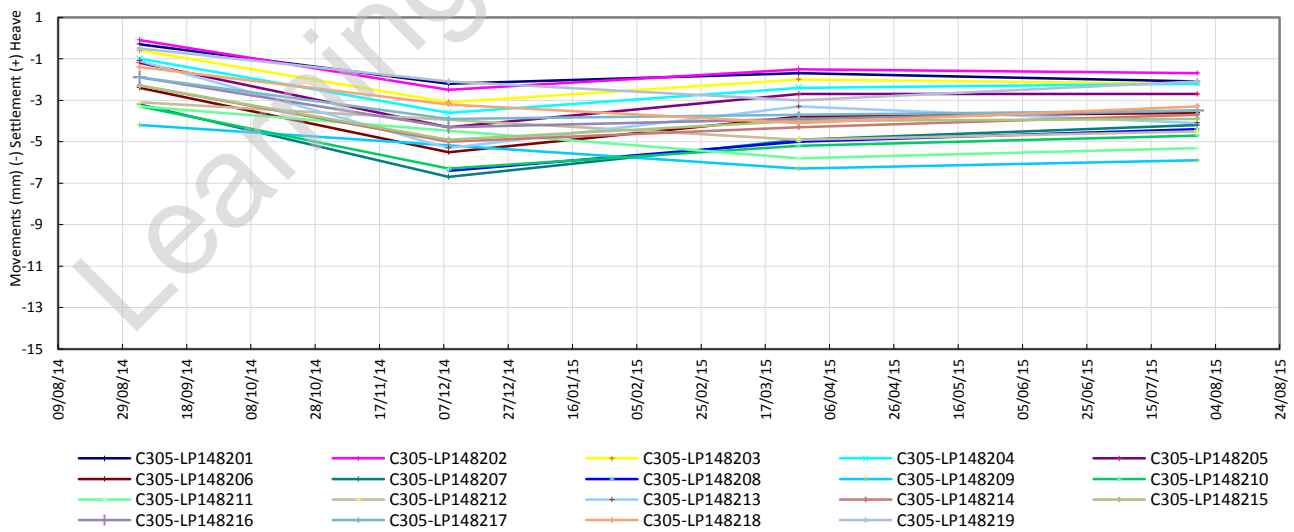
The graph presented below shows the levelling point readings from this array. A maximum settlement of -0.9 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.7 mm after the Westbound TBM transit.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP148201-C305-LP148219



The next plot shows the trend line adjustment for the levelling points in this array.

AREA 14 - STEPNEY GREEN SHAFT TO PUDDING MILL LANE  
 LEVELLING POINTS - C305-LP148201-C305-LP148219



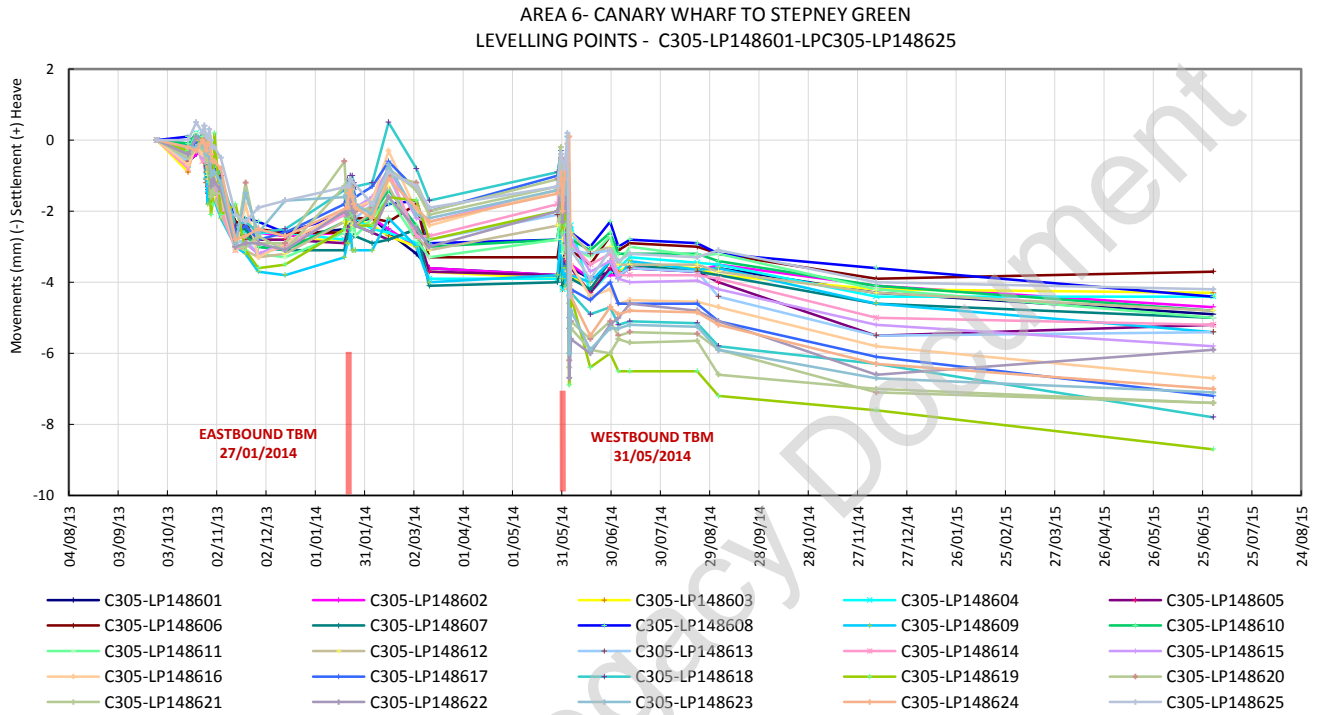
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	03/09/2014	08/12/2014	27/03/2015	29/07/2015	
C305-LP148201	-0.30	-2.20	-1.70	-2.10	-1.565
C305-LP148202	-0.10	-2.50	-1.50	-1.70	-1.171
C305-LP148203	-0.60	-3.10	-2.00	-2.20	-1.134
C305-LP148204	-1.00	-3.60	-2.40	-2.20	-0.681
C305-LP148205	-1.20	-4.30	-2.70	-2.70	-0.835
C305-LP148206	-2.40	-5.50	-3.80	-3.60	-0.495
C305-LP148207	-3.20	-6.70	-4.90	-4.20	-0.224
C305-LP148208	#N/A	-6.40	-5.00	-4.40	3.103
C305-LP148209	-4.20	#N/A	-6.30	-5.90	-2.072
C305-LP148210	-3.30	-6.30	-5.20	-4.70	-0.884
C305-LP148211	-3.30	#N/A	-5.80	-5.30	-2.443
C305-LP148212	-3.10	#N/A	-4.90	-4.50	-1.719
C305-LP148213	-1.10	-5.30	-3.30	-4.10	-2.185
C305-LP148214	-2.30	-5.00	-4.30	-3.70	-1.024
C305-LP148215	-2.30	-4.90	-4.00	-3.90	-1.183
C305-LP148216	-1.90	-4.30	-3.90	-3.50	-1.344
C305-LP148217	-1.90	-3.90	-3.70	-3.50	-1.435
C305-LP148218	-1.40	-3.20	-4.10	-3.30	-2.081
C305-LP148219	-0.50	-2.10	-3.00	-2.10	-1.786
	Rate less than -2.5 mm/year		<b>% less 2 mm/ year</b>		100%
	Rate greater than -3.5 mm/year		<b>% less 3 mm/ year</b>		100%

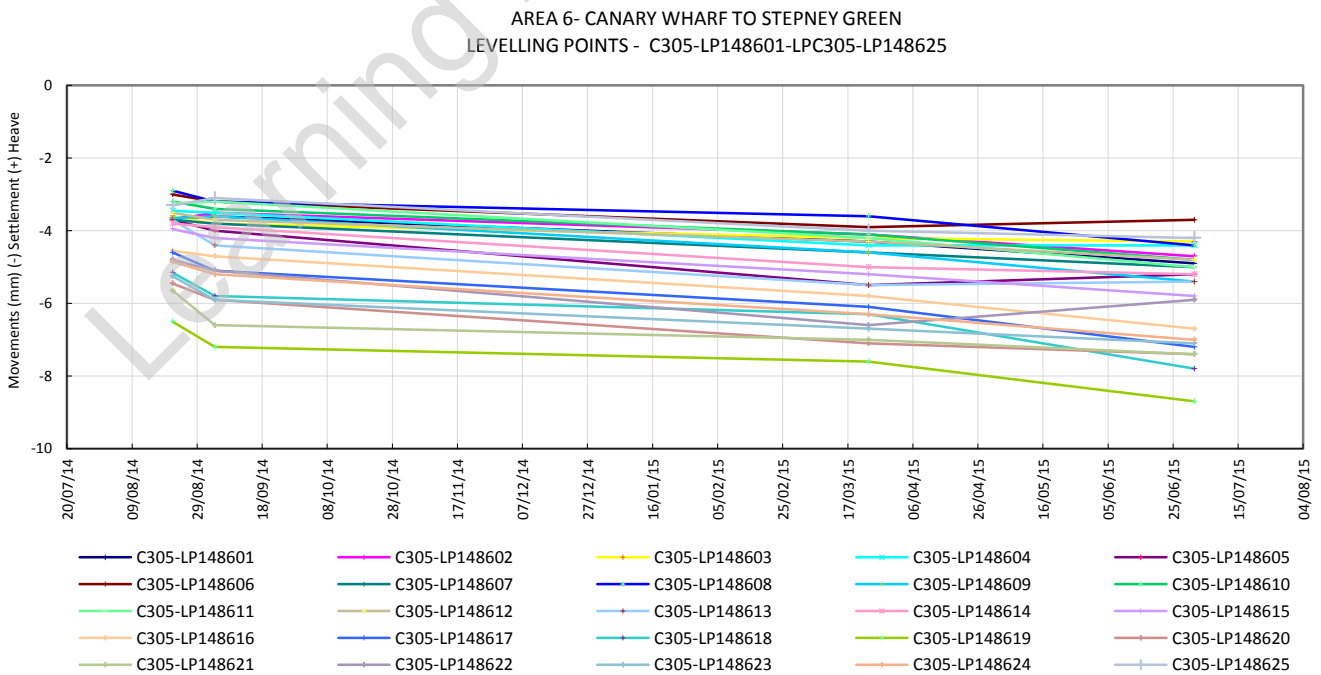
The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%

**C305-LP148601 – C305-LP148625**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -4 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -8.7 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the levelling points in this array.



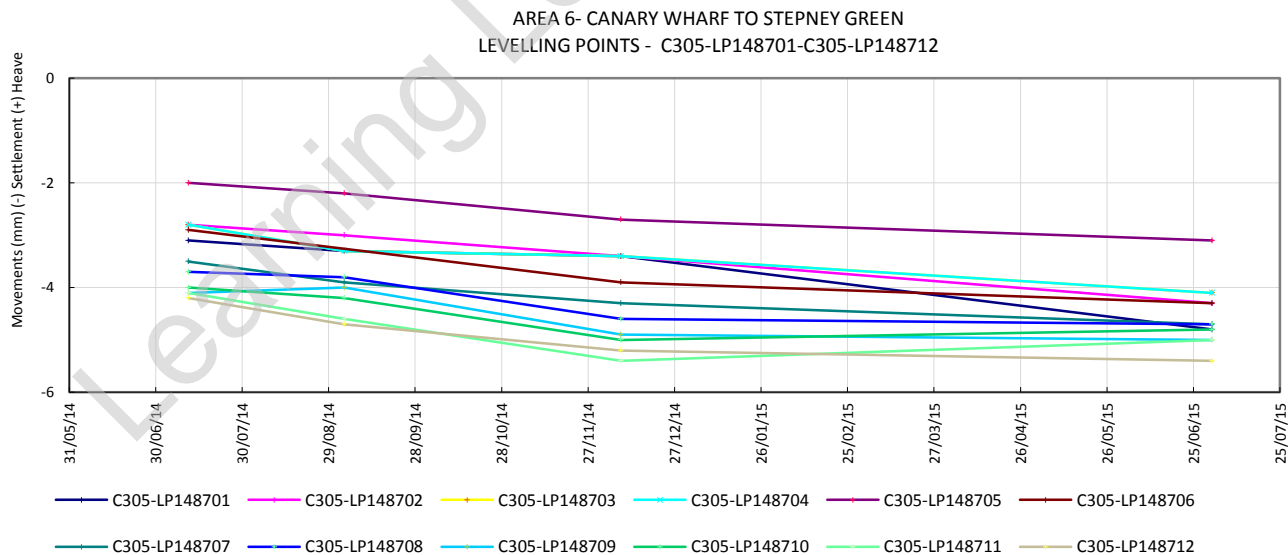
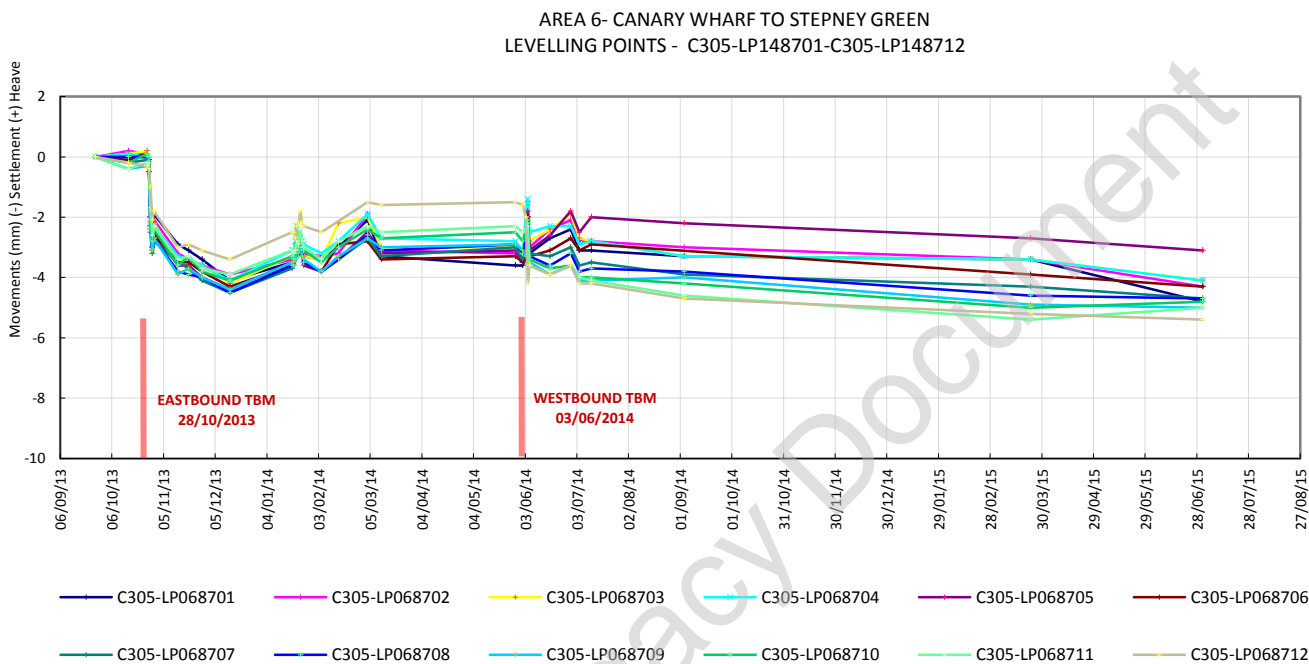
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	21/08/2014	03/09/2014	23/03/2015	01/07/2015	
C305-LP148601	-3.65	-3.60	-4.30	-4.90	-1.435
C305-LP148602	-3.70	-3.50	-4.10	-4.70	-1.200
C305-LP148603	-3.60	-3.80	-4.20	-4.30	-0.756
C305-LP148604	-3.45	-3.50	-4.40	-4.40	-1.219
C305-LP148605	-3.70	-4.00	-5.50	-5.20	-1.908
C305-LP148606	-3.00	-3.20	-3.90	-3.70	-0.877
C305-LP148607	-3.70	-3.80	-4.60	-5.00	-1.488
C305-LP148608	-2.90	-3.20	-3.60	-4.40	-1.465
C305-LP148609	-3.65	-3.60	-4.60	-5.40	-2.013
C305-LP148610	-3.20	-3.40	-4.10	-4.80	-1.699
C305-LP148611	-3.25	-3.20	-4.20	-5.00	-2.013
C305-LP148612	-3.50	-3.70	-4.30	-4.80	-1.385
C305-LP148613	-3.70	-4.40	-5.50	-5.40	-1.840
C305-LP148614	-3.80	-3.90	-5.00	-5.20	-1.700
C305-LP148615	-3.95	-4.20	-5.20	-5.80	-2.037
C305-LP148616	-4.55	-4.70	-5.80	-6.70	-2.374
C305-LP148617	-4.60	-5.10	-6.10	-7.20	-2.667
C305-LP148618	-5.15	-5.80	-6.30	-7.80	-2.478
C305-LP148619	-6.50	-7.20	-7.60	-8.70	-2.016
C305-LP148620	-5.45	-5.90	-7.10	-7.40	-2.165
C305-LP148621	-5.65	-6.60	-7.00	-7.40	-1.549
C305-LP148622	-4.80	-5.10	-6.60	-5.90	-1.542
C305-LP148623	-5.25	-5.90	-6.70	-7.10	-1.868
C305-LP148624	-4.85	-5.20	-6.30	-7.00	-2.330
C305-LP148625	-3.30	-3.10	4.00	-4.20	-1.229
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	96%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 96%

**C305-LP148701 – C305-LP148712**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -4.4 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -5.4 mm after the Westbound TBM transit.



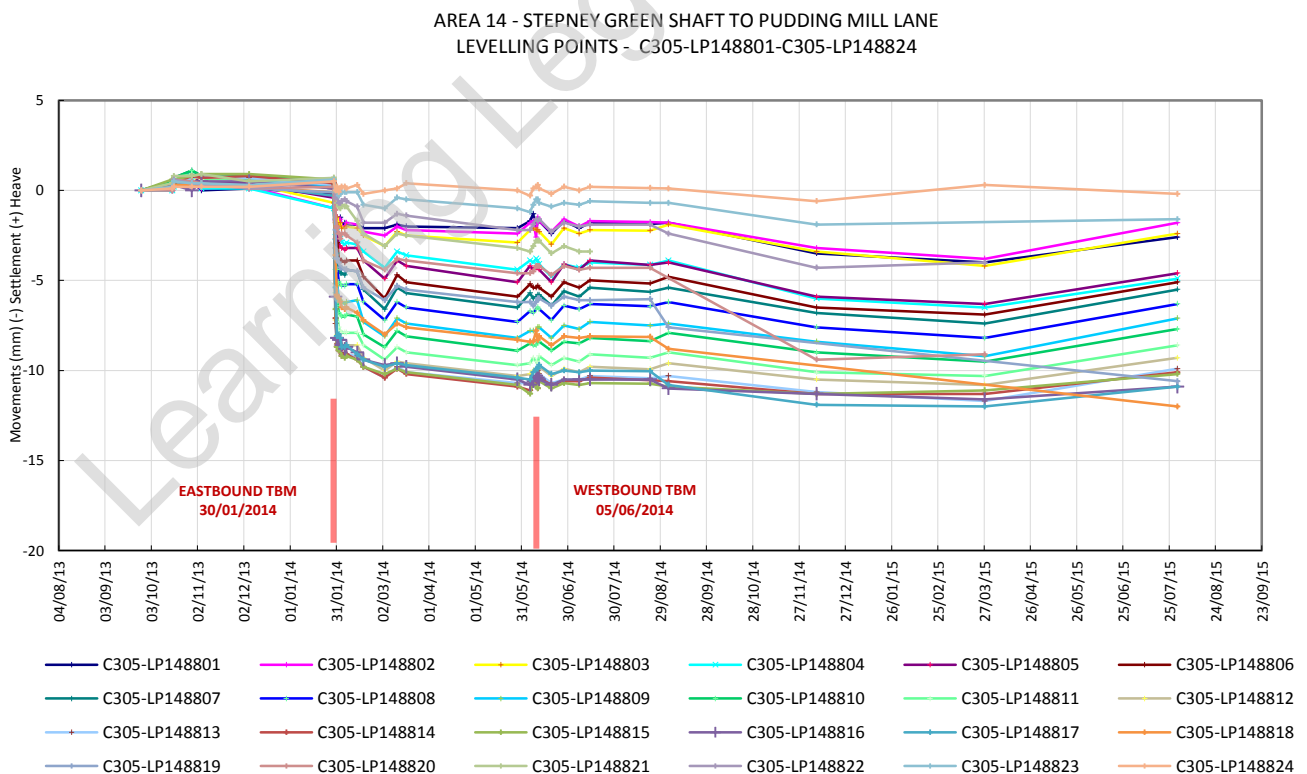
The table below lists the annual settlement rate for the levelling points in this array.

	Registered movement (mm)				mm/year
	11/07/2014	03/09/2014	08/12/2014	01/07/2015	
C305-LP148701	-3.10	-3.30	-3.40	-4.80	-1.751
C305-LP148702	-2.80	-3.00	-3.40	-4.30	-1.552
C305-LP148703	-2.80	-3.30	-3.40	-4.10	-1.210
C305-LP148704	-2.80	-3.30	-3.40	-4.10	-1.210
C305-LP148705	-2.00	-2.20	-2.70	-3.10	-1.129
C305-LP148706	-2.90	#N/A	-3.90	-4.30	-1.396
C305-LP148707	-3.50	-3.90	-4.30	-4.70	-1.156
C305-LP148708	-3.70	-3.80	-4.60	-4.70	-1.074
C305-LP148709	-4.10	-4.00	-4.90	-5.00	-1.048
C305-LP148710	-4.00	-4.20	-5.00	-4.80	-0.823
C305-LP148711	-4.10	-4.60	-5.40	-5.00	-0.817
C305-LP148712	-4.20	-4.70	-5.20	-5.40	-1.123
	Rate less than -2.5 mm/year			% less 2 mm/ year	100%
	Rate greater than -3.5 mm/year			% less 3 mm/ year	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%

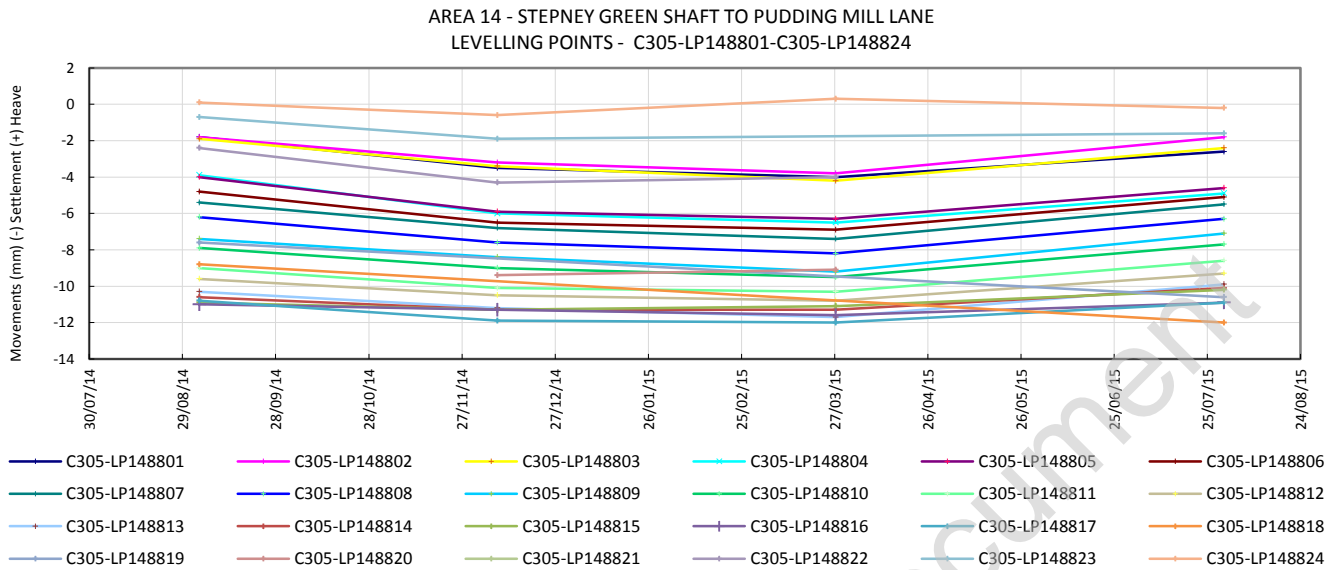
**C305-LP148801 – C305-LP148824**

The graph presented below shows the levelling point readings from this array. A maximum settlement of -10.5 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -12 mm after the Westbound TBM transit.





The next plot shows the trend line adjustment for the levelling points in this array.



The table below lists the annual settlement rate for the levelling points in this array.

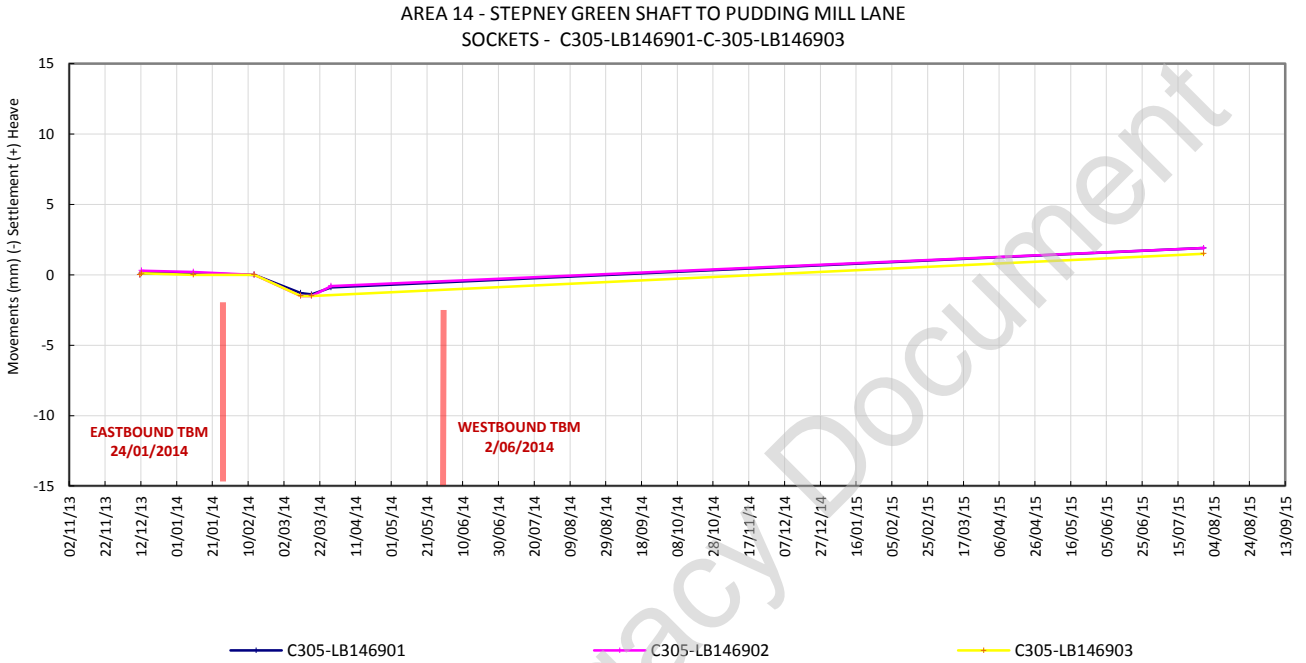
	Registered movement (mm)				mm/year
	03/09/2014	08/12/2014	27/03/2015	30/07/2015	
C305-LP148801	-1.80	-3.50	-4.00	-2.60	-0.824
C305-LP148802	-1.80	-3.20	-3.80	-1.80	-0.048
C305-LP148803	-1.90	-3.40	-4.20	-2.40	-0.615
C305-LP148804	-3.90	-6.00	-6.50	-4.90	-0.996
C305-LP148805	-4.00	-5.90	-6.30	-4.60	-0.570
C305-LP148806	-4.80	-6.50	-6.90	-5.10	-0.276
C305-LP148807	-5.40	-6.80	-7.40	-5.50	-0.152
C305-LP148808	-6.20	-7.60	-8.20	-6.30	-0.152
C305-LP148809	-7.40	-8.40	-9.20	-7.10	0.171
C305-LP148810	-7.90	-9.00	-9.50	-7.70	0.161
C305-LP148811	-9.00	-10.10	-10.30	-8.60	0.454
C305-LP148812	-9.60	-10.50	-10.80	-9.30	0.305
C305-LP148813	-10.30	-11.20	-11.70	-9.90	0.351
C305-LP148814	-10.60	-11.30	-11.30	-10.10	0.580
C305-LP148815	-10.90	-11.30	-11.10	-10.20	0.818
C305-LP148816	-11.00	-11.30	-11.60	-10.90	0.045
C305-LP148817	-10.80	-11.90	-12.00	-10.90	-0.036
C305-LP148818	-8.80	#N/A	#N/A	-12.00	#N/A
C305-LP148819	-7.60	#N/A	#N/A	-10.60	#N/A
C305-LP148820	#N/A	-9.40	-9.10	#N/A	1.005
C305-LP148821	#N/A	#N/A	#N/A	#N/A	#N/A
C305-LP148822	-2.40	-4.30	-4.00	#N/A	#N/A
C305-LP148823	-0.70	-1.90	#N/A	-1.60	-0.722
C305-LP148824	0.10	-0.60	0.30	-0.20	0.006
	Rate less than -2.5 mm/year			<b>% less 2 mm/ year</b>	100%
	Rate greater than -3.5 mm/year			<b>% less 3 mm/ year</b>	100%

The percentage of the levelling points with a settlement rate less than 2 mm/year is 100%

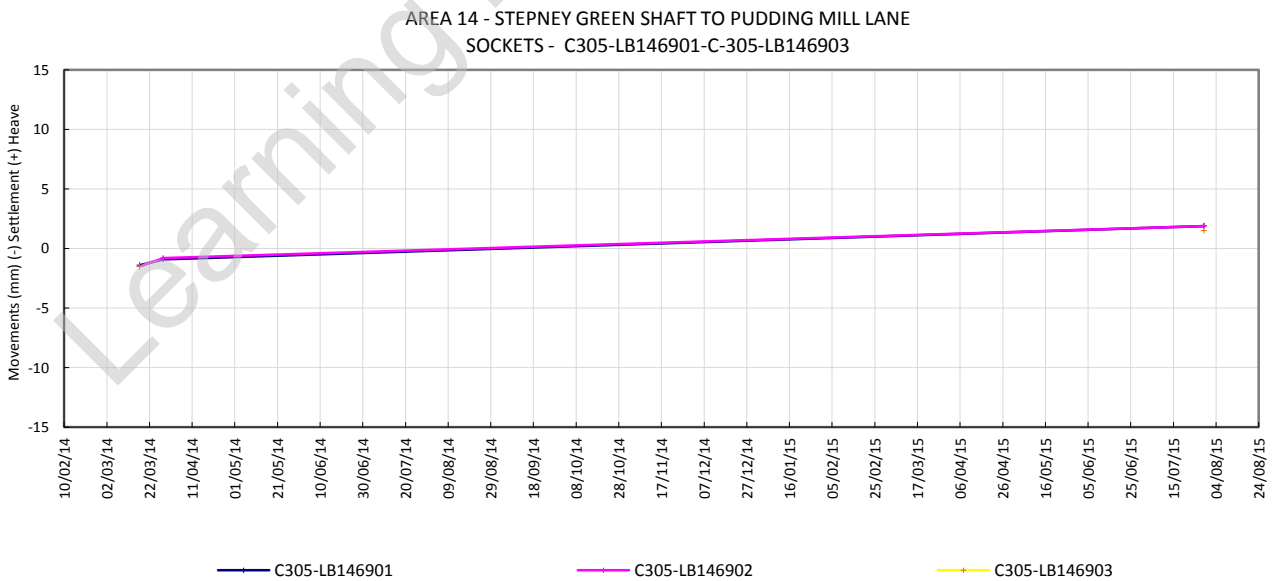
SOCKETS

**C305-LB146901 – C305-LB146903**

The graph presented below shows the socket readings from this array. A total maximum settlement of –1.5 mm was recorded after the Eastbound and TBM transit and no settlement was evident after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



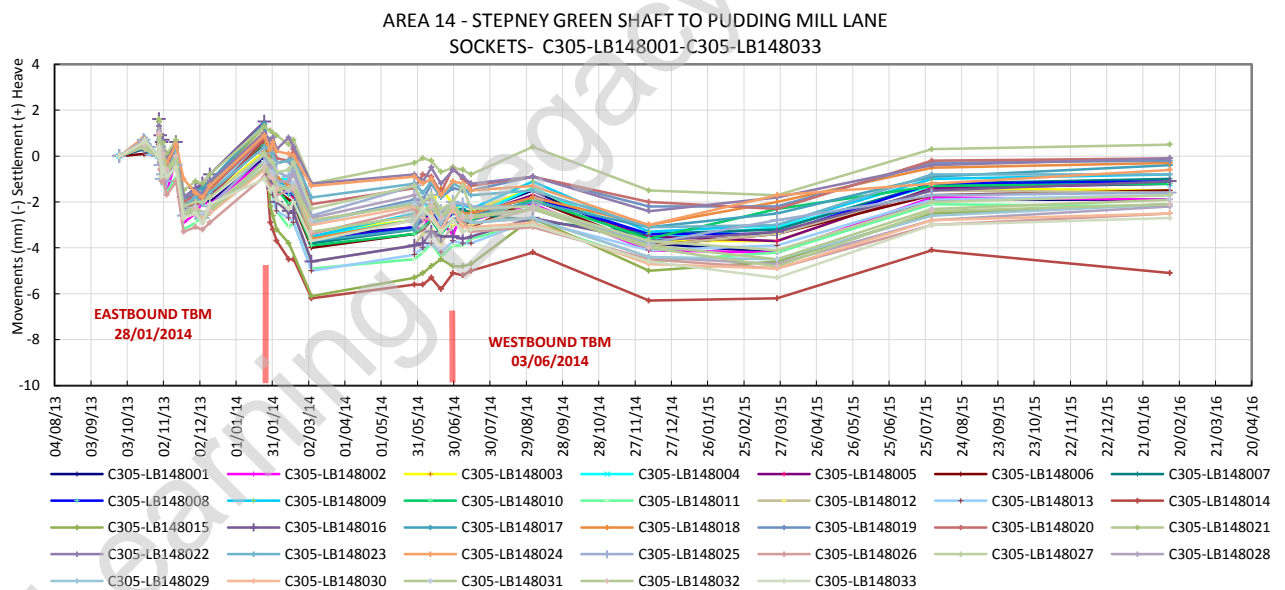
The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)			mm/year
	17/03/2014	28/03/2014	29/07/2015	
C305-LB146901	-1.40	-0.90	1.90	2.261
C305-LB146902	-1.50	-0.80	1.90	2.264
C305-LB146903	-1.50		1.50	2.195
	Rate less than -2.5 mm/year			100%
	Rate greater than -3.5 mm/year			100%

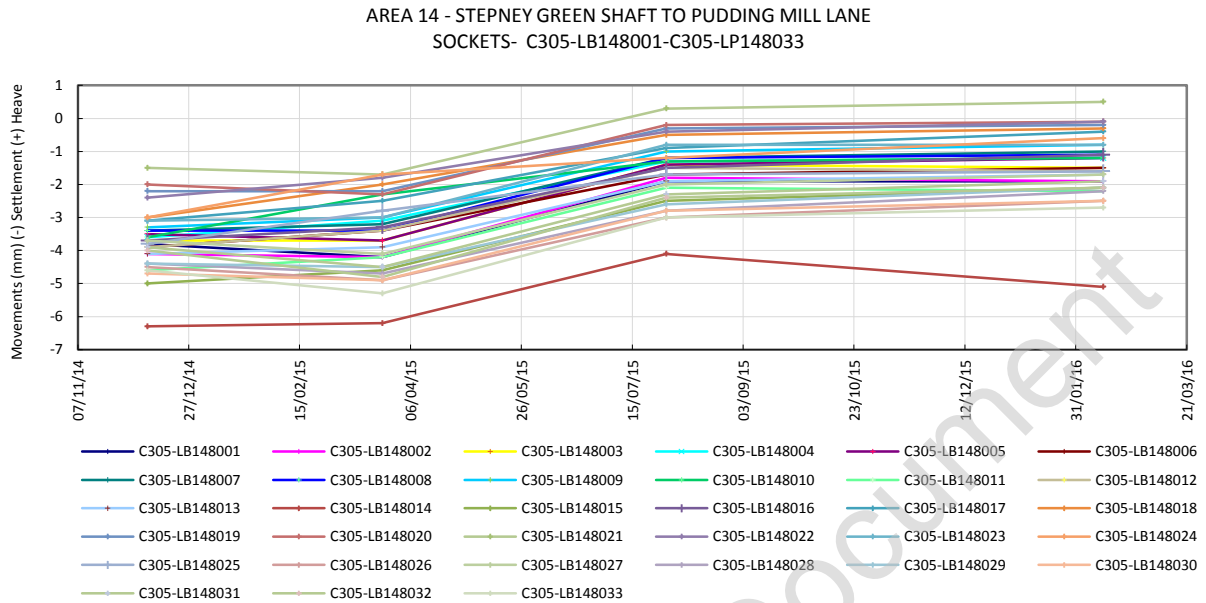
The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

### C305-LB148001 – C305-LB148033

The graph presented below shows the socket readings from this array. A maximum settlement of -6.1 mm was recorded after the Eastbound TBM transit and a total maximum settlement of -6.3 mm after the Westbound TBM transit.



The next plot shows the trend line adjustment for the sockets in this array.



The table below lists the annual settlement rate for the sockets in this array.

	Registered movement (mm)				mm/year
	08/12/2014	24/03/2015	30/07/2015	12/02/2016	
C305-LB148001	-3.80	-4.20	-1.90	-1.90	2.002
C305-LB148002	-4.10	-4.20	-1.80	-1.90	2.221
C305-LB148003	-3.70	-3.70	-1.40	-1.50	2.191
C305-LB148004	-3.60	-3.10	-1.30	-1.20	2.206
C305-LB148005	-3.50	-3.70	-1.40	-1.20	2.307
C305-LB148006	-3.90	-3.40	-1.70	-1.50	2.191
C305-LB148007	-3.40	-3.20	-1.20	-1.00	2.283
C305-LB148008	-3.40	-3.40	-1.20	-1.10	2.260
C305-LB148009	-3.30	-3.00	-1.00	-0.80	2.351
C305-LB148010	-3.60	-2.30	-1.30	-1.20	1.960
C305-LB148011	-4.60	-4.20	-2.10	-2.20	2.266
C305-LB148012	-3.90	-3.40	-1.50	-1.60	2.136
C305-LB148013	-4.10	-3.90	-1.90	-1.70	2.283
C305-LB148014	-6.30	-6.20	-4.10	-5.10	1.302
C305-LB148015	-5.00	-4.60	-2.50	-2.10	2.687
C305-LB148016	-3.70	-3.30	-1.50	-1.10	2.390
C305-LB148017	-3.10	-2.50	-0.90	-0.40	2.413
C305-LB148018	-3.00	-2.00	-0.50	-0.30	2.334
C305-LB148019	-2.20	-2.20	-0.30	-0.20	1.964
C305-LB148020	-2.00	-2.30	-0.20	-0.10	1.957
C305-LB148021	-1.50	-1.70	0.30	0.50	2.010

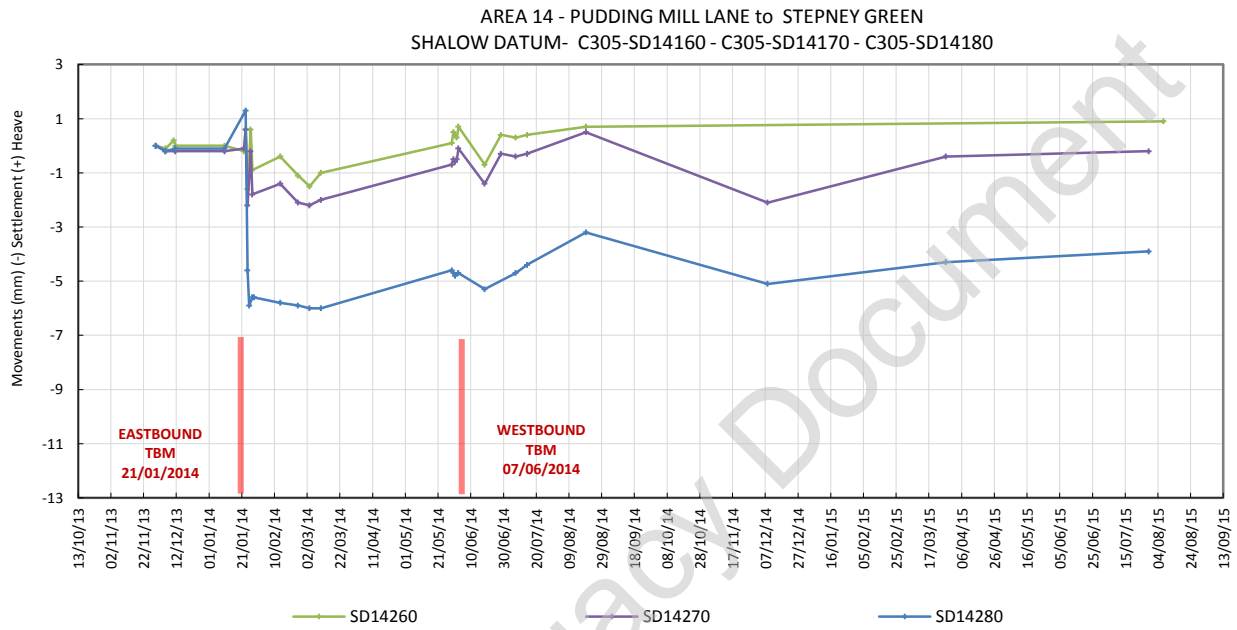
	Registered movement (mm)				mm/year
	08/12/2014	24/03/2015	30/07/2015	12/02/2016	
C305-LB148022	-2.40	-1.80	-0.40	-0.10	2.047
C305-LB148023	-3.10	-3.00	-0.80	-0.80	2.244
C305-LB148024	-3.00	-1.70	-1.20	-0.60	1.887
C305-LB148025	-3.80	-2.80	-1.70	-1.60	1.854
C305-LB148026	-4.50	-4.90	-3.00	-2.50	2.028
C305-LB148027	-3.70	-4.10	-2.00	-1.70	2.057
C305-LB148028	-4.40	-4.70	-2.80	-2.20	2.181
C305-LB148029	-4.40	-4.50	-2.60	-2.10	2.233
C305-LB148030	-4.70	-4.90	-2.80	-2.50	2.194
C305-LB148031	-3.90	-4.50	-2.30	-1.90	2.104
C305-LB148032	-4.00	-4.80	-2.40	-2.10	2.081
C305-LB148033	-4.60	-5.30	-3.00	-2.70	2.050
	Rate less than -2.5 mm/year		% less 2 mm/ year		100%
	Rate greater than -3.5 mm/year		% less 3 mm/ year		100%

The percentage of the sockets with a settlement rate less than 2 mm/year is 100%.

**SHALLOW DATUM**

**C305-SD14260, C305-SD14270 and C305-SD14280**

The graph below shows the data of shallow datum: C305-SD14260, C305-SD14270 and C305-SD14280; there is a maximum settlement of -6.0mm after the Eastbound TBM transit and -5.3mm after the Westbound TBM transit.



## 8. SUMMARY STATEMENT

It has been agreed between the Project Manager, the Designer, the Contractor and the Sub Contractor that the instrumentation covered within this report; for monitoring ground movement effects of Crossrail works, including long term effects, can be decommissioned as the annual settlement rate, are approaching or have achieved the specified 2 mm/yr settlement rate.

Minutes of the close out review meeting are included in appendix C.

The data presented in this report shows that some monitoring points were affected by site construction activities; most notably Ham and Wick excavation and site works and excavation of Eleanor Shaft by others. In most instances long term annual settlement rates and projection trends have achieved or are approaching the specified 2 mm/year settlement rate.

The following arrays were noted to be in abeyance (for the specified 2mm/yr settlement rate):

### **Ham and Wick Works**

- Sub-area 2: C305-LP14255 – C305-LP14261
- Sub-area 2: C305-LP15055 – C305-LP15071
- Sub-area 2: C305-LB14201 – C305-LP14236

### **Eleanor Street Shaft**

- Sub-area 4: C305-LP141101 – C305-LP141139
- Sub-area 4: C305-LB144501 – C305-LP144539
- Sub-area 4: C305 - XR0143120

### **Mile End Shaft**

- Sub-area 5: C305-LP142501 – C305-LP142530
- Sub-area 5: C305-LP142801 – C305-LP142831
- Sub-area 5: C305-LP142940 – C305-LP142943
- Sub-area 5: C305-LP142901 – C305-LP142933
- Sub-area 5: C305-LP143101 – C305-LP143110
- Sub-area 5: C305 - XR0146010
- Sub-area 5: C305 - XR0146040
- Sub-area 5: C305 - XR0146050
- Sub-area 5: C305 - XR0146060

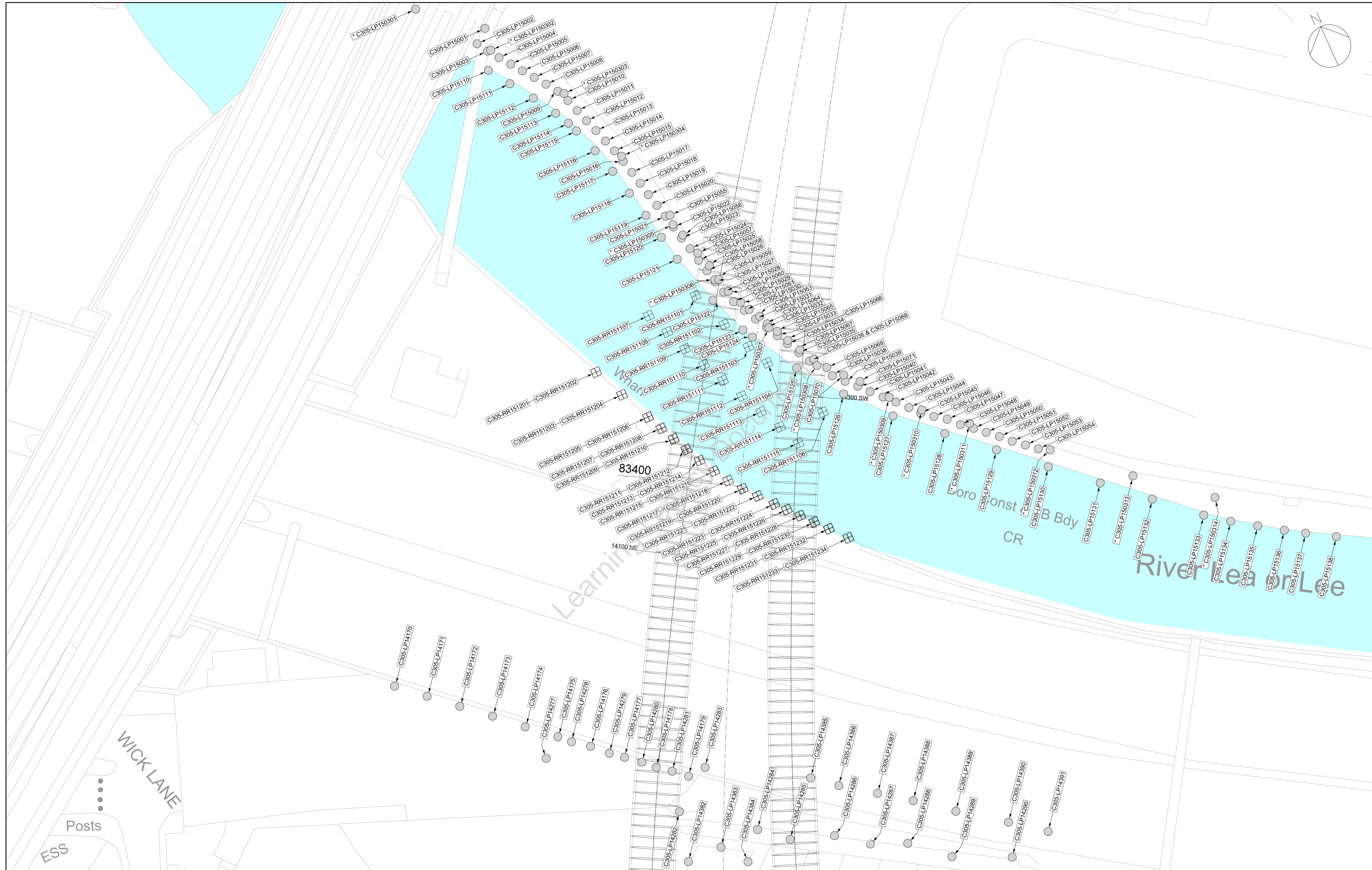
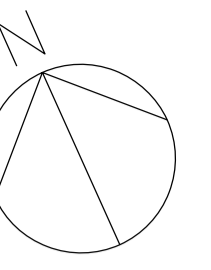
These arrays were discussed between the Project Manager, the Designer, the Contractor and the Sub Contractor, and agreement was reached that these exceptions can also be decommissioned as the monitoring data from the surrounding areas show that the annual ground settlement rates are in accordance with the required specification (See appendix C).

Learning Legacy Document

**APPENDIX A:**

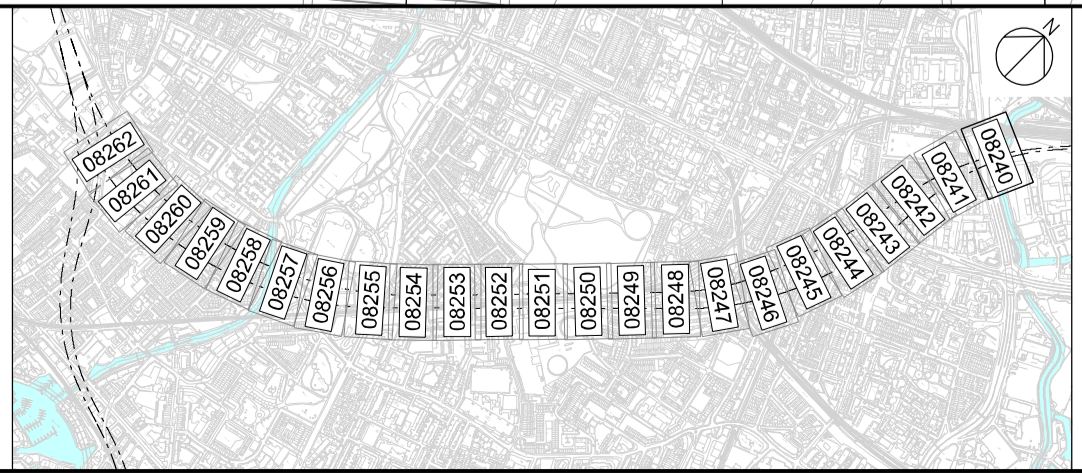
**LOCATION OF THE WORKS**





Rev.	Date	Description	By	Chkd	App	Auth
P01	09/12/2015	First Issue		MD	MD	MD
P02	17/12/2015			MD	MD	MD
P03	11/01/2016			MD	MD	MD
P04	20/04/2016			MD	MD	MD
P05	26/04/2016			MD	MD	MD
P06	09/06/2016			MD	MD	MD

- Notes
- Levelling Points
  - Sockets
  - 3D Prisms
  - Retro Targets



\*: The levelling points between C305-LP150301-C305-LP150314, have been installed to measure at the same time the horizontal displacement. Tape extensometer instrument has been used to get those readings.

Scale: 1:250 @ A1

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**Contract:** Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G  
**Originator:** Dragados Sisk Joint Venture  
**Location:** Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)

**Title:** Instrumentation & Monitoring  
 Installation Report for Instrumentation from  
 Pudding Mill Lane to Stepney Green (Drive Z)  
 C305-DSJ-C2-RGN-CRG03-50379

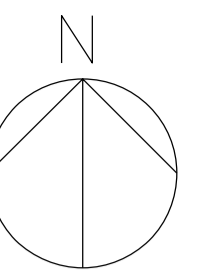
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P01	02/03/2015	First Issue		AH	AH	RC
P02	06/03/2015			MD	AH	RC
P03	20/03/2015			MD	AH	RC
P04	06/06/2016			MD	MD	MD

Notes

- Levelling Points



Contract : Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G  
 Originator : Dragados Sisk Joint Venture  
 Location : Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)  
 Title : Instrumentation & Monitoring  
 Installation Report for I&M installed as per MS  
 I&M Ham & Wick Control Section "E" Boreholes  
 C305-DSJ-C-GMS-CRG03-50020

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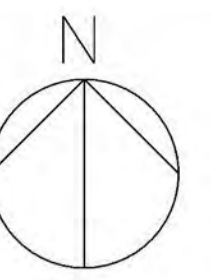
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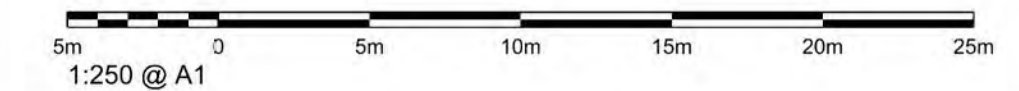
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P01	06/03/2015	First Issue	MD	AH	RC	-
P02	20/03/2015		MD	AH	RC	-
P03	22/04/2016		MD	MD	MD	-

- Notes
- ▽ (PV) Vibrating Wire Piezometers
  - ▽ (PS) Standpipe Piezometers
  - ◇ Rod Extensometers
  - Inclometers





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Originator:  
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Location:  
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Title:  
Instrumentation & Monitoring  
I&M Installation Report for Ham & Wick  
Control Section E Boreholes (Drive Z)  
C305-DSJ-C2-RGN-CRG03-50126

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Rev: P03

Suitability: S4

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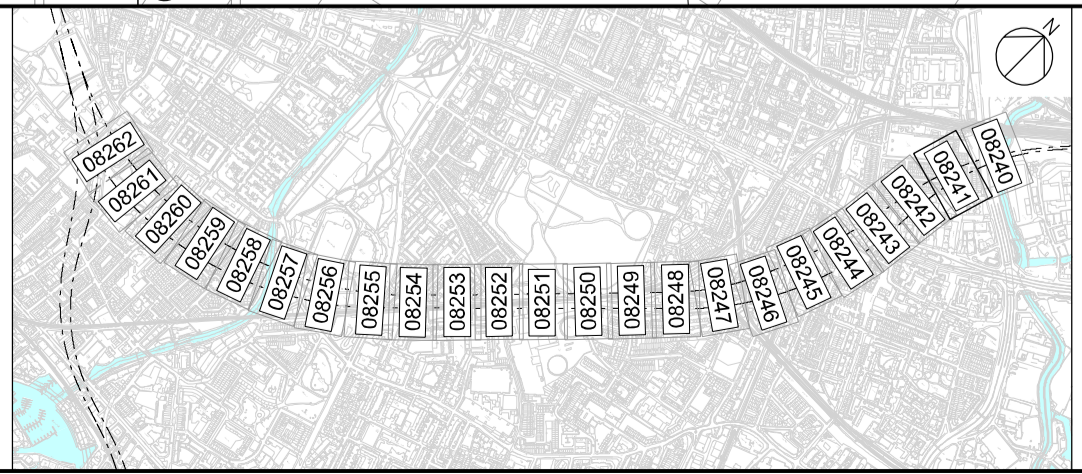




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P01	03/12/2015	First Issue	MD	MD	MD	-

**Notes**

- Levelling Points
- Sockets
- 3D Prisms



Scale: 1:250 @ A1

0 5m 10m 15m 20m 25m

**Crossrail**

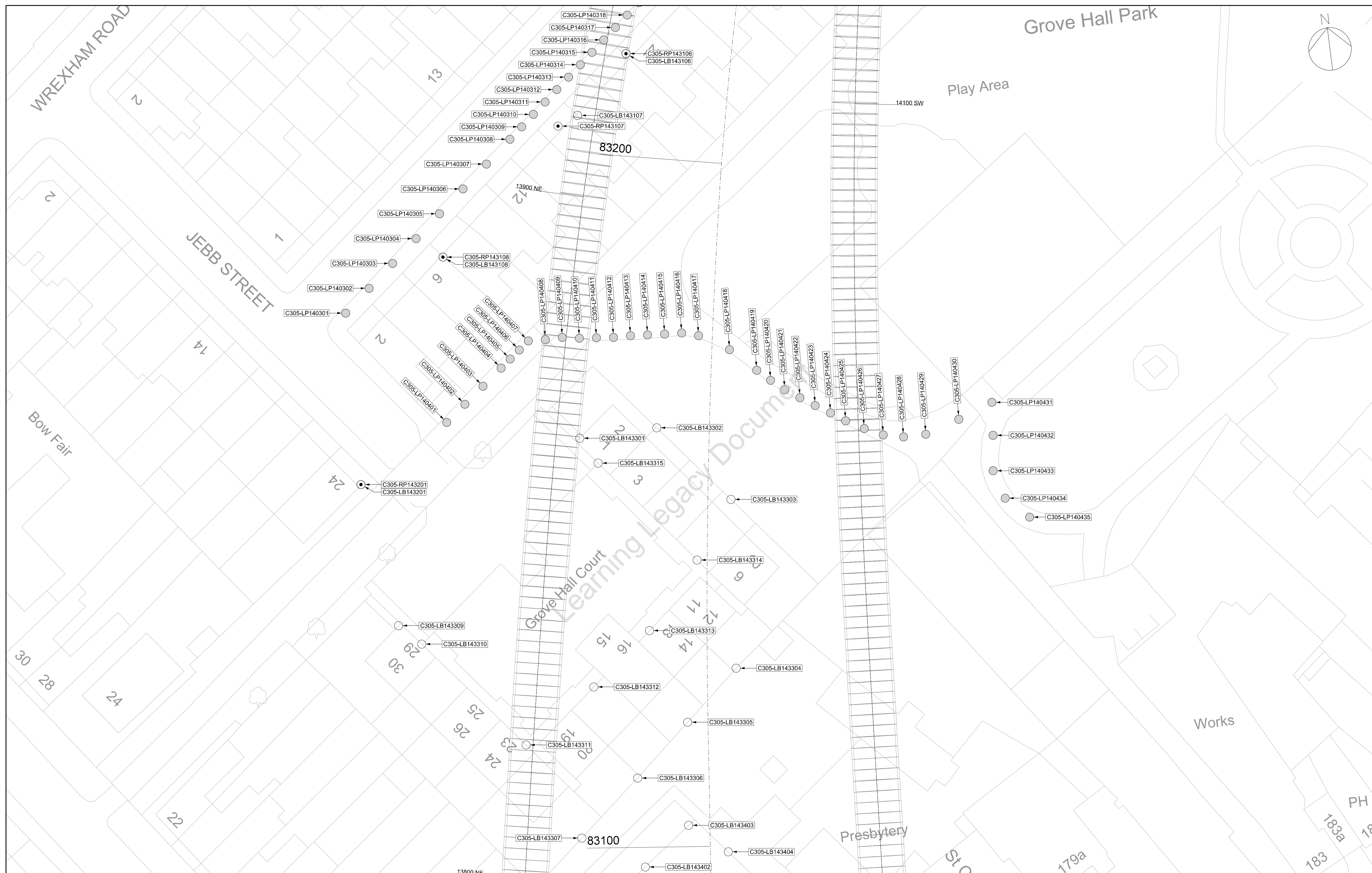
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 Suitability: S4

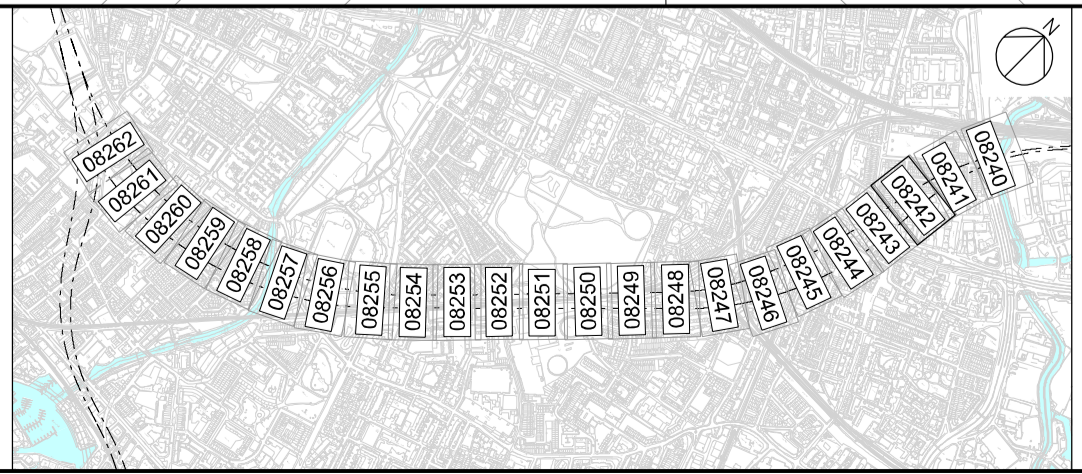
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P01	03/12/2015	First Issue	MD	MD	MD	-

- Notes
- Levelling Points
  - Sockets
  - 3D Prisms



Scale: 1:250 @ A1

5m 0 5m 10m 15m 20m 25m

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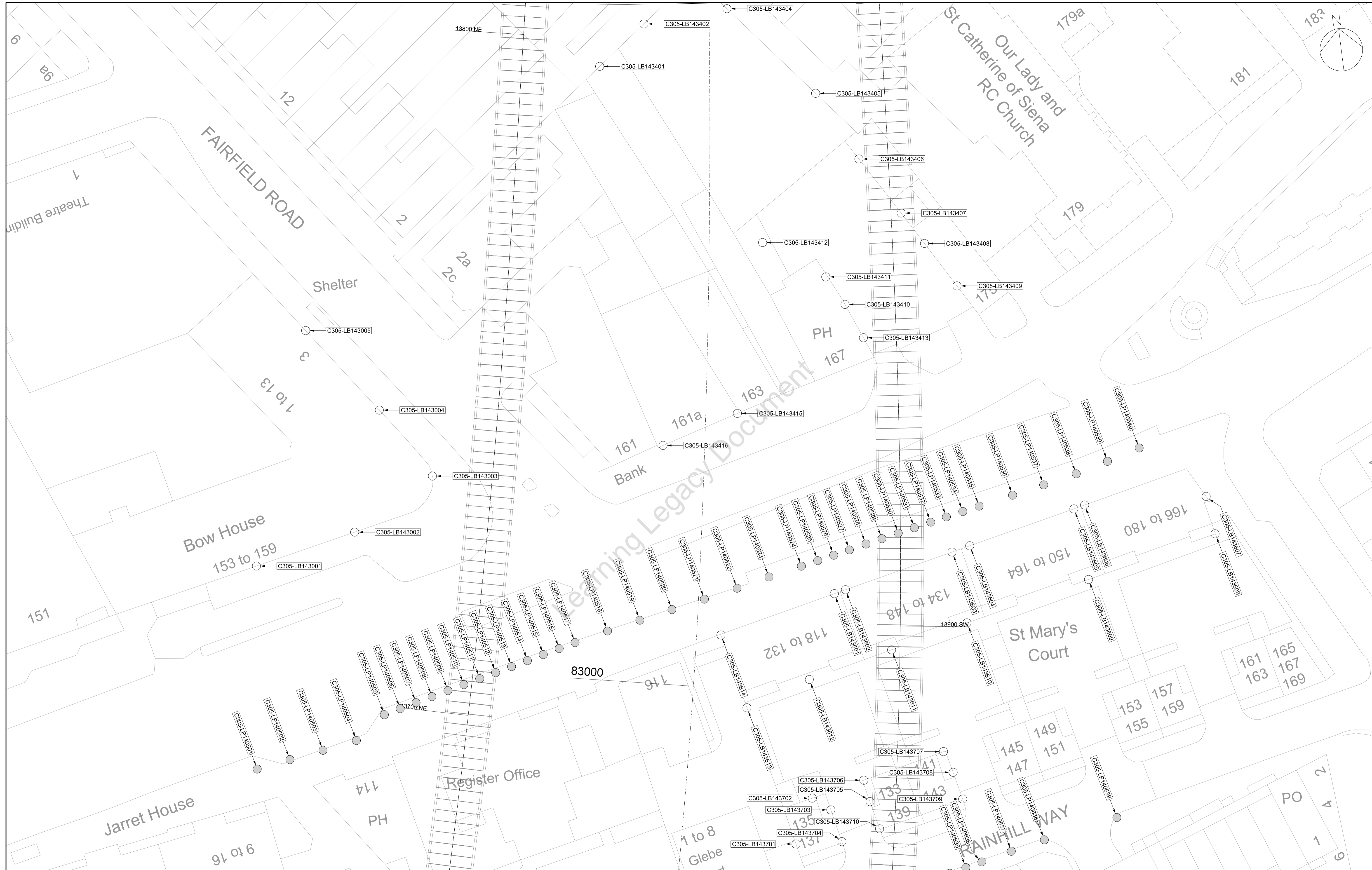
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 Rev: P01  
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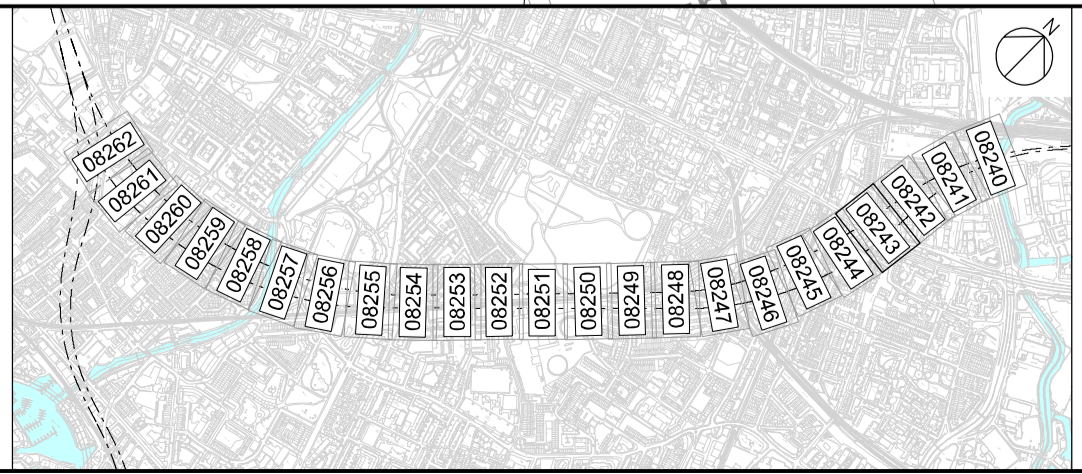
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- Notes
- Levelling Points
  - Sockets
  - 3D Prisms



Scale: 1:250 @ A1

0 5m 10m 15m 20m 25m

**Crossrail**

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 Installation Report for Instrumentation from  
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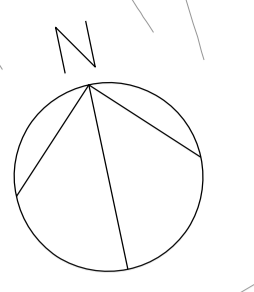
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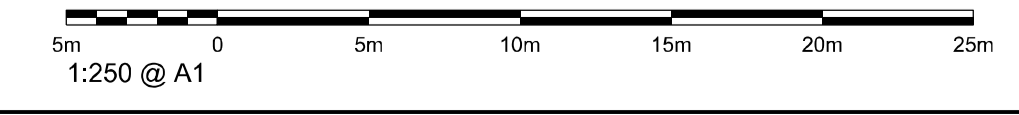
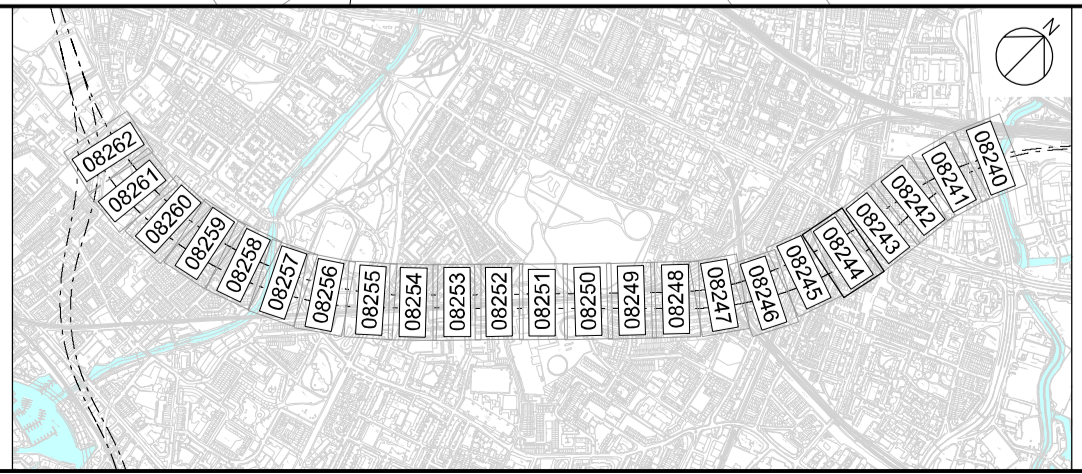





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- Notes**
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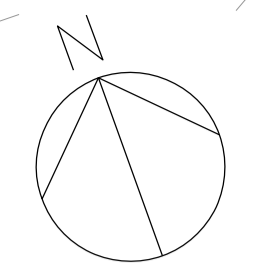
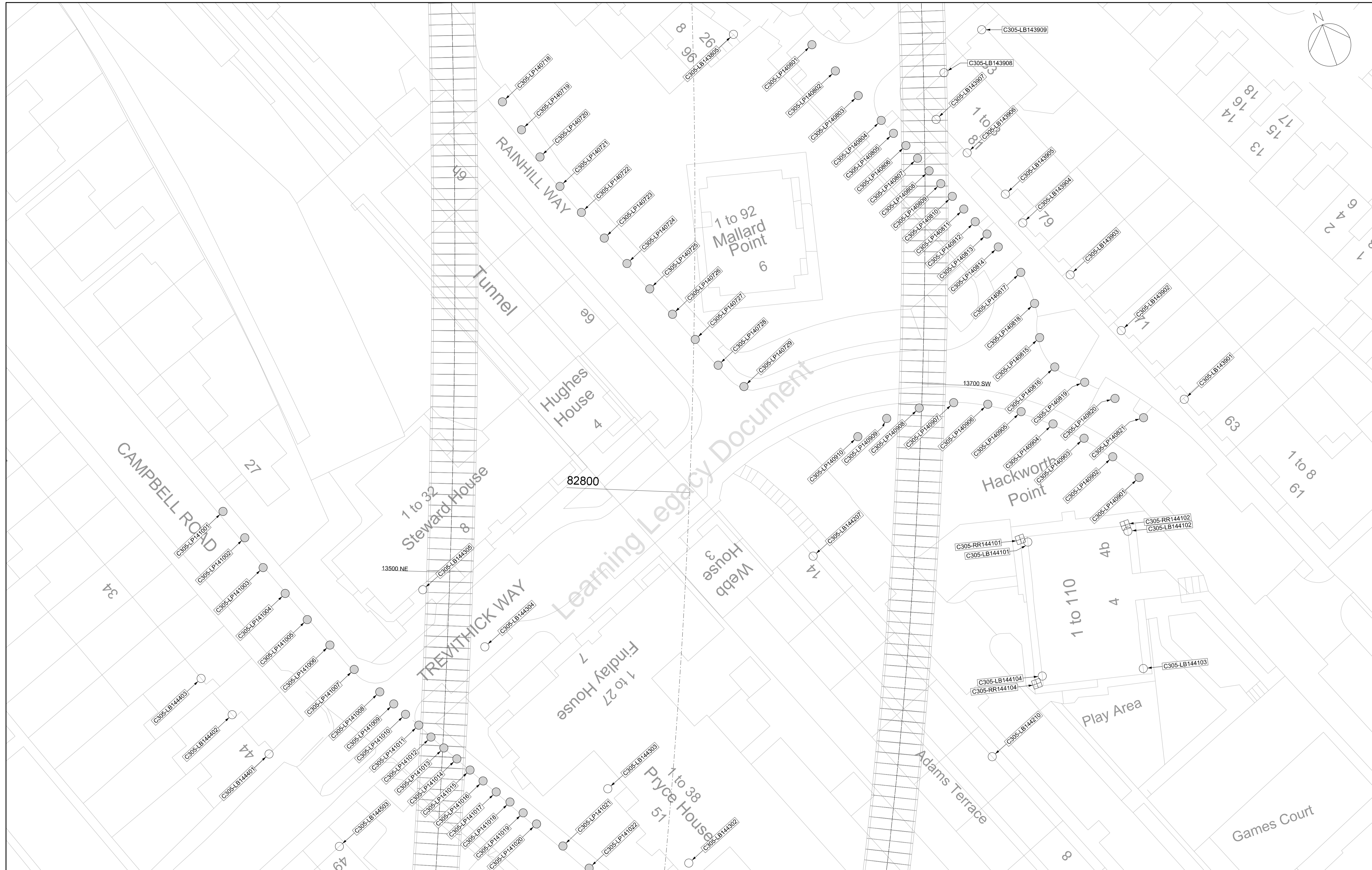
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 Suitability : S4

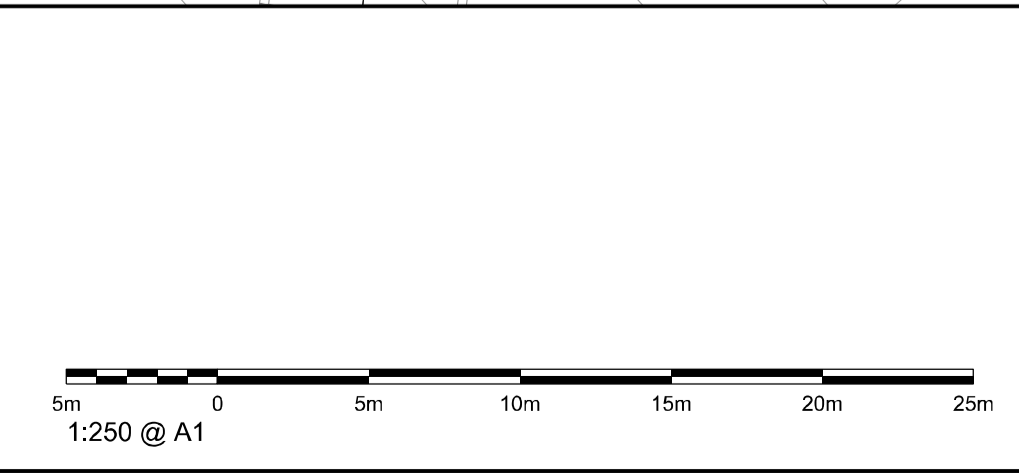
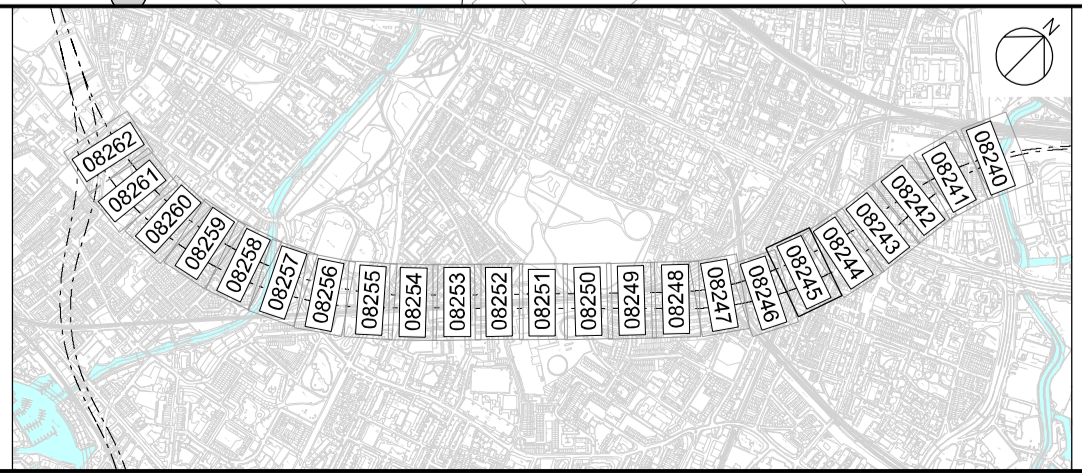
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P01	09/12/2015	First Issue		MD	MD	MD
P02	20/04/2016			MD	MD	MD

- Notes**
- Levelling Points
  - Sockets
  - 3D Prisms
  - Retro Targets




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**Originator:** Dragados Sisk Joint Venture  
**Location:** Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)  
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 By: [Redacted]  
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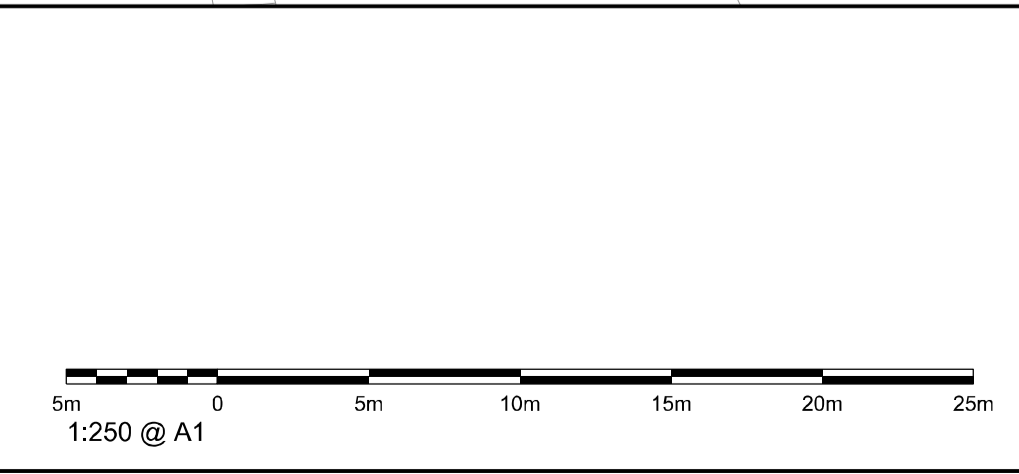
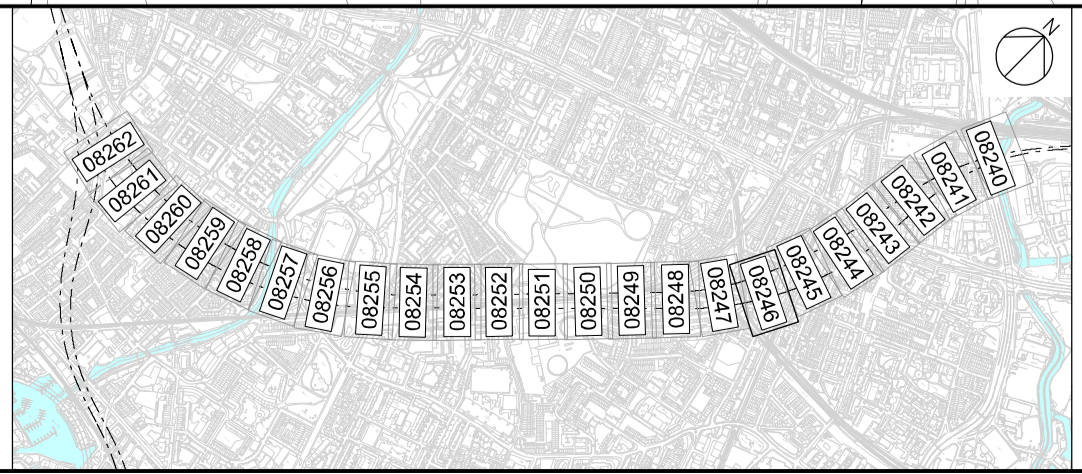
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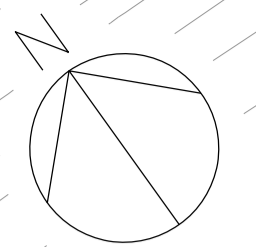
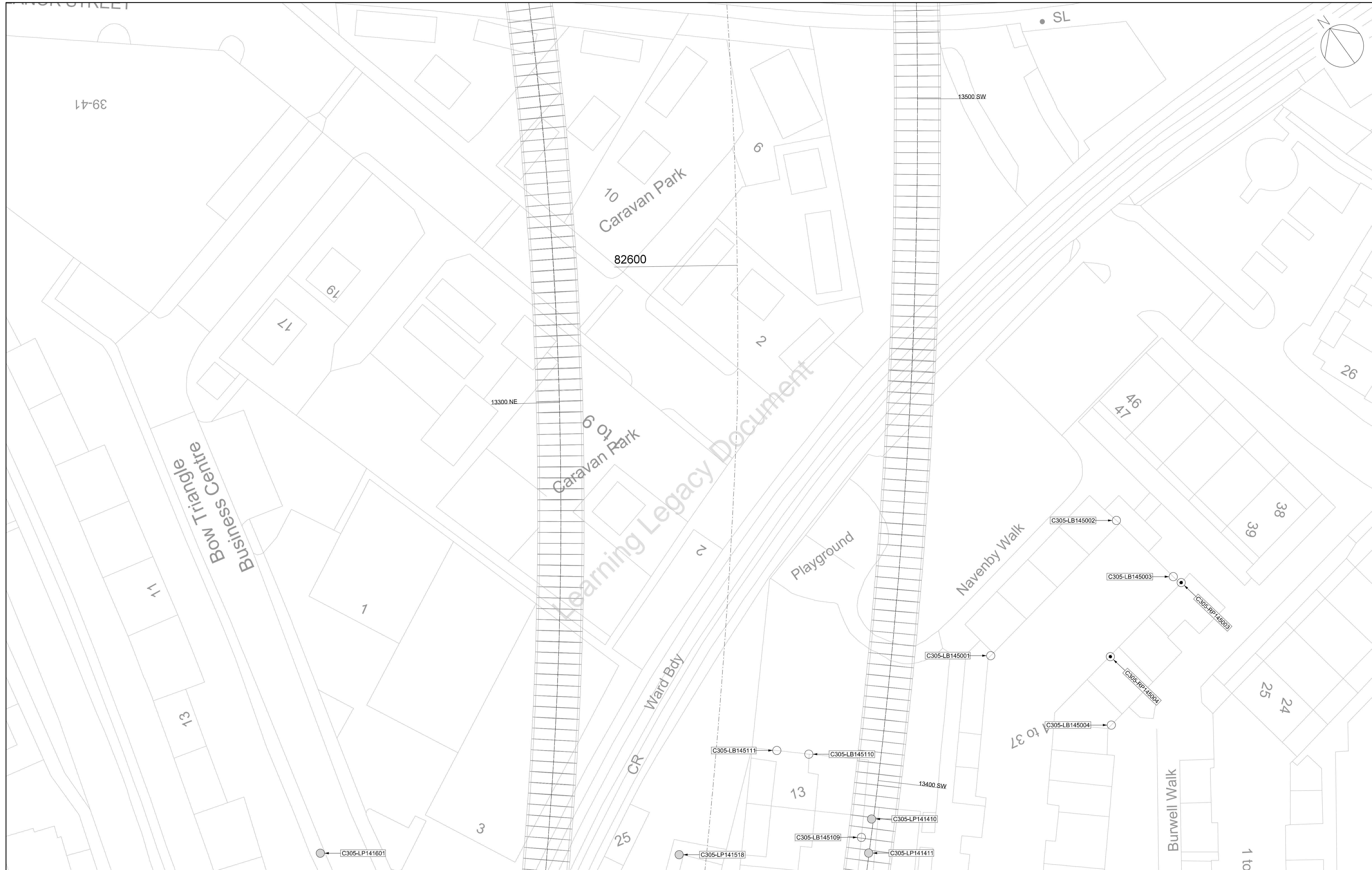
- Notes**
- Levelling Points
  - Sockets
  - 3D Prisms



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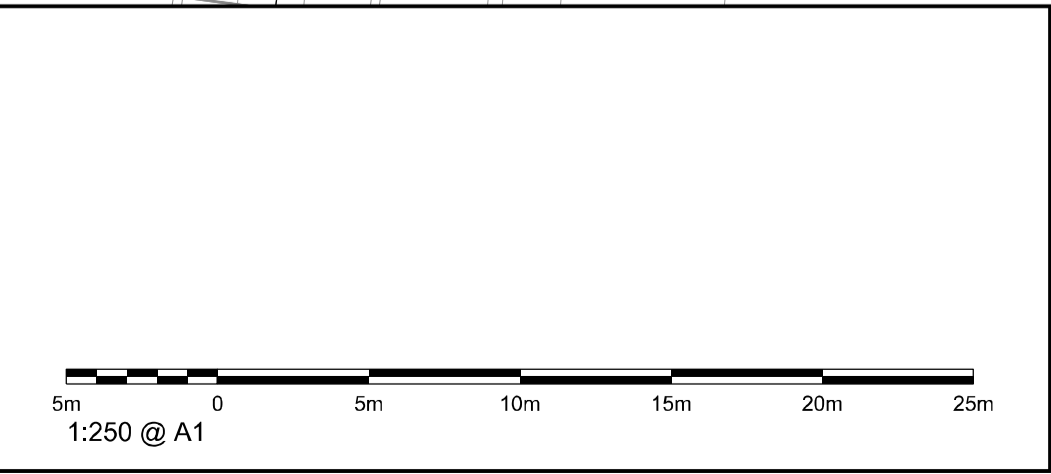
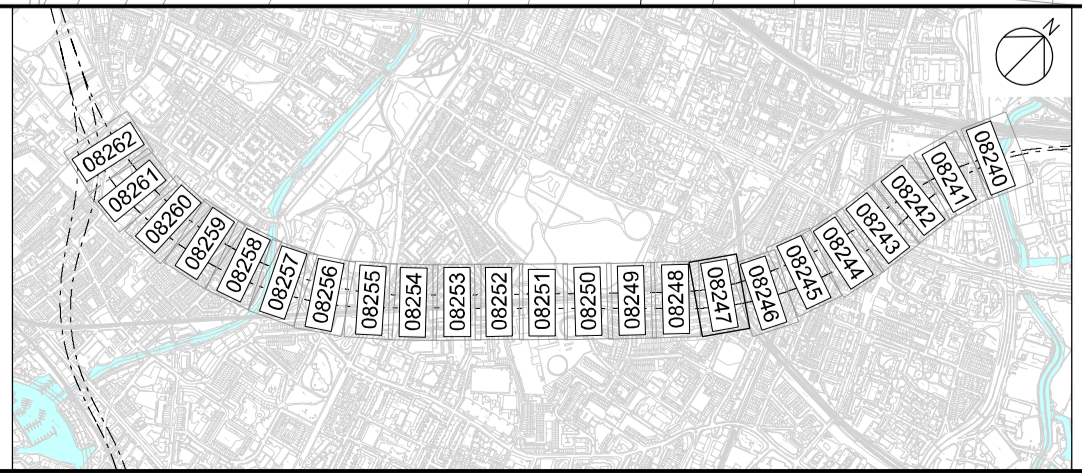




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- Notes**
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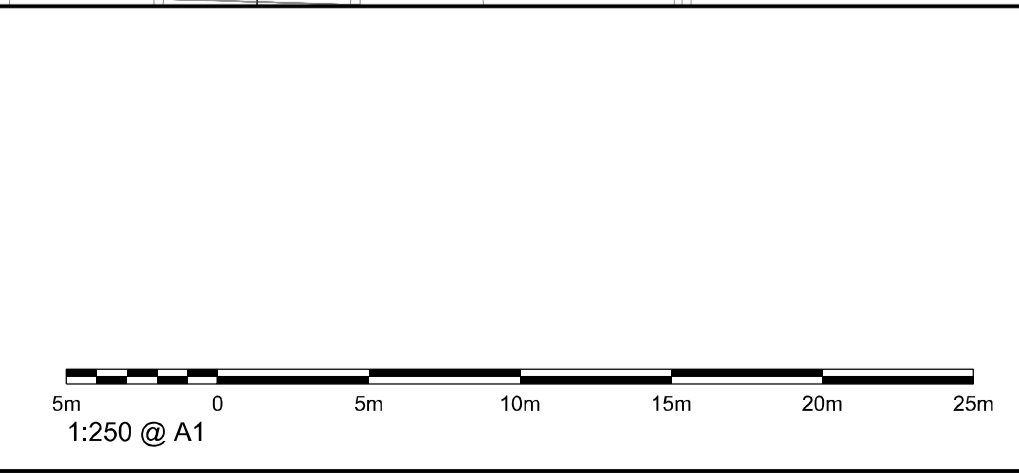
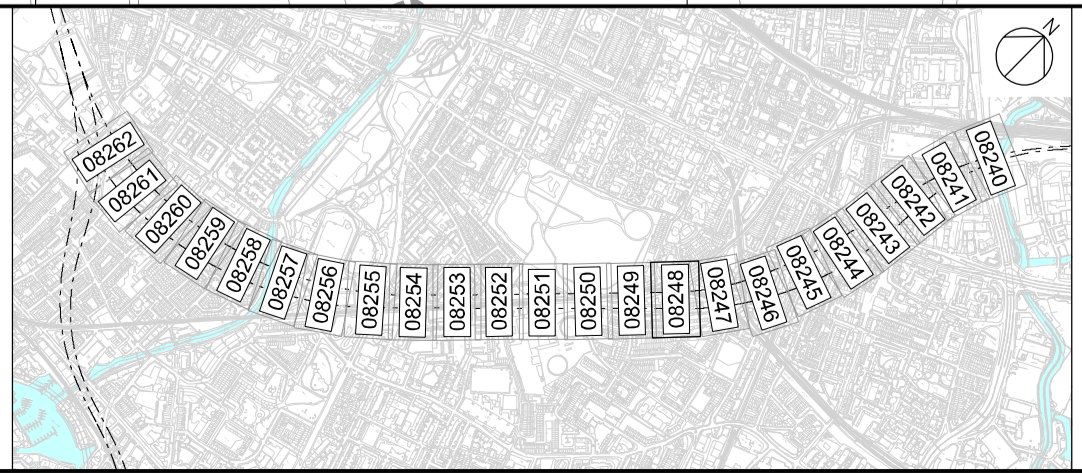
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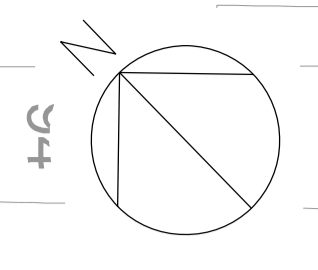
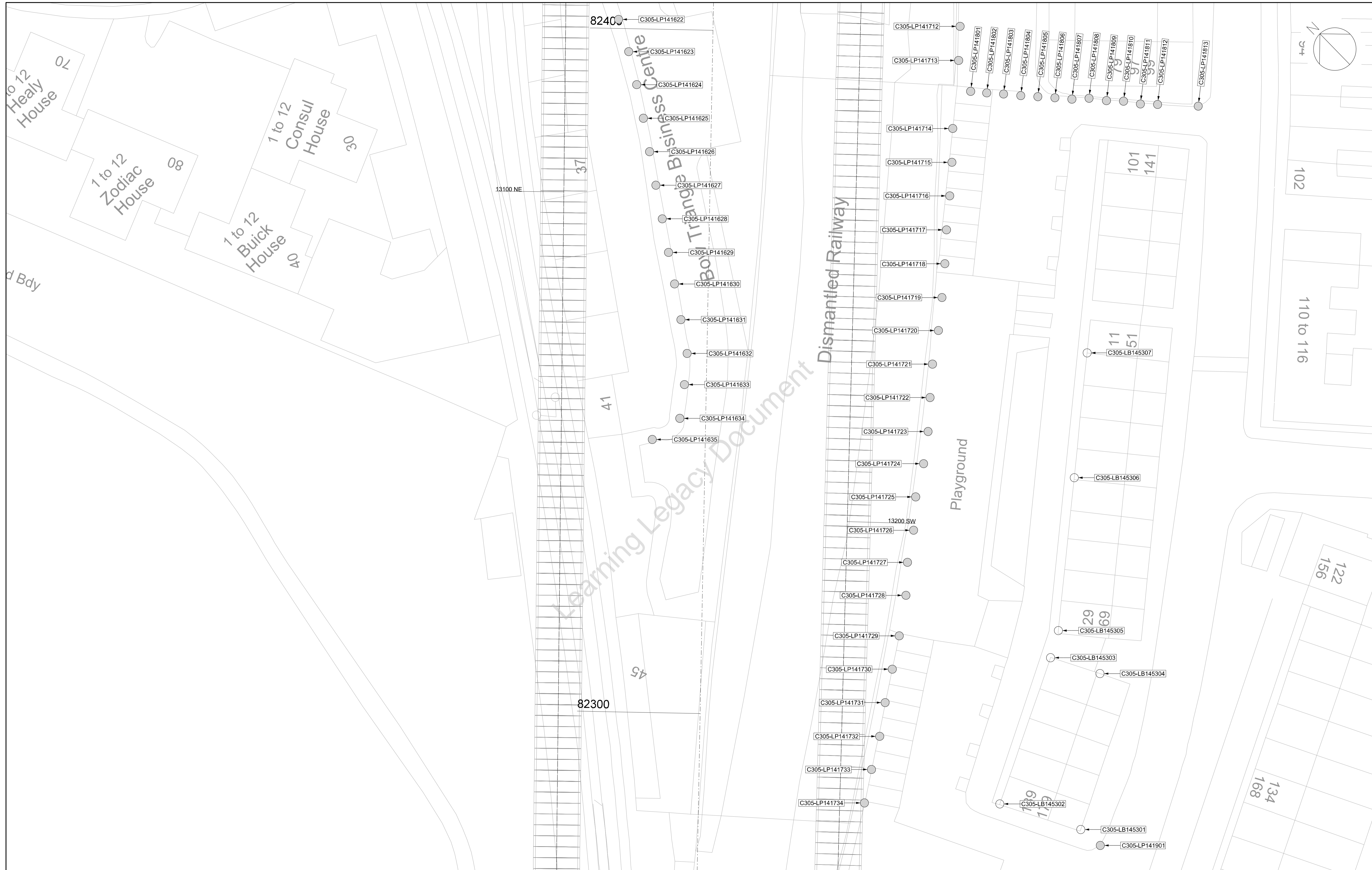
- Notes
- Levelling Points
  - Sockets
  - 3D Prisms




**Contract:** Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G  
**Originator:** Dragados Sisk Joint Venture  
**Location:** Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)  
**Title:** Instrumentation & Monitoring Installation Report for Instrumentation from Pudding Mill Lane to Stepney Green (Drive Z)  
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**Suitability:** S4

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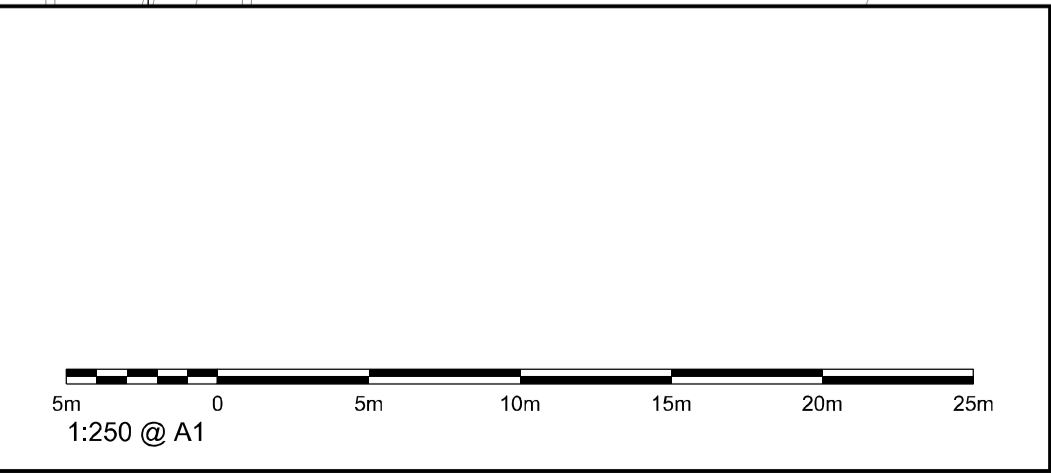
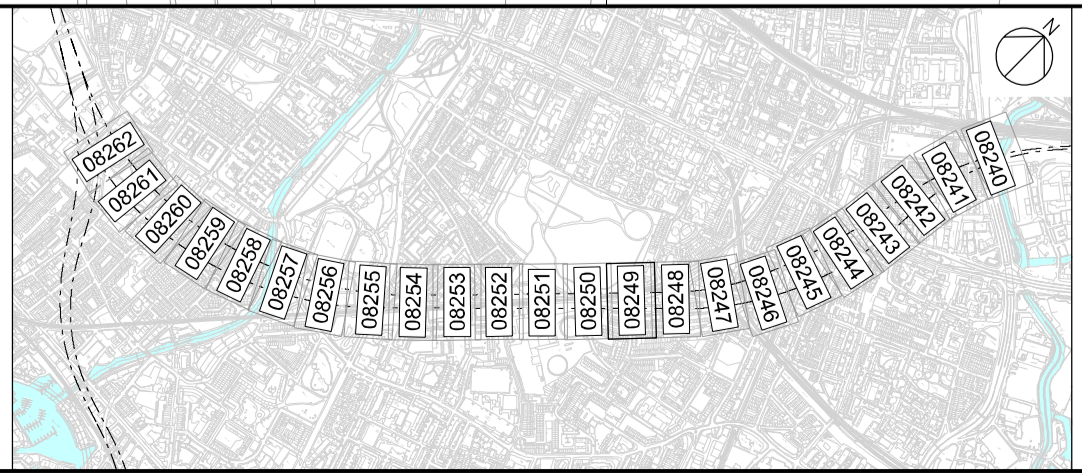





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- Notes**
- Levelling Points
  - Sockets
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**Contract:**  
Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G

**Originator:**  
Dragados Sisk Joint Venture

**Location:**  
Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)

**Title:**  
Instrumentation & Monitoring  
Installation Report for Instrumentation from  
Pudding Mill Lane to Stepney Green (Drive Z)  
C305-DSJ-C2-RGN-CRG03-50379

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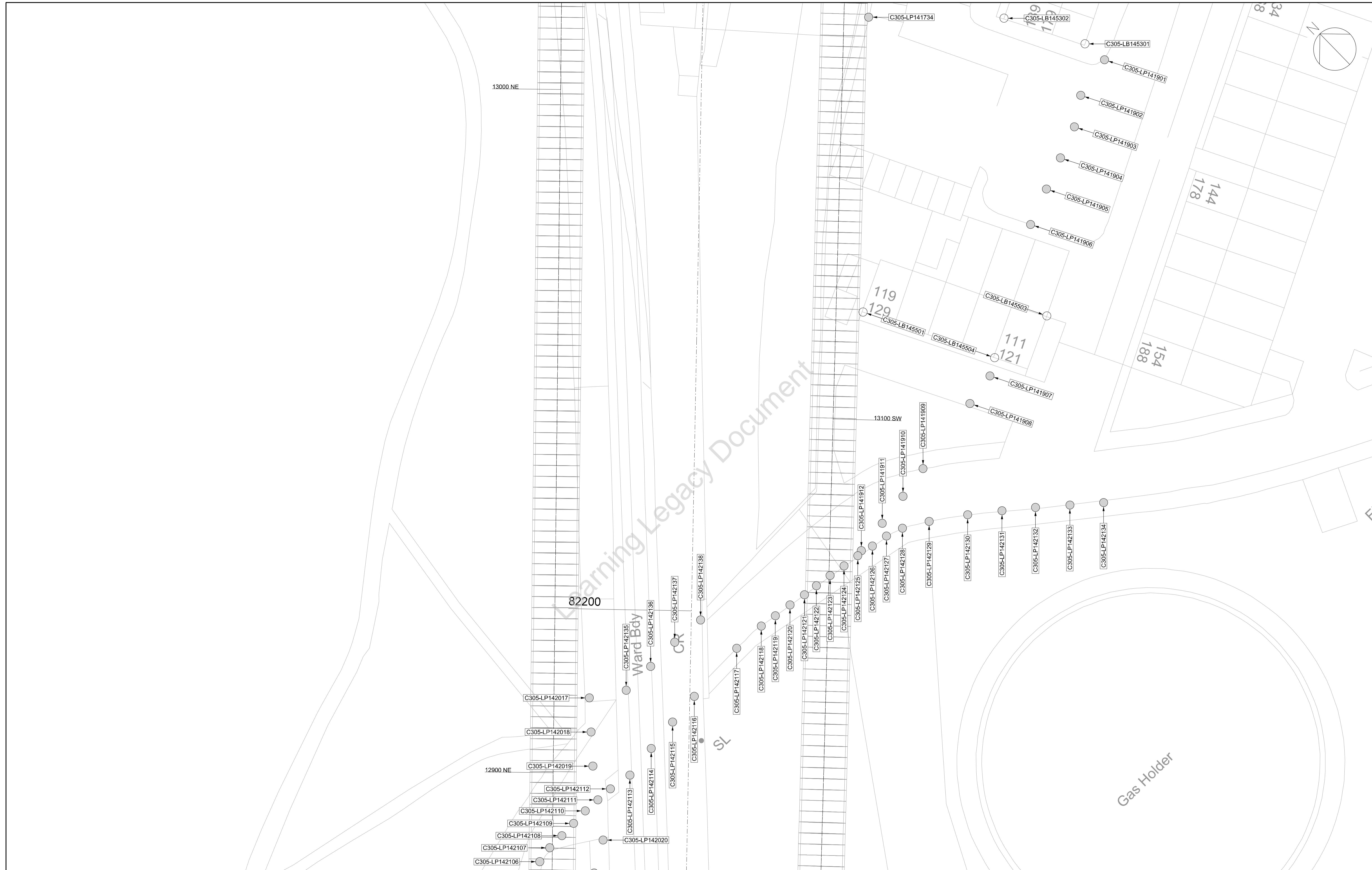
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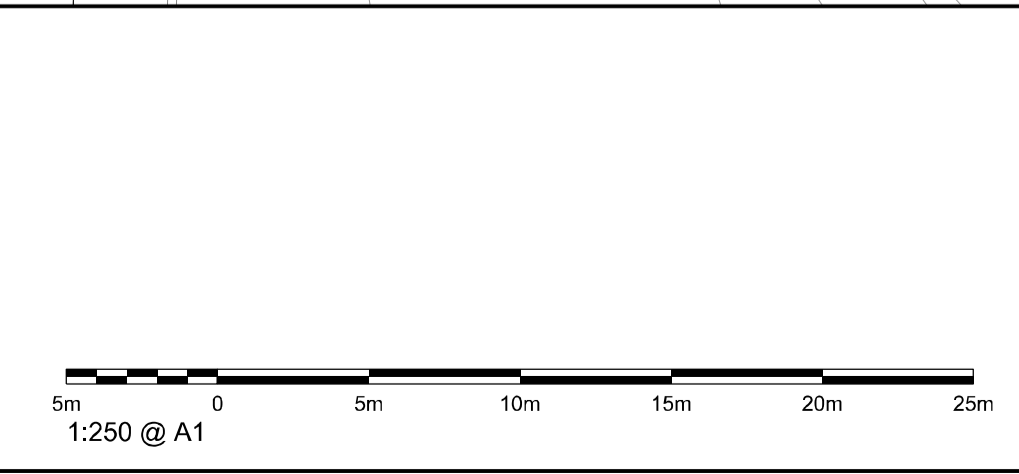
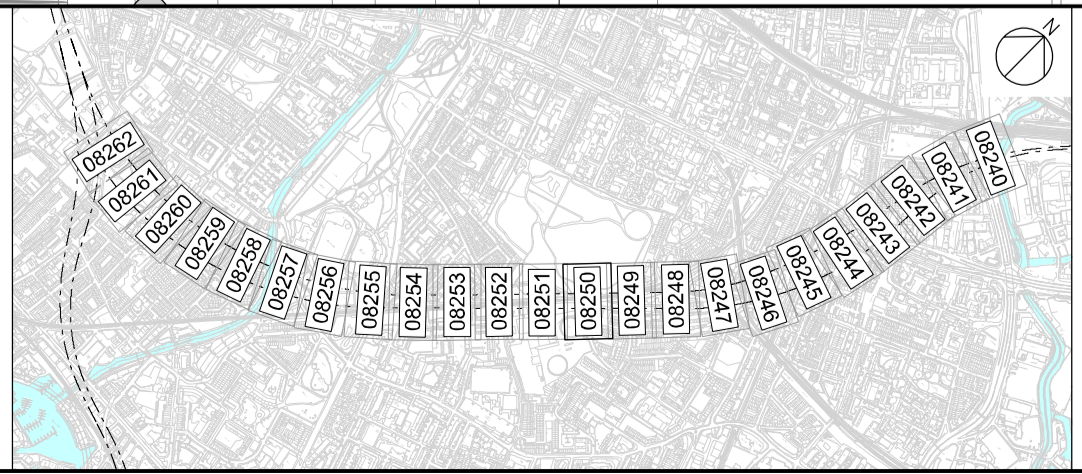
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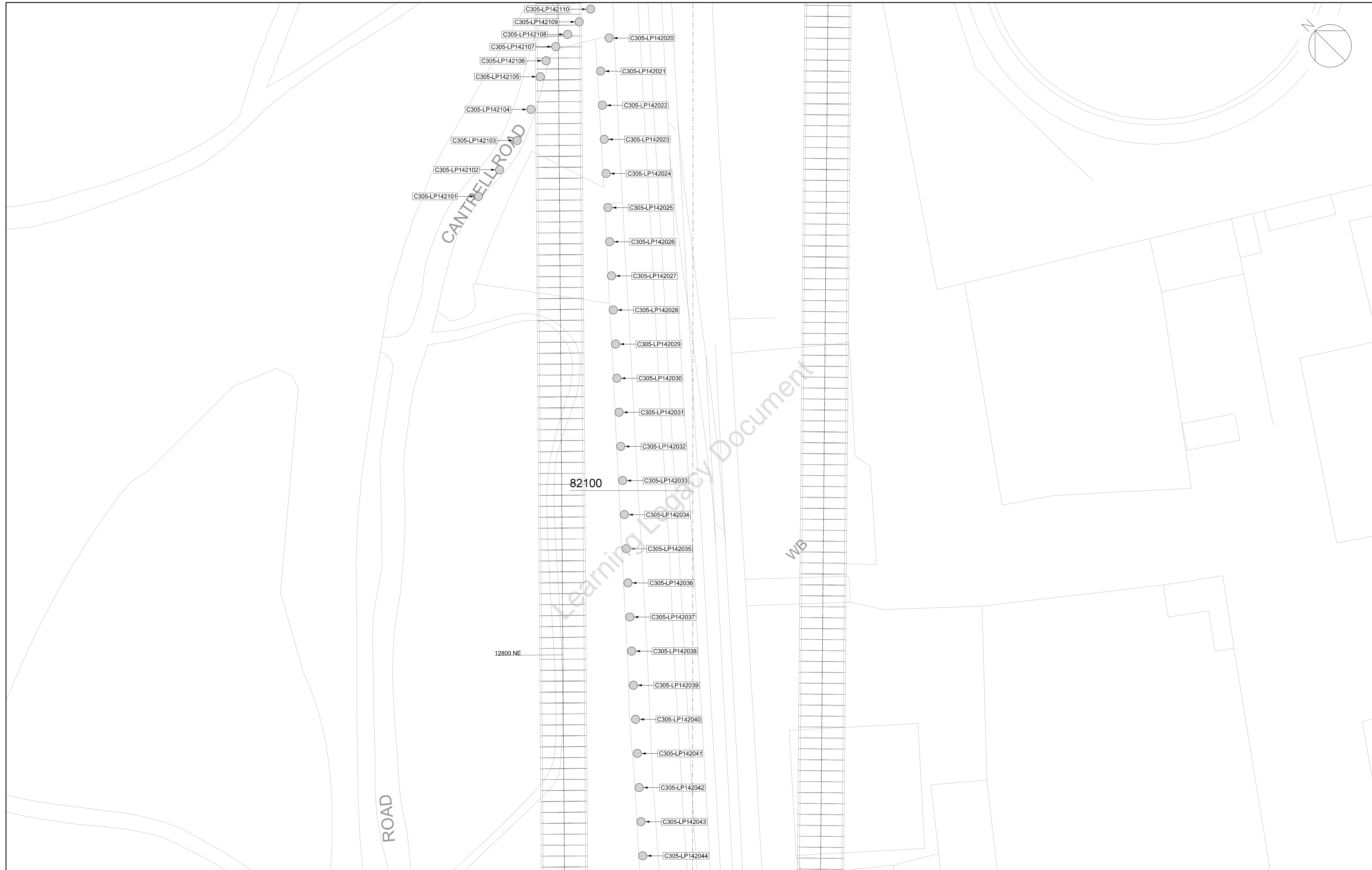
- Notes**
- Levelling Points
  - Sockets
  - 3D Prisms



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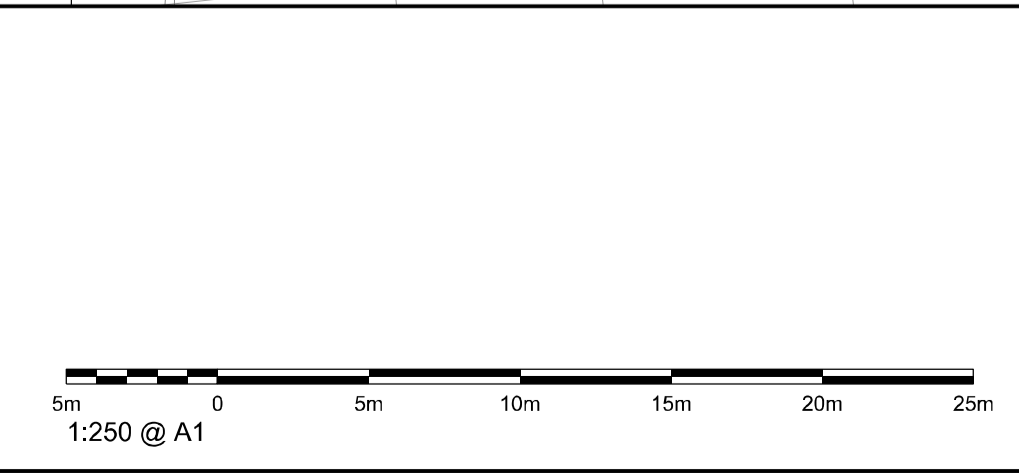
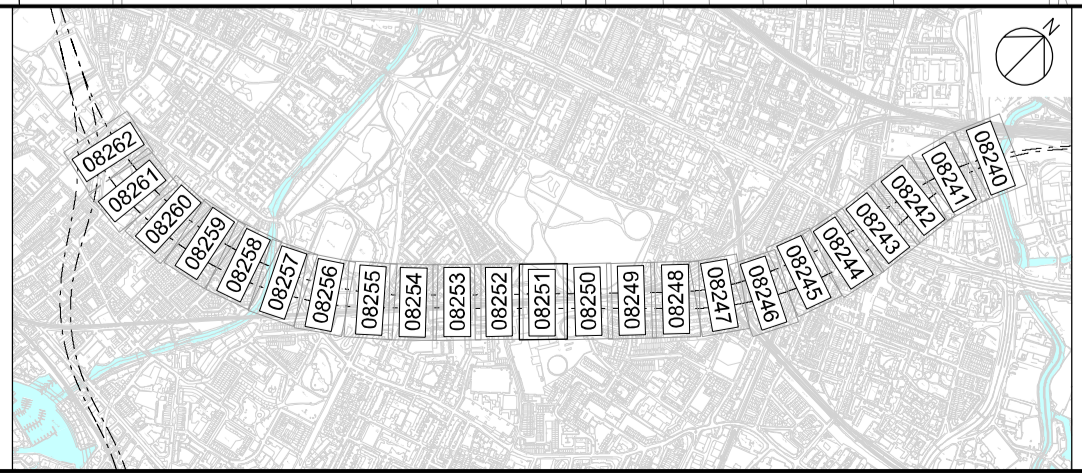
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- Notes
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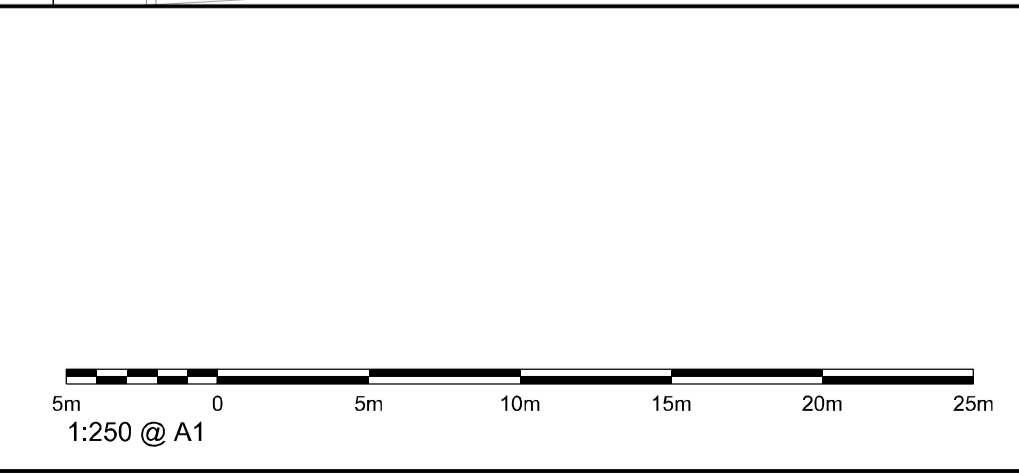
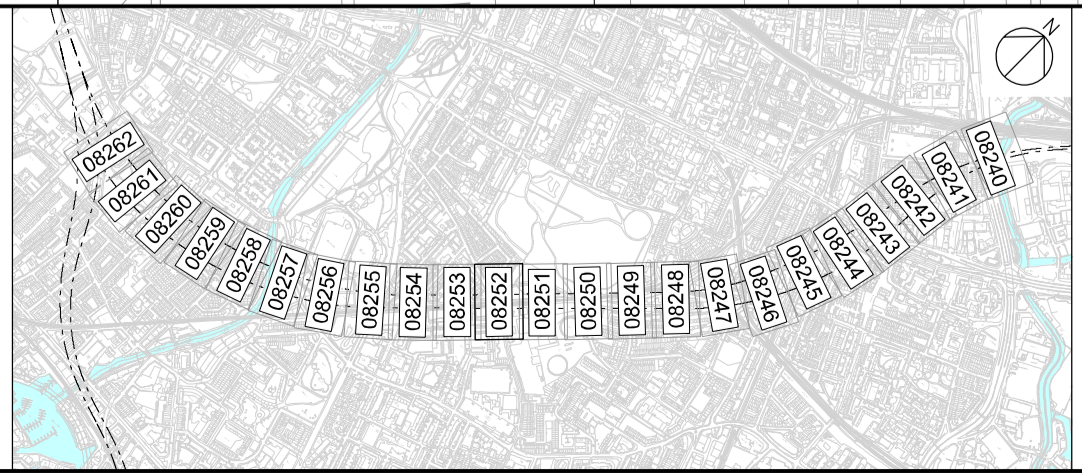
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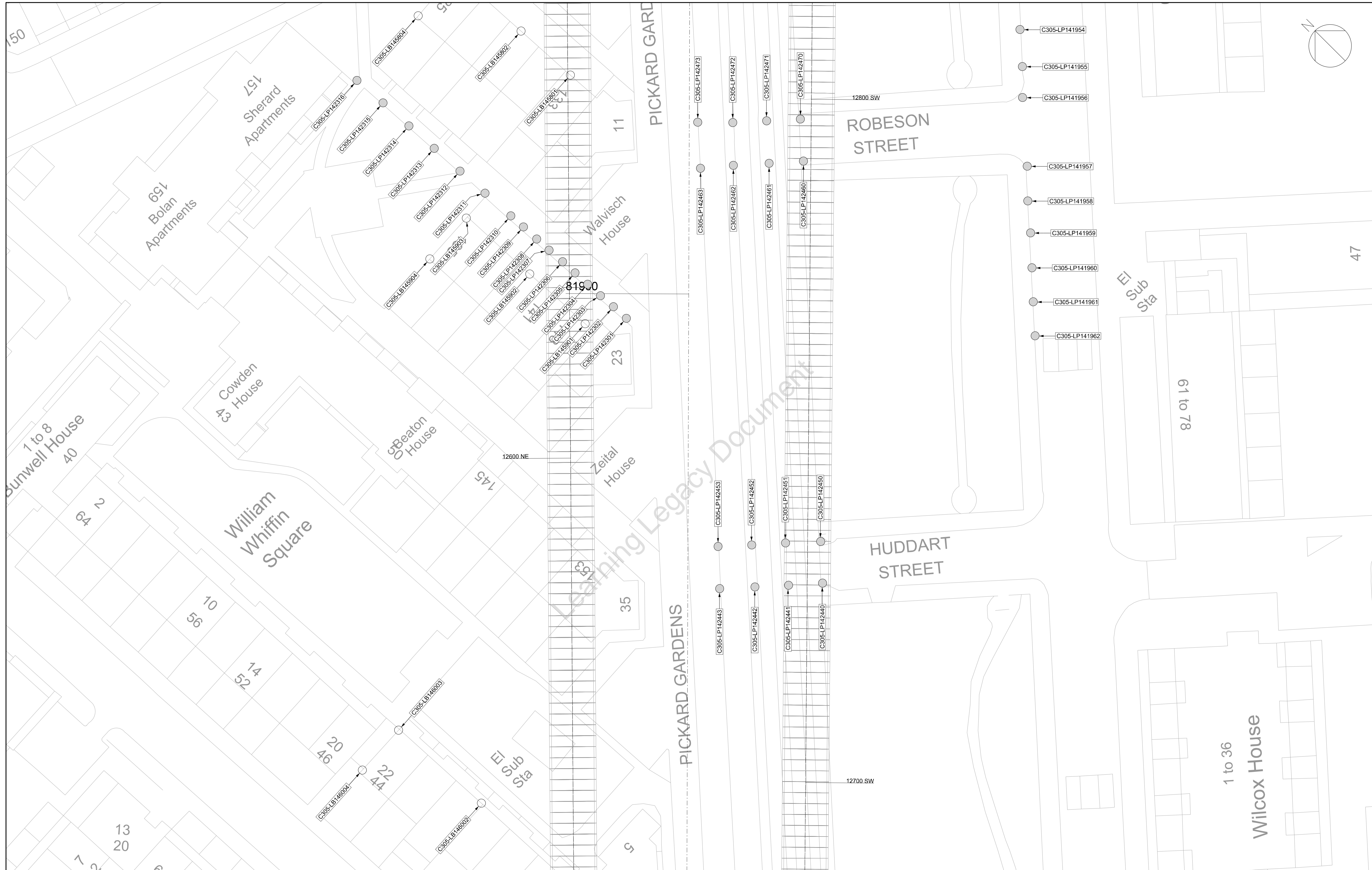
- Notes**
- Levelling Points
  - Sockets
  - 3D Prisms



  
 Contract: Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G  
 Originator: Dragados Sisk Joint Venture  
 Location: Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)  
 Title: Instrumentation & Monitoring Installation Report for Instrumentation from Pudding Mill Lane to Stepney Green (Drive Z)  
 C305-DSJ-C2-RGN-CRG03-50379  
 By: [Redacted]  
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 Rev: P02  
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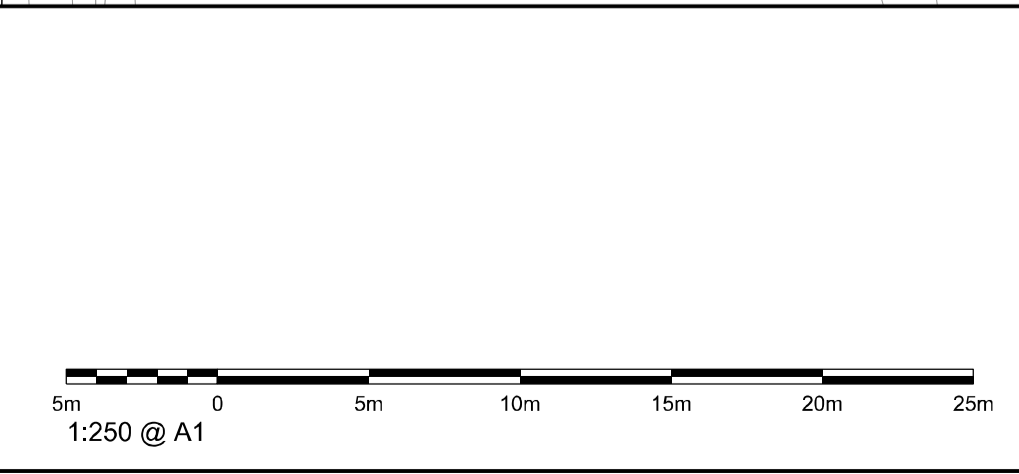
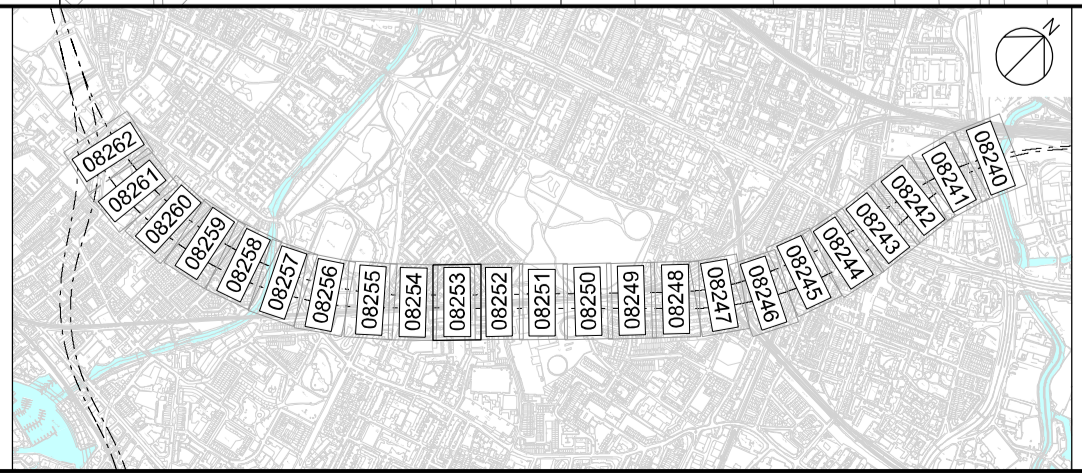
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- Notes
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  - Sockets
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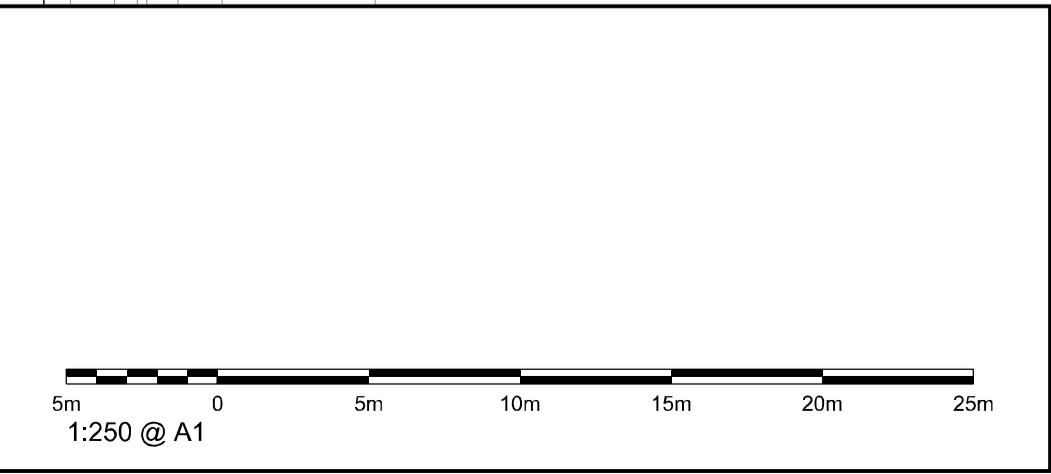
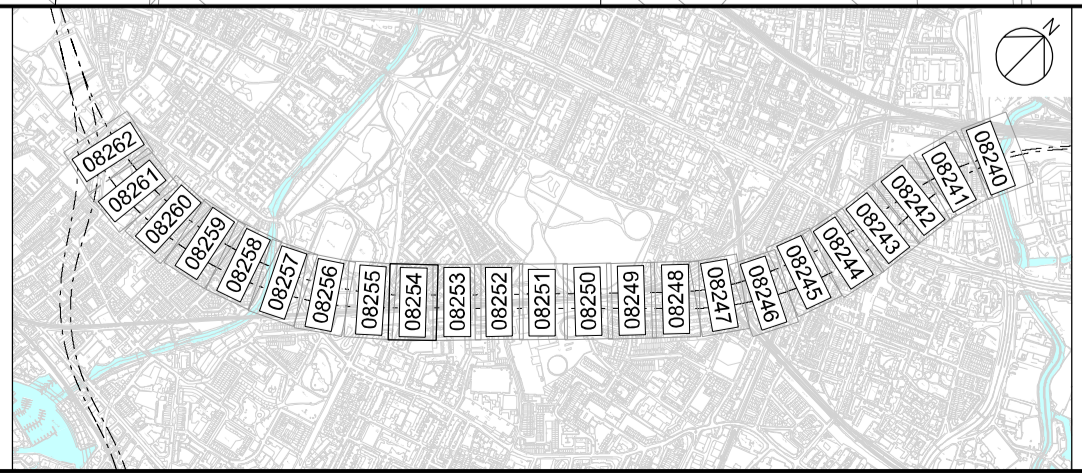
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	<p>Title: Instrumentation &amp; Monitoring Installation Report for Instrumentation from Pudding Mill Lane to Stepney Green (Drive Z) C305-DSJ-C2-RGN-CRG03-50379</p>	<p>Scale: 1:250 @ A1</p>	<p>Rev: P01</p>
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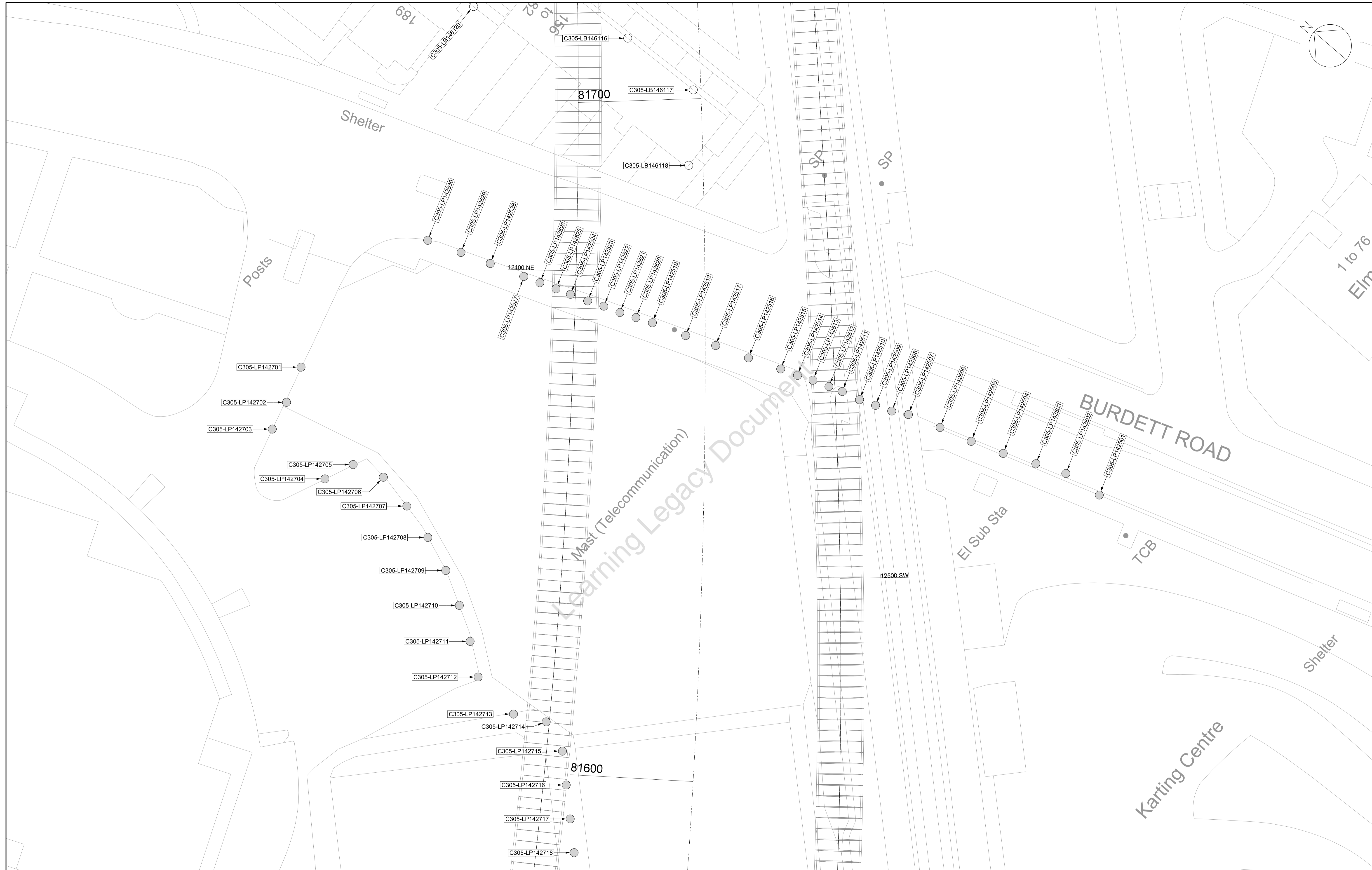
- Notes
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  - Sockets
  - 3D Prisms



  
 Contract: Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G  
 Originator: Dragados Sisk Joint Venture  
 Location: Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)  
 Title: Instrumentation & Monitoring Installation Report for Instrumentation from Pudding Mill Lane to Stepney Green (Drive Z)  
 C305-DSJ-C2-RGN-CRG03-50379  
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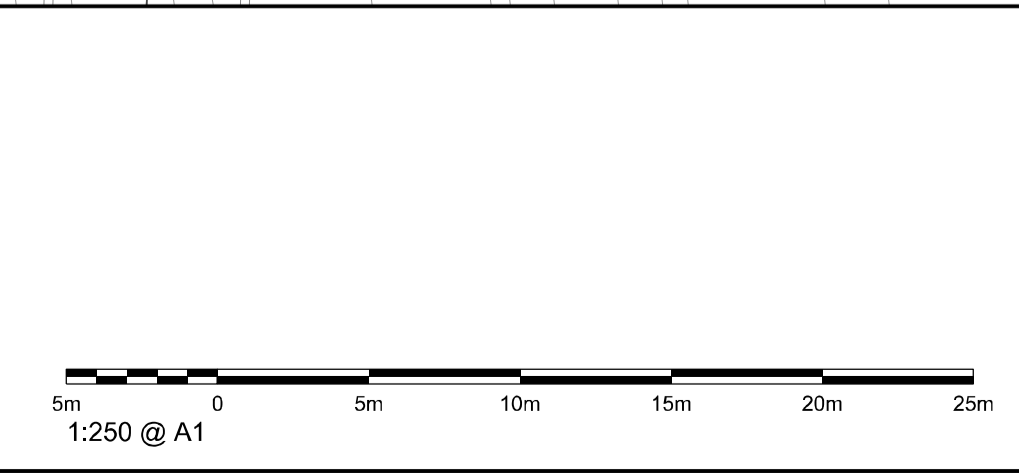
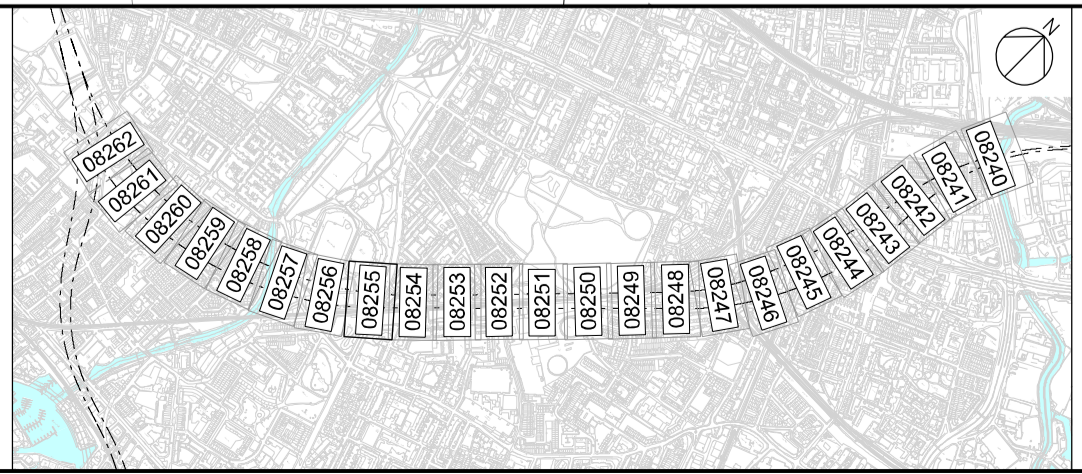
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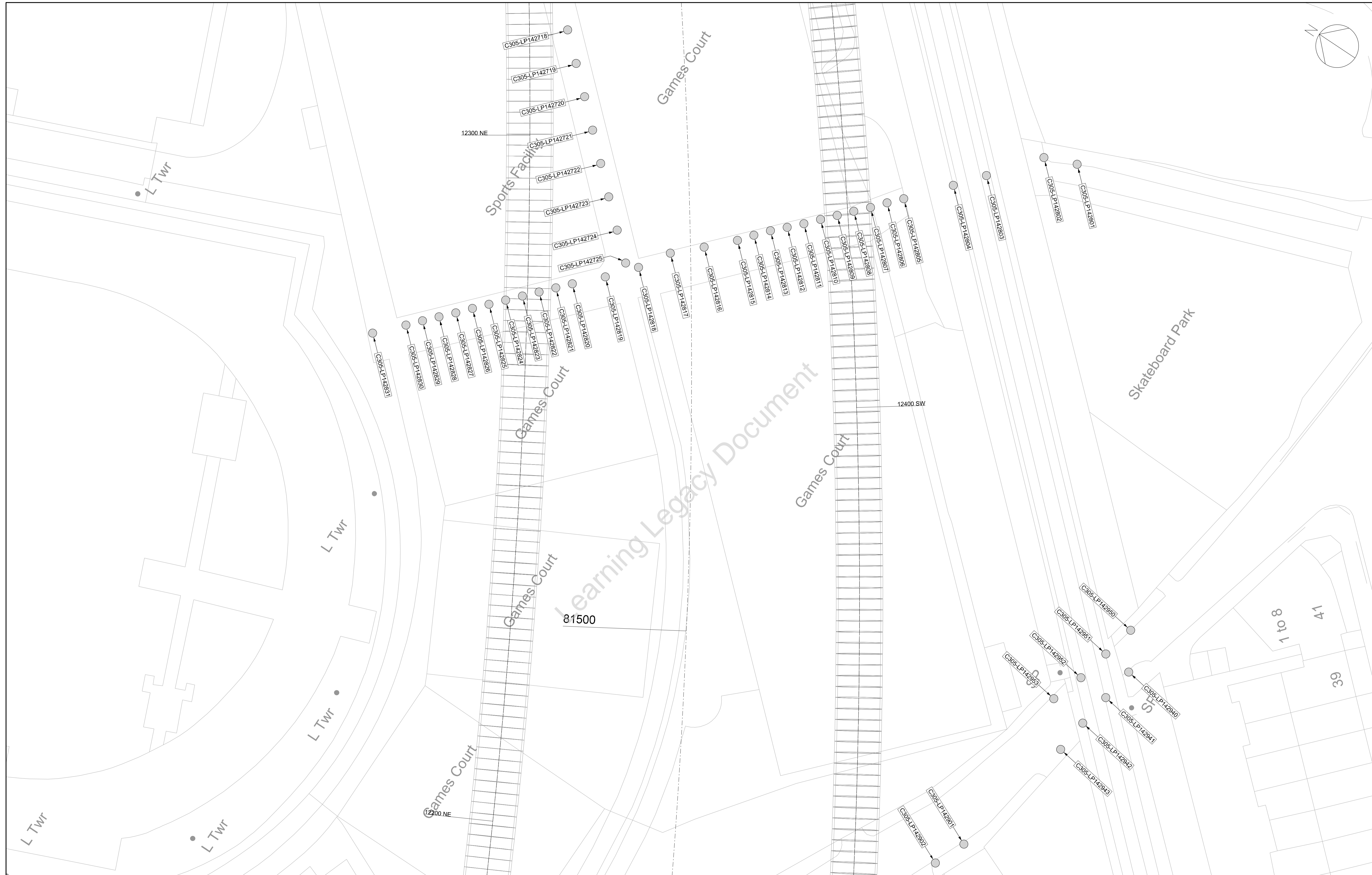
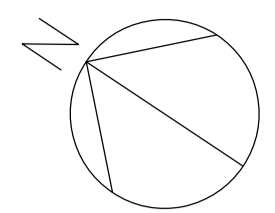
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	<p>Title : Instrumentation &amp; Monitoring Installation Report for Instrumentation from Pudding Mill Lane to Stepney Green (Drive Z) C305-DSJ-C2-RGN-CRG03-50379</p>	<p>Scale : 1:250 @ A1</p>
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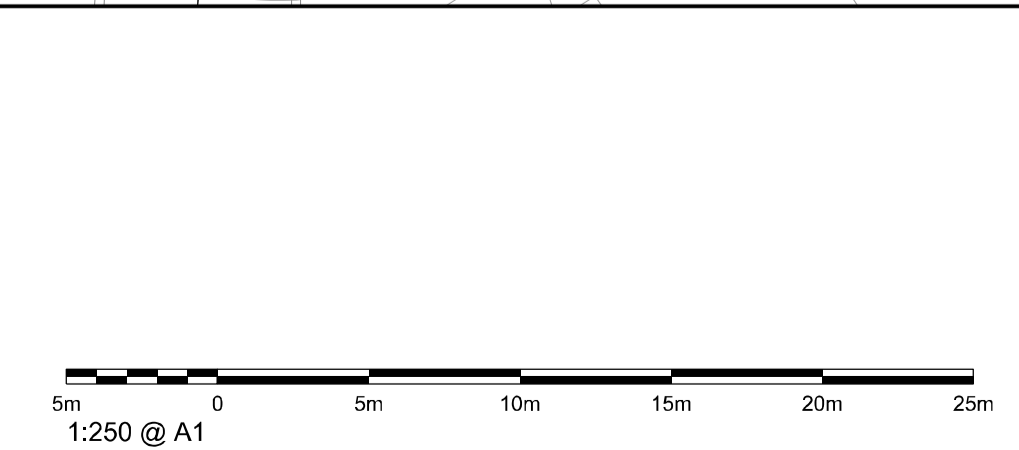
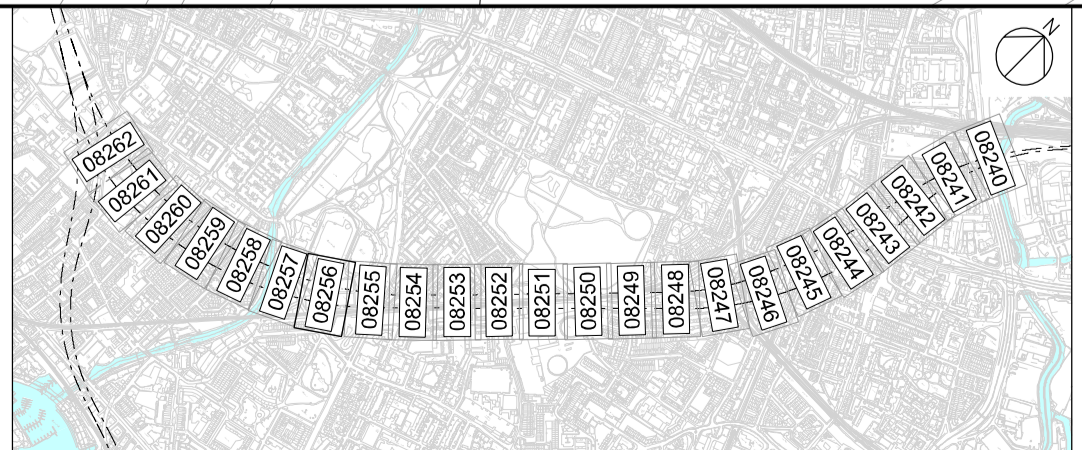
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Contract: Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G  
 Originator: Dragados Sisk Joint Venture  
 Location: Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)

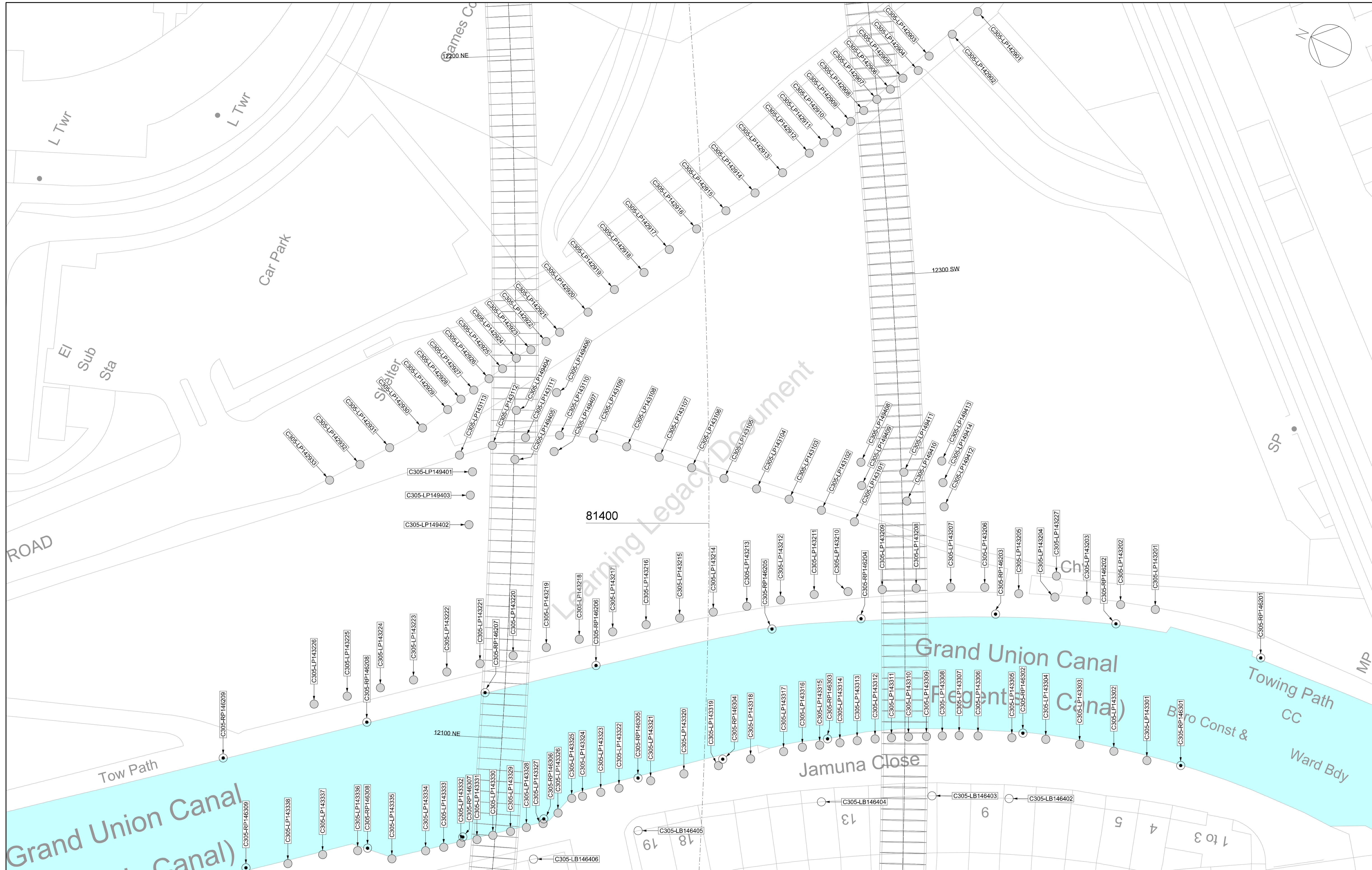
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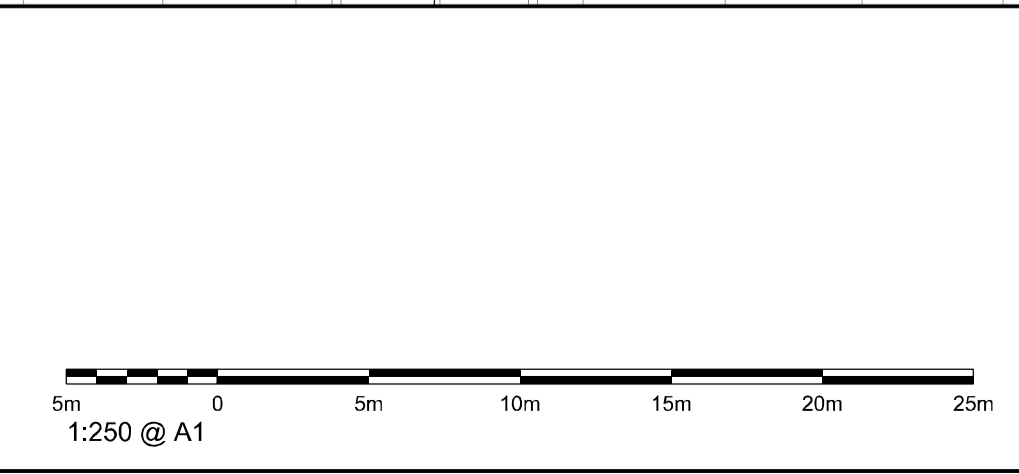
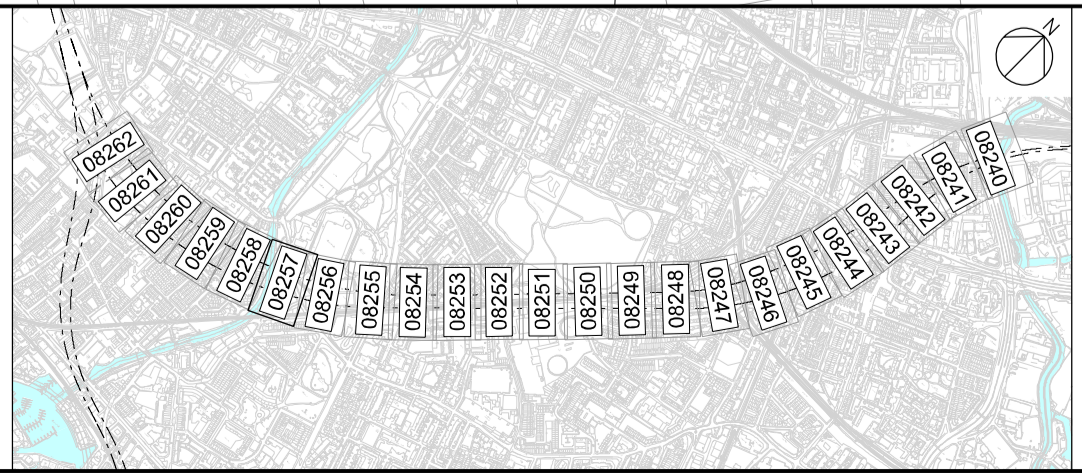
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Contract: Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G  
 Originator: Dragados Sisk Joint Venture  
 Location: Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)

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 Suitability: S4

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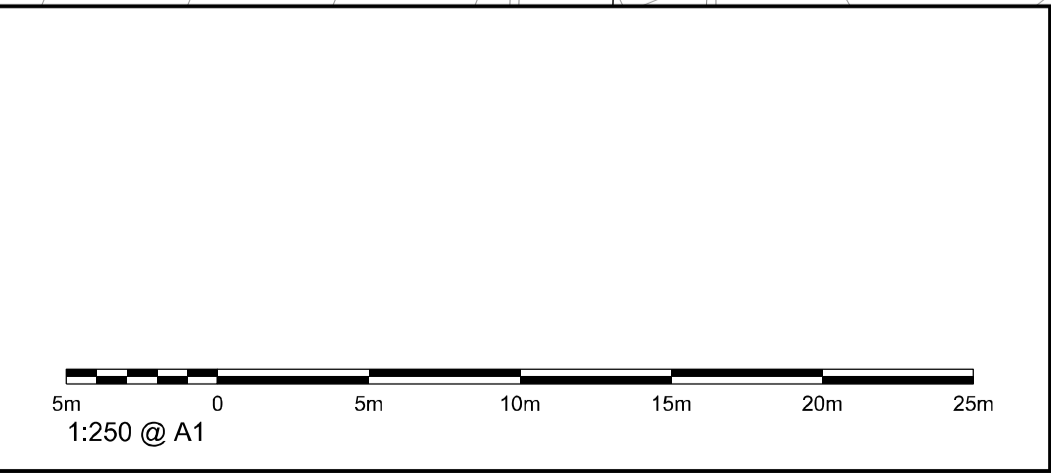
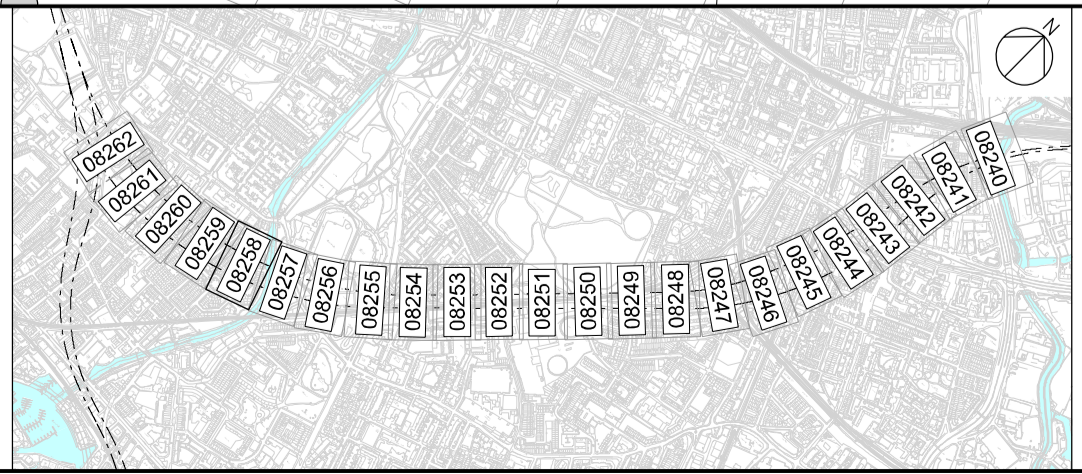
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Contract: Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G  
 Originator: Dragados Sisk Joint Venture  
 Location: Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)

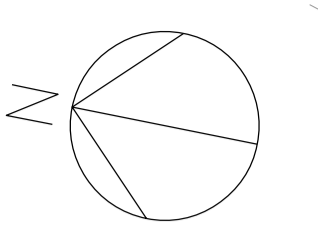
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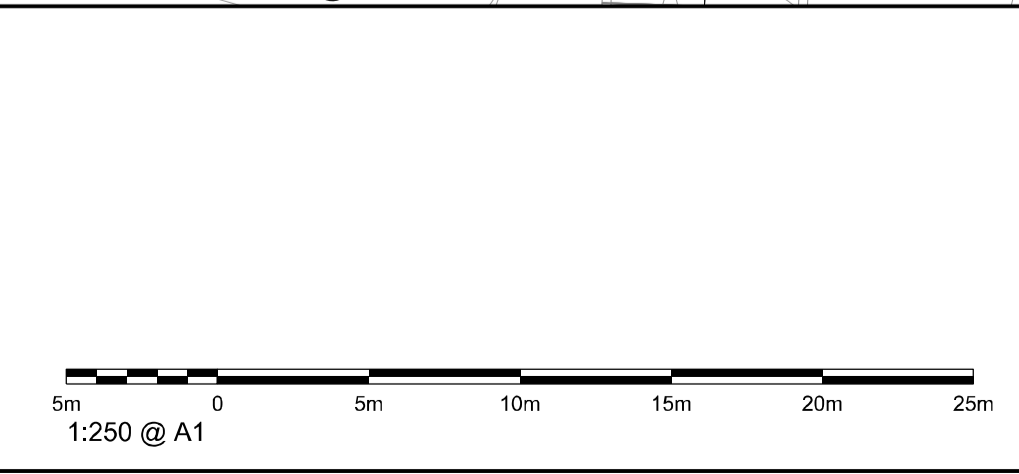
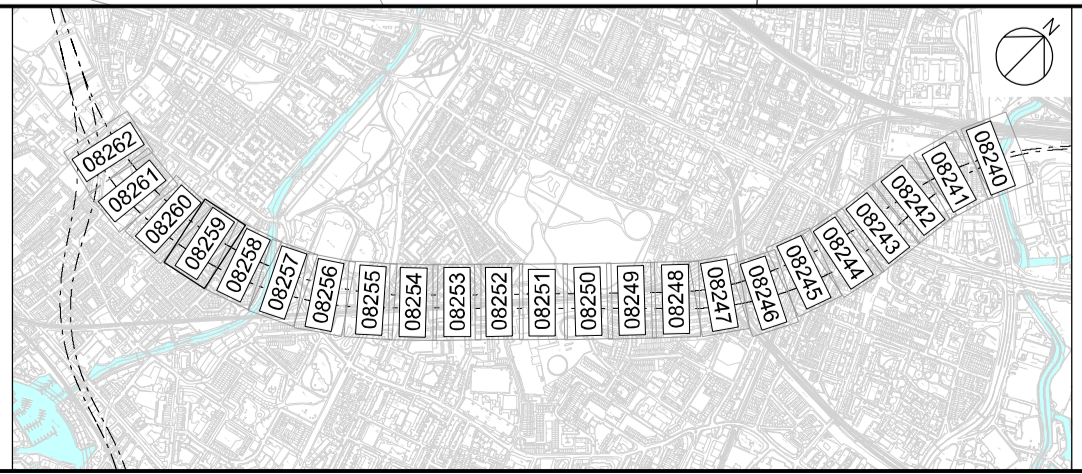
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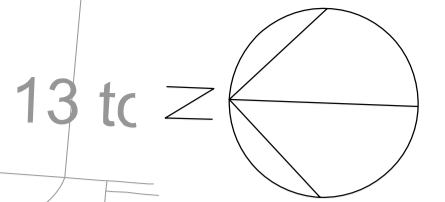
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**Project No.:** C305-DSJ-C2-RGN-CRG03-50379  
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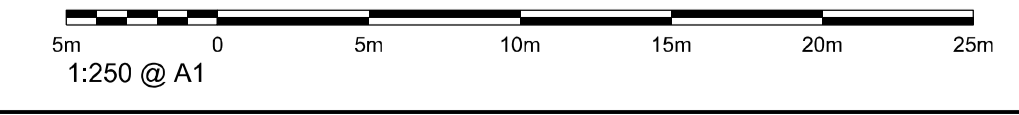
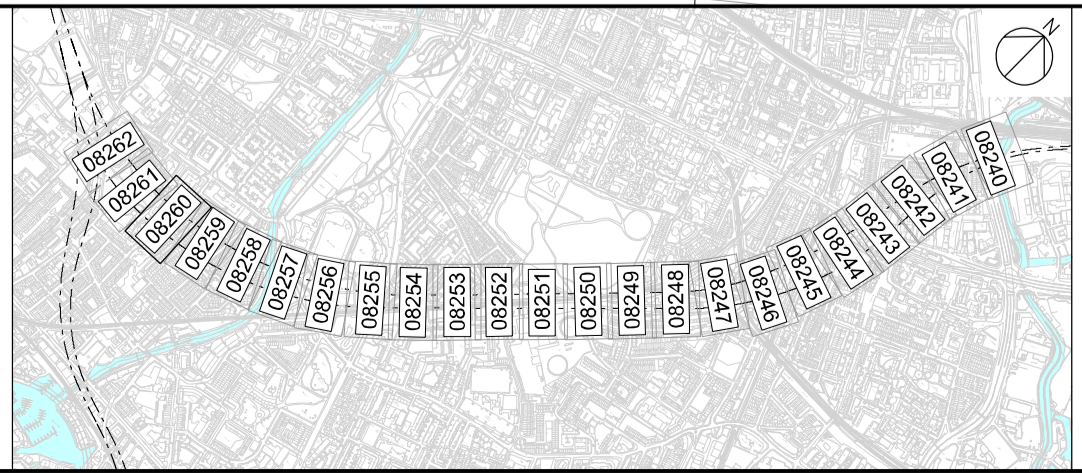
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Rev.	Date	Description	By	Chkd	App	Auth
P01	09/12/2015	First Issue	MD	MD	MD	-
P02	17/12/2015	---	MD	MD	MD	-
P03	20/04/2016	---	MD	MD	MD	-

- Notes**
- Levelling Points
  - Sockets
  - 3D Prisms
  - Retro Targets




**Contract:** Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G  
**Originator:** Dragados Sisk Joint Venture  
**Location:** Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)  
**Title:** Instrumentation & Monitoring Installation Report for Instrumentation from Pudding Mill Lane to Stepney Green (Drive Z)  
**Project No:** C305-DSJ-C2-RGN-CRG03-50379  
**Scale:** 1:250 @ A1  
**Drawing and CAD file No.:** C305-DSJ-C2-DDA-CRT00\_ST007\_1-08260  
**Rev.:** P03  
**Suitability:** S4  
**By:** [Redacted]  
**Chk:** [Redacted]  
**App:** [Redacted]  
**Auth:** [Redacted]

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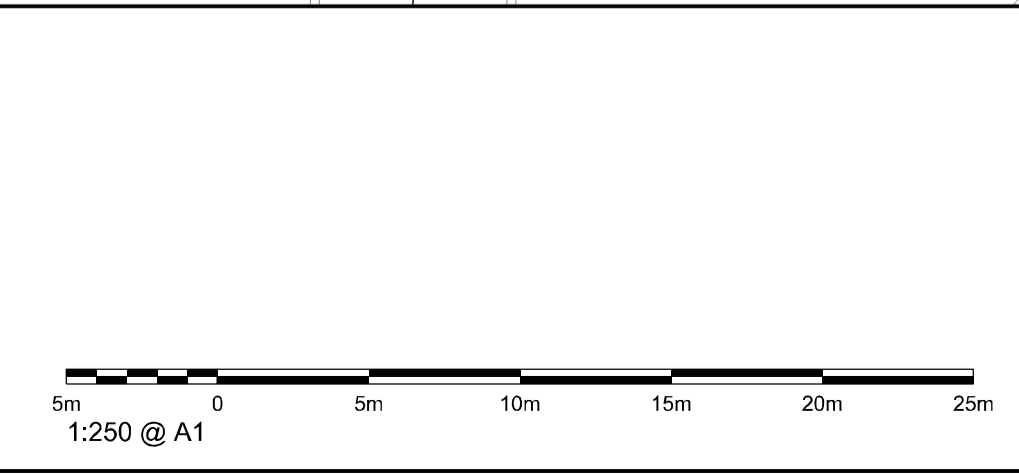
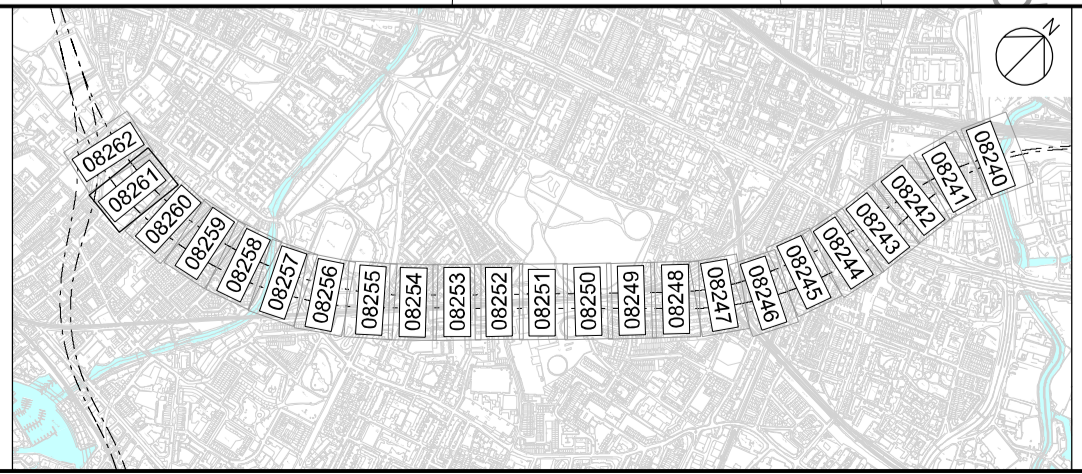




Learning Legacy Document

Rev.	Date	Description	By	Chkd	App	Auth
P01	03/12/2015	First Issue	MD	MD	MD	-

- Notes**
- Levelling Points
  - Sockets
  - 3D Prisms



<p><b>Crossrail Limited</b> 25 Canada Square London E14 6LQ</p> <p>© Crossrail www.crossrail.co.uk</p>	Contract:	Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G	By:	
	Originator:	Dragados Sisk Joint Venture	Chk:	
	Location:	Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)	Asp:	
	Title:	Instrumentation & Monitoring Installation Report for Instrumentation from Pudding Mill Lane to Stepney Green (Drive Z) C305-DSJ-C2-RGN-CRG03-50379	Auth:	
Scale:		1:250 @ A1	Drawing and CAD file No.:	
Rev:		P01	S4	
Sustainability:		S4		

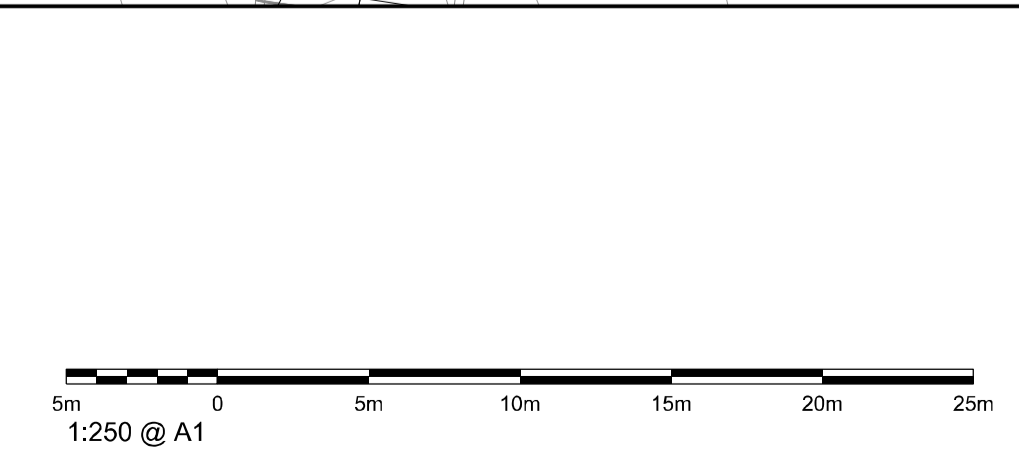
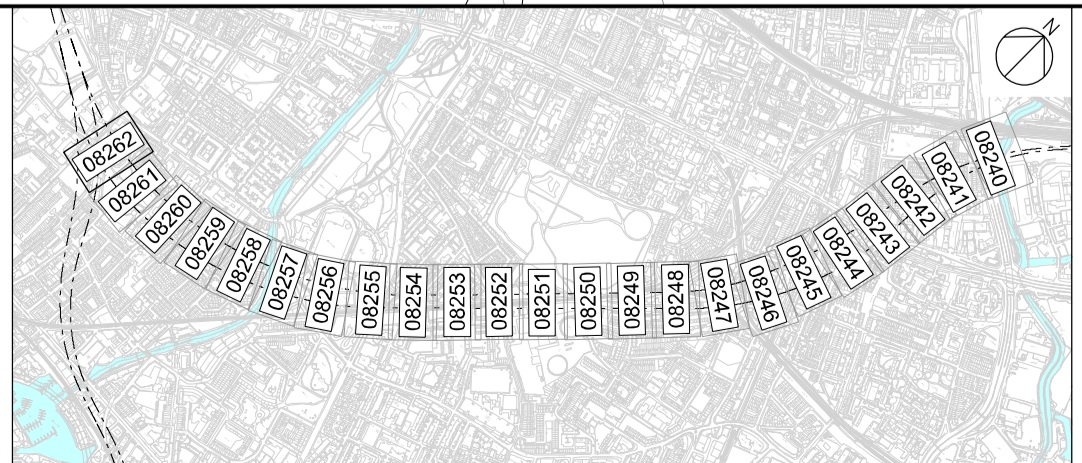
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Rev.	Date	Description	By	Chkd	App	Auth
P01	03/12/2015	First Issue	MD	MD	MD	-

- Notes**
- Levelling Points
  - Sockets
  - 3D Prisms



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	<p>Title: Instrumentation &amp; Monitoring Installation Report for Instrumentation from Pudding Mill Lane to Stepney Green (Drive Z) C305-DSJ-C2-RGN-CRG03-50379</p>	<p>Scale: 1:250 @ A1</p>
<p>Drawing and CAD file No.: C305-DSJ-C2-DDA-CRT00_ST007_1-08262</p>		<p>Suitability: S4</p>

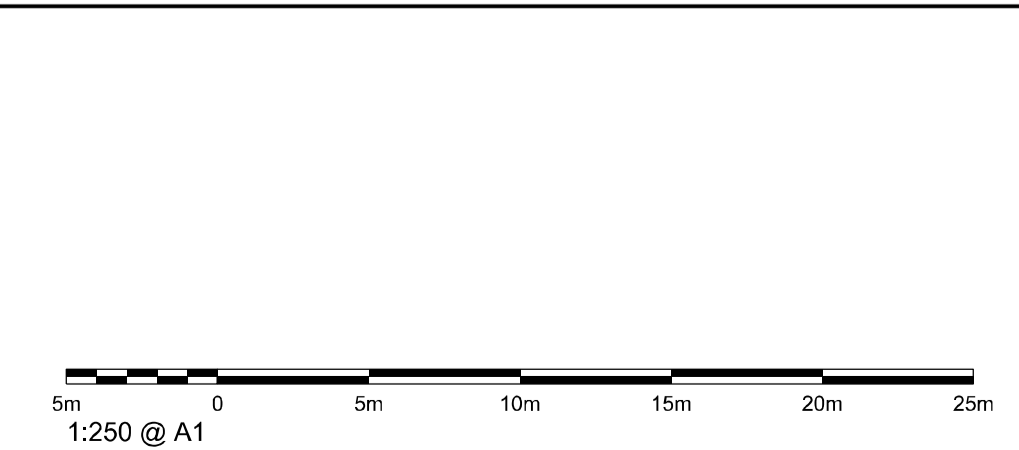
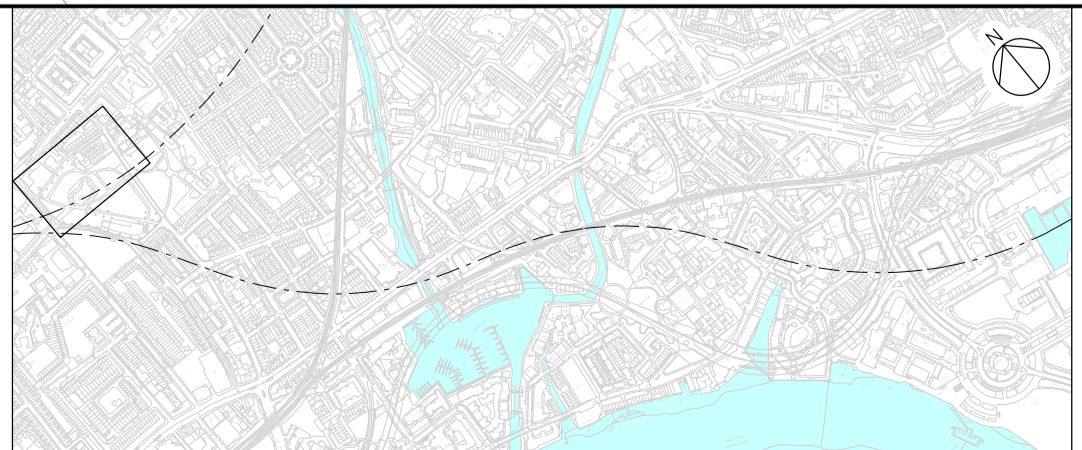
RESTRICTED






Rev.	Date	Description	By	Chkd	App	Auth
P01	01/10/2015	First Issue				

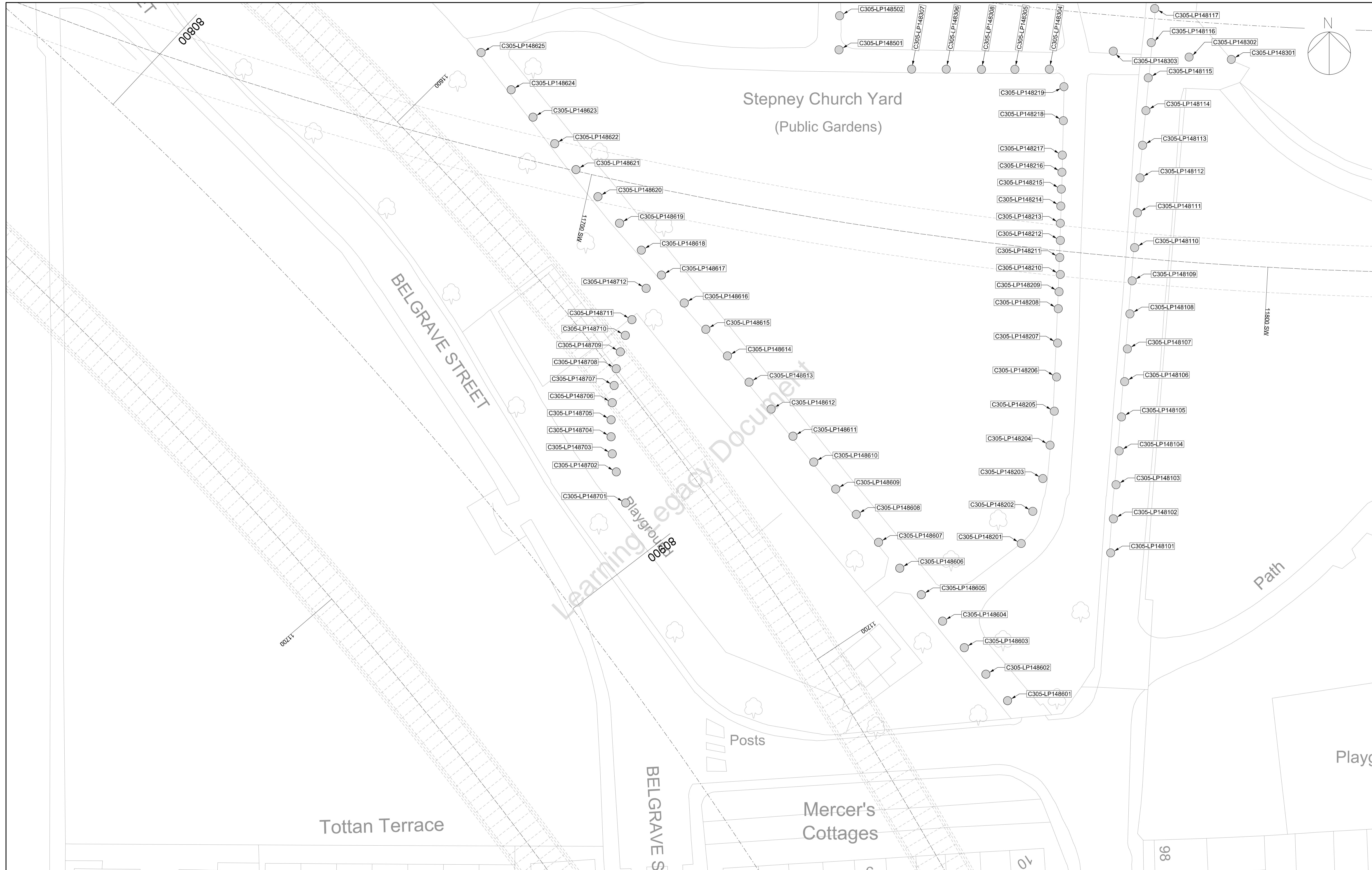
- Notes
- Levelling Point
  - Socket




**Contract:** Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G  
**Originator:** Dragados Sisk Joint Venture  
**Location:** Crossrail Tunnels - Drive Y (Limmo Peninsula to Farringdon Stn)  
**Title:** Instrumentation & Monitoring Installation Report for Sockets & Nails at St Dunstons Church (Drive Y)  
**Reference:** C305-DSJ-C2-RGN-CRG03-50161  
**Scale:** 1:250 @ A1  
**Drawing and CAD file No.:** C305-DSJ-C2-DDA-CRT00\_ST006\_1-08155  
**Rev.:** P01  
**Suitability:** S4

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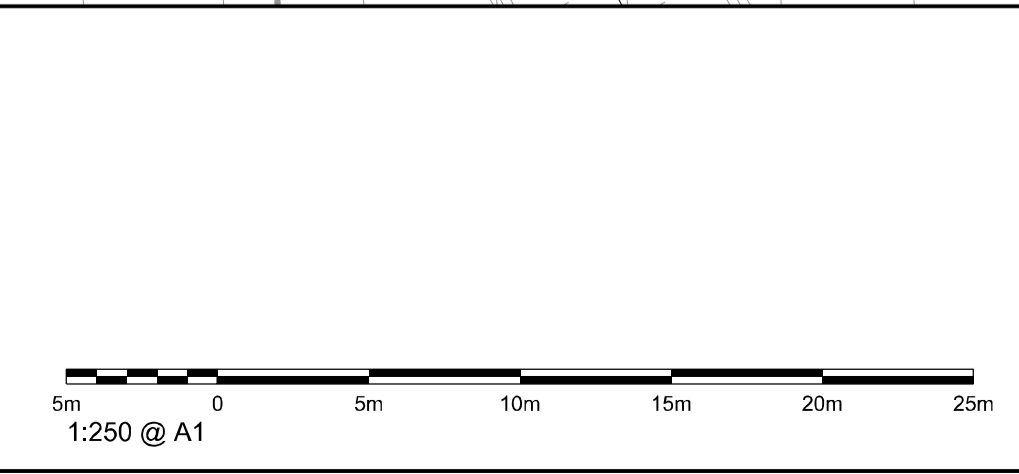
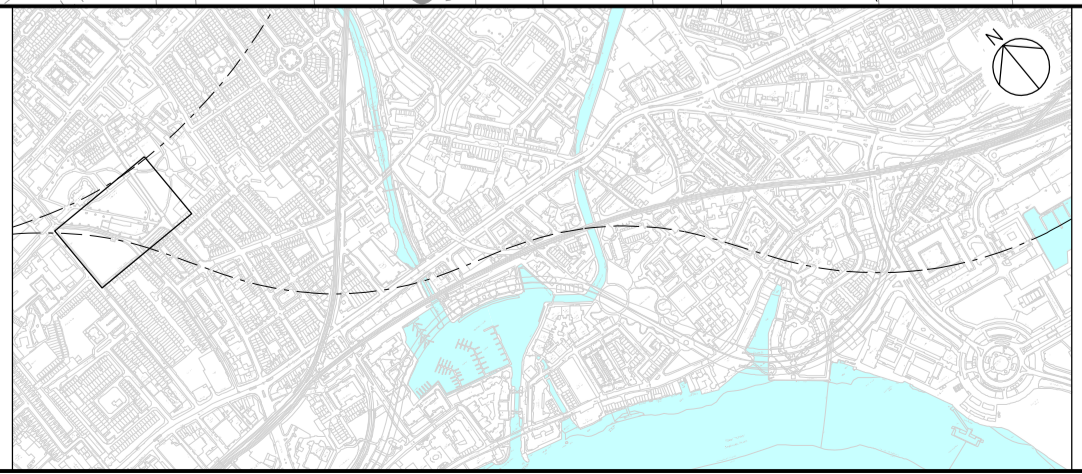




Rev.	Date	Description	By	Chkd	App	Auth
P01	01/10/2015	First Issue	MD	RC	RC	-

Notes

- Levelling Point






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	<p>Title: Instrumentation &amp; Monitoring Installation Report for Sockets &amp; Nails at St Dunstons Church (Drive Y) C305-DSJ-C2-RGN-CRG03-50161</p>	<p>Scale: 1:250 @ A1</p>
<p>Drawing and CAD file No.: C305-DSJ-C2-DDA-CRT00_ST006_1-08156</p>		<p>Suitability: S4</p>

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Rev.	Date	Description	By	Chkd	App	Auth
P01	28/02/2014	First Issue	AH	AH	RC	-
P02	05/02/2016	---	MD	MD	MD	---
P03	29/02/2016	---	MD	MD	MD	---

- Notes
-  Rod Extensometer
  -  Inclinometer
  -  Vibrating Wire Piezometer



Contract  
Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G

Originator  
Dragados Sisk Joint Venture

Location  
Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)

Title  
Instrumentation & Monitoring  
I&M Installation Report for Section  
C2 Eleanor Street Shaft (Drive Z)  
C305-DSJ-C2-RGN-CRG03-50180

By: [Redacted]  
Chk: [Redacted]  
App: [Redacted]  
Auth: [Redacted]


Scale: 1:2000 @ A1

Drawing and CAD file No.: C305-DSJ-C2-DDA-CRT00\_ST007\_Z-08084

Rev: P03

Suitability: S4

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Scale: 1:2000 @ A1

Drawing and CAD file No.: C305-DSJ-C2-DDA-CRT00\_ST007\_Z-08084

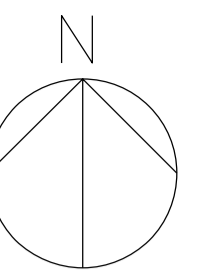
Rev: P03

Suitability: S4

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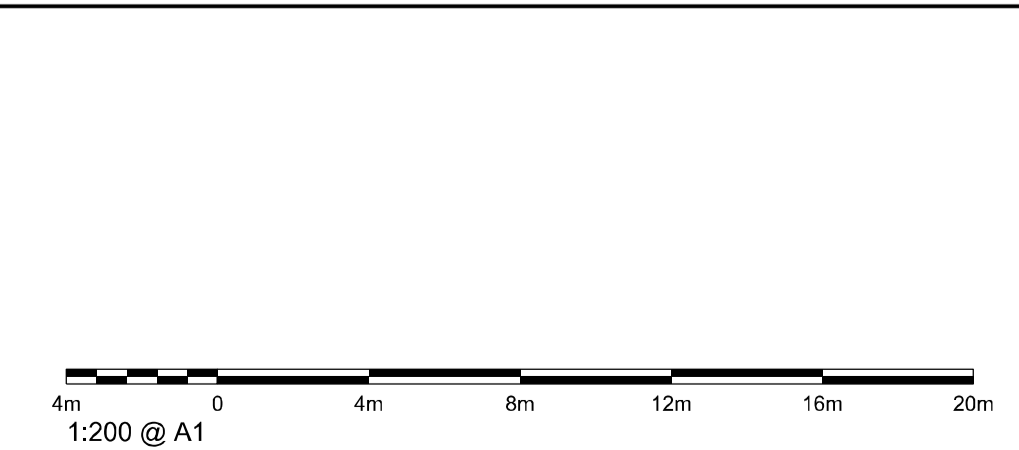
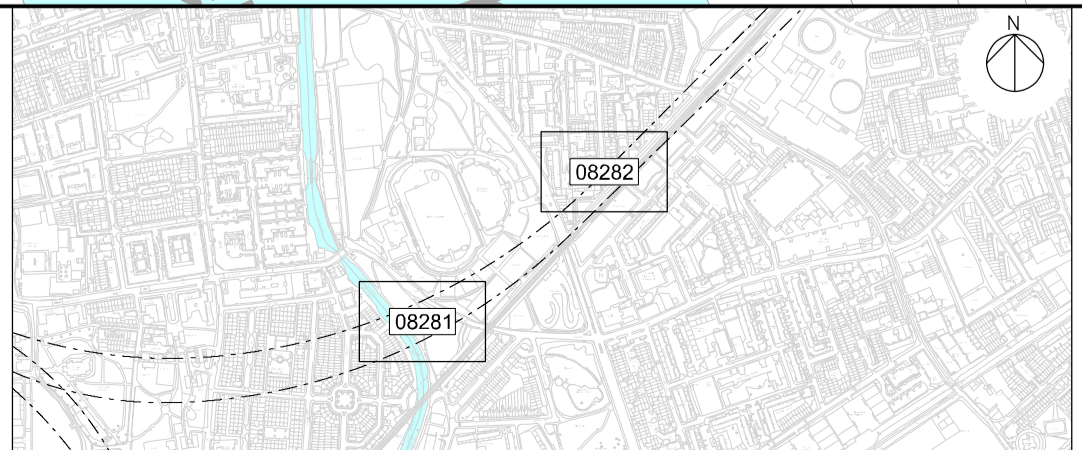




Rev.	Date	Description	By	Chkd	App	Auth
P01	03/12/2015	First Issue	MD	MD	MD	-

Notes

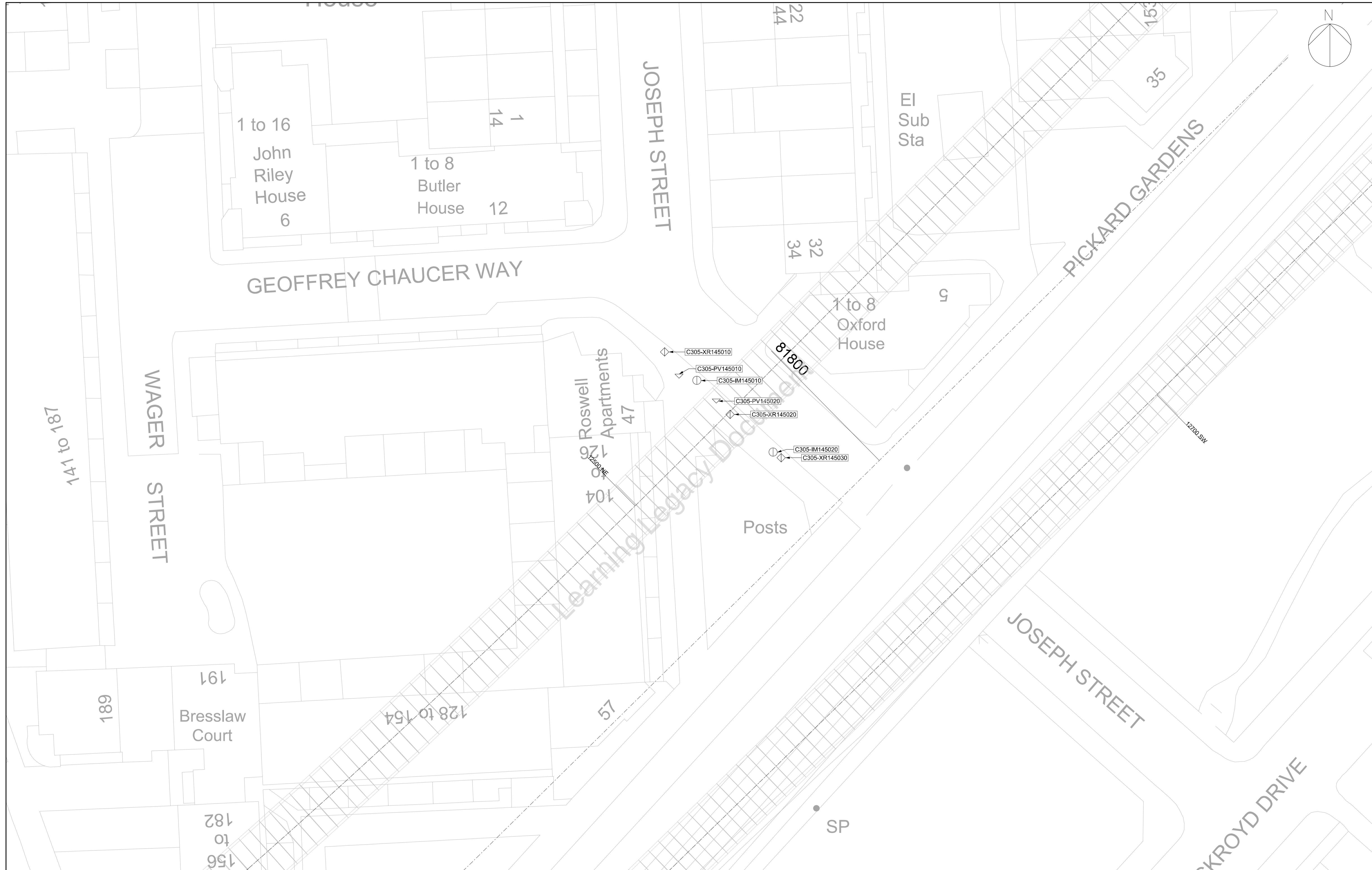
- Inclinometer
- Vibrating Wire Piezometer
- Rod Extensometer



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	<p>Title : Instrumentation &amp; Monitoring Installation Report for Section C2 Mile End Area (Drive Z) C305-DSJ-C2-RGN-CRG03-50184</p>	<p>Scale : 1:200 @ A1</p>
	<p>Rev : P01</p>	<p>Suitability : S4</p>

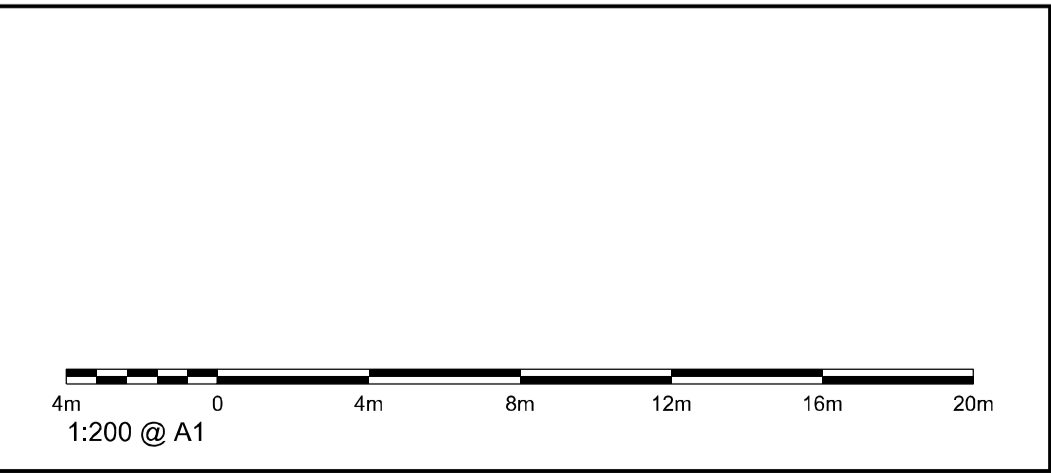
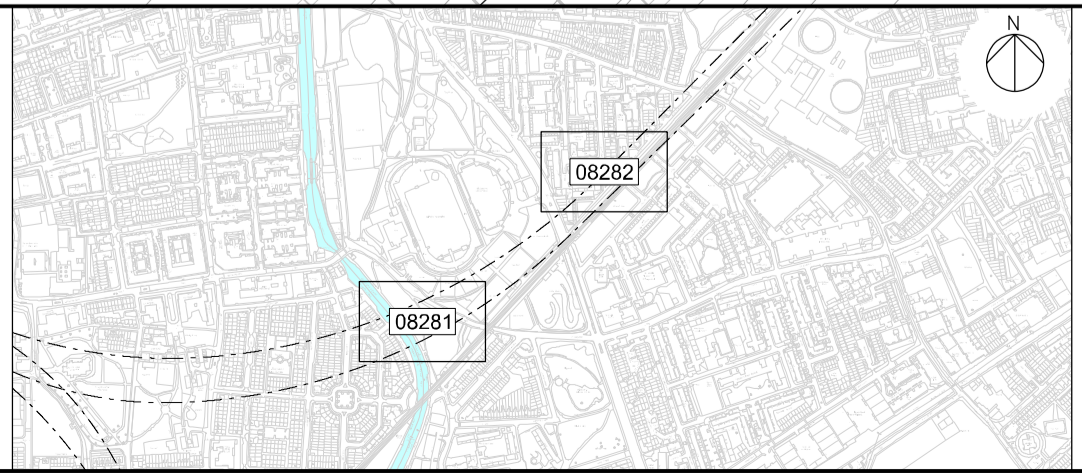
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Rev.	Date	Description	By	Chkd	App	Auth
P01	03/12/2015	First Issue	MD	MD	MD	-

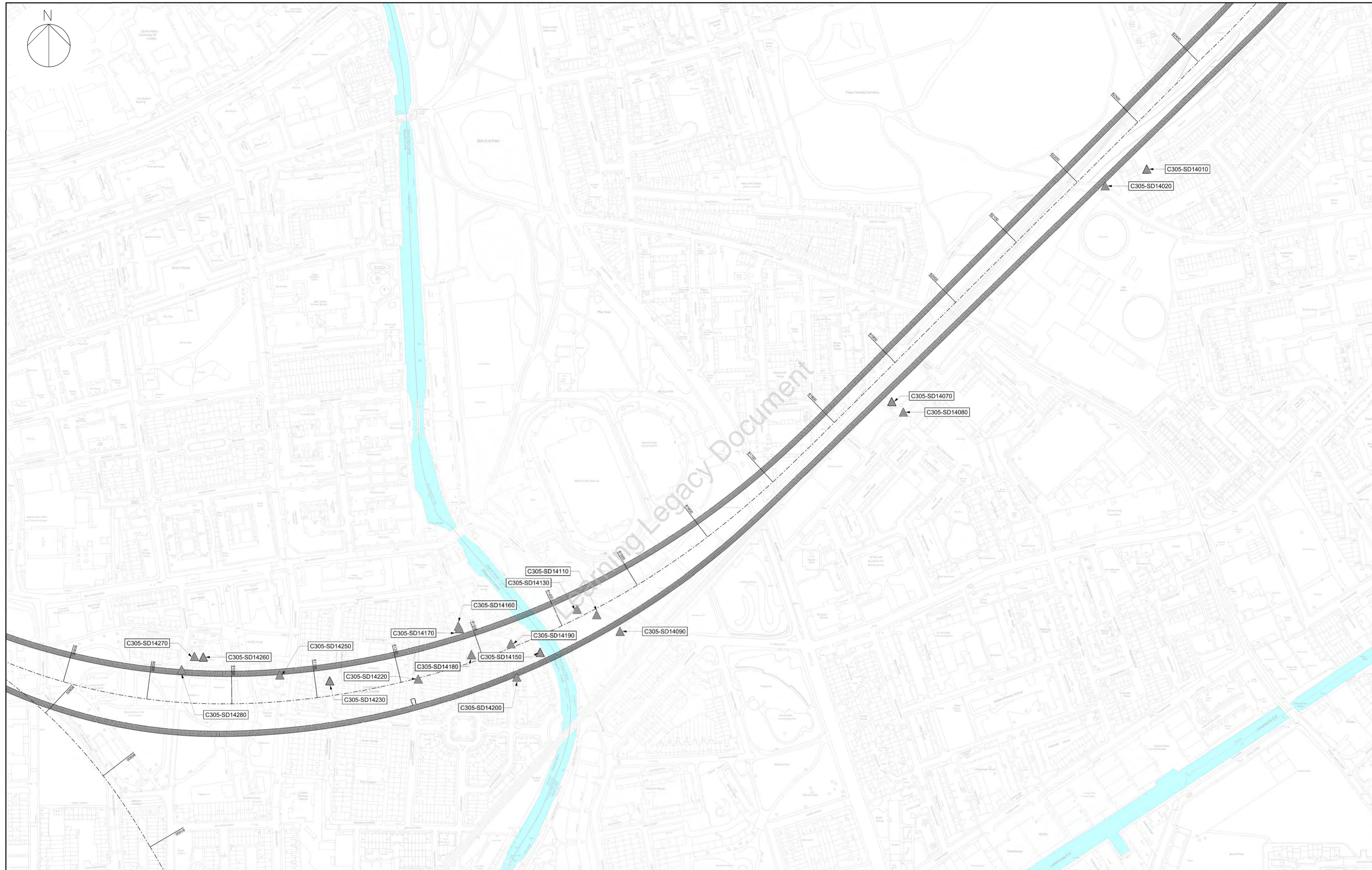
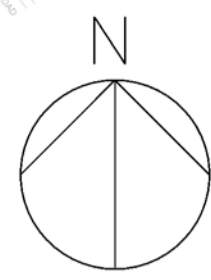
- Notes**
- Inclinator
  - ▽ Vibrating Wire Piezometer
  - ◇ Rod Extensometer



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	<p>Title: Instrumentation &amp; Monitoring Installation Report for Section C2 Mile End Area (Drive Z) C305-DSJ-C2-RGN-CRG03-50184</p>	<p>Scale: 1:200 @ A1</p>	<p>Rev: P01</p>
	<p>Drawing and CAD file No.: C305-DSJ-C2-DDA-CRT00_ST007_1-08282</p>	<p>Suitability: S4</p>	<p>Rev: S4</p>
	<p>RESTRICTED</p>		

Fit for authorisation





Rev.	Date	Description	By	Chkd	App	Auth
P01	28/02/2014	First Issue	AH	AH	RC	-
P02	03/02/2016		MD	MD	MD	-

**Notes**

▲ Shallow Datum



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Contract:  
 Tunnels East - Drive Y LIM to FAR & Drive Z SGJ to PML & Drive G

Originator:  
 Dragados Sisk Joint Venture

Location:  
 Crossrail Tunnels - Drive Z (Stepney Green to Pudding Mill Lane)

Title:  
 Instrumentation & Monitoring  
 I&M Installation Report for  
 Shallow Datums (Drive Z)  
 C305-DSJ-C2-RGN-CRG03-50183

By: [Redacted]  
 Chk: [Redacted]  
 App: [Redacted]  
 Auth: [Redacted]

Scale: 1:2000 @ A1  
 Drawing and CAD file No: C305-DSJ-C2-DDA-CRT00\_ST007\_Z-08085  
 Rev: P02  
 Suitability: S4

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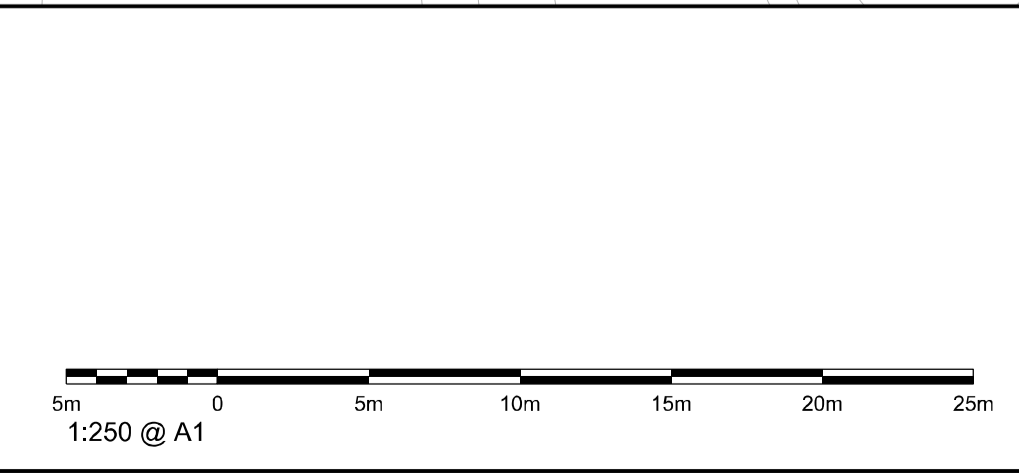


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Rev.	Date	Description	By	Chkd	App	Auth
P01	11/02/2016	First Issue	MD	MD	MD	-

**Notes**

- ▽ Vibrating Wire Piezometer



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	<p>Title: Instrumentation &amp; Monitoring I&amp;M Installation report for Galsworthy Avenue Niche Piezometer (Drive Z) C305-DSJ-C2-RGN-CRG03-50182</p>	<p>Scale: 1:250 @ A1 Drawing and CAD file No.: C305-DSJ-C2-DDA-CRT00_ST007_1-08172</p>

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**APPENDIX B:**

**SUMMARY OF INSTRUMENTATION INSTALLED ON SITE**

Learning Legacy Document

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commisioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
							Average	12-03-14	12-03-14	12-03-14
Levelling Point	C305-LP14170	20-11-12	Installed	87932.682	37823.199	105.972	105.97	105.9715	105.9721	105.9724
Levelling Point	C305-LP14171	20-11-12	Installed	87936.408	37819.890	106.072	106.07	106.0719	106.0725	106.0716
Levelling Point	C305-LP14172	20-11-12	Installed	87940.170	37816.589	106.151	106.15	106.1509	106.1513	106.1508
Levelling Point	C305-LP14173	20-11-12	Installed	87943.960	37813.298	106.268	106.27	106.2685	106.2679	106.2676
Levelling Point	C305-LP14174	20-11-12	Installed	87947.677	37809.935	106.364	106.36	106.3639	106.3641	106.3640
Levelling Point	C305-LP14175	20-11-12	Installed	87951.445	37806.642	106.439	106.44	106.4386	106.4394	106.4390
Levelling Point	C305-LP14176	20-11-12	Installed	87955.238	37803.397	106.444	106.44	106.4436	106.4443	106.4441
Levelling Point	C305-LP14177	20-11-12	Installed	87959.111	37799.907	106.482	106.48	106.4821	106.4814	106.4825
Levelling Point	C305-LP14178	20-11-12	Installed	87962.732	37796.661	106.456	106.46	106.4561	106.4554	106.4565
Levelling Point	C305-LP14179	20-11-12	Installed	87966.545	37793.554	106.432	106.43	106.4322	106.4318	106.4320
							Average	30-05-12	30-05-12	30-05-12
Levelling Point	C305-LP14221	22-05-12	Installed	87903.705	37724.667	109.480	109.48	109.4797	109.4803	109.4800
Levelling Point	C305-LP14222	22-05-12	Installed	87906.371	37726.917	109.433	109.43	109.4333	109.4326	109.4331
Levelling Point	C305-LP14223	22-05-12	Installed	87908.983	37729.064	109.413	109.41	109.4127	109.4134	109.4129
Levelling Point	C305-LP14224	22-05-12	Installed	87911.792	37731.388	109.364	109.36	109.3634	109.3646	109.3640
Levelling Point	C305-LP14225	22-05-12	Installed	87914.497	37733.589	109.315	109.32	109.3149	109.3153	109.3148
Levelling Point	C305-LP14226	22-05-12	Installed	87917.196	37735.832	109.287	109.29	109.2866	109.2874	109.2870
Levelling Point	C305-LP14227	22-05-12	Installed	87919.907	37738.079	109.223	109.22	109.2233	109.2225	109.2232
Levelling Point	C305-LP14228	22-05-12	Installed	87922.577	37740.349	109.190	109.19	109.1901	109.1896	109.1903
Levelling Point	C305-LP14229	22-05-12	Installed	87925.318	37742.517	109.163	109.16	109.1629	109.1634	109.1627
Levelling Point	C305-LP14230	22-05-12	Installed	87928.014	37744.734	109.103	109.10	109.1031	109.1026	109.1033
Levelling Point	C305-LP14231	22-05-12	Installed	87930.734	37746.993	109.086	109.09	109.0864	109.0855	109.0861
Levelling Point	C305-LP14232	22-05-12	Installed	87933.415	37749.242	109.069	109.07	109.0689	109.0695	109.0686
Levelling Point	C305-LP14233	22-05-12	Installed	87936.108	37751.477	109.023	109.02	109.0227	109.0231	109.0232
Levelling Point	C305-LP14234	22-05-12	Installed	87938.849	37753.498	108.760	108.76	108.7602	108.7595	108.7603
Levelling Point	C305-LP14235	22-05-12	Installed	87941.501	37755.966	108.944	108.94	108.9434	108.9444	108.9442
Levelling Point	C305-LP14236	22-05-12	Installed	87944.261	37758.138	108.885	108.89	108.8852	108.8846	108.8852

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP14237	22-05-12	Installed	87946.908	37760.362	108.845	108.85	108.8449	108.8455	108.8446
Levelling Point	C305-LP14238	22-05-12	Installed	87949.779	37762.549	108.797	108.80	108.7973	108.7969	108.7968
Levelling Point	C305-LP14239	22-05-12	Installed	87952.238	37762.011	108.802	108.80	108.8023	108.8014	108.8023
Levelling Point	C305-LP14240	22-05-12	Installed	87954.092	37760.367	108.728	108.73	108.7277	108.7283	108.7280
Levelling Point	C305-LP14241	22-05-12	Installed	87955.966	37758.723	108.611	108.61	108.6111	108.6109	108.6110
Levelling Point	C305-LP14242	22-05-12	Installed	87957.791	37757.009	108.598	108.60	108.5986	108.5977	108.5977
Levelling Point	C305-LP14243	22-05-12	Installed	87959.628	37755.196	108.598	108.60	108.5983	108.5975	108.5982
Levelling Point	C305-LP14244	22-05-12	Installed	87961.474	37753.519	108.542	108.54	108.5424	108.5418	108.5418
Levelling Point	C305-LP14245	22-05-12	Installed	87963.380	37751.871	108.519	108.52	108.5185	108.5195	108.5190
Levelling Point	C305-LP14246	22-05-12	Installed	87965.204	37750.178	108.475	108.48	108.4744	108.4752	108.4754
Levelling Point	C305-LP14247	22-05-12	Installed	87967.028	37748.586	108.324	108.32	108.3234	108.3245	108.3241
Levelling Point	C305-LP14248	22-05-12	Installed	87968.888	37746.900	108.267	108.27	108.2667	108.2676	108.2667
Levelling Point	C305-LP14249	22-05-12	Installed	87970.753	37745.224	108.218	108.22	108.2178	108.2184	108.2178
Levelling Point	C305-LP14250	22-05-12	Installed	87972.860	37743.323	108.166	108.17	108.1656	108.1664	108.1660
Levelling Point	C305-LP14251	22-05-12	Installed	87974.496	37741.809	108.100	108.10	108.0997	108.1006	108.0997
Levelling Point	C305-LP14252	22-05-12	Installed	87976.314	37740.098	108.053	108.05	108.0529	108.0532	108.0529
Levelling Point	C305-LP14253	22-05-12	Installed	87978.124	37738.497	108.106	108.11	108.1062	108.1056	108.1062
Levelling Point	C305-LP14254	22-05-12	Installed	87980.182	37736.573	108.117	108.12	108.1176	108.1167	108.1167
Levelling Point	C305-LP14255	22-05-12	Installed	87945.214	37770.345	108.762	108.76	108.7615	108.7624	108.7621
Levelling Point	C305-LP14256	22-05-12	Installed	87942.632	37773.351	108.766	108.77	108.7655	108.7662	108.7663
Levelling Point	C305-LP14257	22-05-12	Installed	87940.147	37776.499	108.709	108.71	108.7087	108.7095	108.7088
Levelling Point	C305-LP14258	22-05-12	Installed	87937.597	37779.584	108.739	108.74	108.7392	108.7388	108.7390
Levelling Point	C305-LP14259	22-05-12	Installed	87935.040	37782.663	108.805	108.81	108.8054	108.8049	108.8047
Levelling Point	C305-LP14260	22-05-12	Installed	87932.482	37785.734	108.850	108.85	108.8501	108.8494	108.8505
Levelling Point	C305-LP14261	22-05-12	Installed	87929.605	37788.332	108.905	108.91	108.9053	108.9047	108.9050
							Average	04-09-13	04-09-13	04-09-13
Levelling Point	C305-LP14277	04-09-13	Installed	87948.593	37804.468	106.335	106.34	106.3351	106.3348	106.3351
Levelling Point	C305-LP14278	04-09-13	Installed	87952.973	37805.169	106.263	106.26	106.2629	106.2631	106.2630

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP14279	04-09-13	Installed	87957.328	37801.360	106.234	106.23	106.2337	106.2342	106.2341
Levelling Point	C305-LP14280	04-09-13	Installed	87961.165	37798.226	106.286	106.29	106.2864	106.2856	106.2860
Levelling Point	C305-LP14281	04-09-13	Installed	87964.659	37795.196	106.323	106.32	106.3229	106.3232	106.3229
Levelling Point	C305-LP14282	04-09-13	Installed	87963.212	37789.374	107.539	107.54	107.5396	107.5388	107.5386
Levelling Point	C305-LP14283	04-09-13	Installed	87969.283	37793.750	106.432	106.43	106.4317	106.4324	106.4319
Levelling Point	C305-LP14284	04-09-13	Installed	87972.560	37782.308	107.059	107.06	107.0596	107.0588	107.0586
Levelling Point	C305-LP14285	04-09-13	Installed	87976.339	37779.047	106.803	106.80	106.8033	106.8029	106.8028
Levelling Point	C305-LP14286	04-09-13	Installed	87982.481	37776.892	106.739	106.74	106.7387	106.7395	106.7388
Levelling Point	C305-LP14287	04-09-13	Installed	87986.771	37773.613	106.759	106.76	106.7596	106.7589	106.7585
Levelling Point	C305-LP14288	04-09-13	Installed	87991.787	37771.467	106.454	106.45	106.4541	106.4539	106.4540
Levelling Point	C305-LP14289	04-09-13	Installed	87996.889	37767.039	106.563	106.56	106.5633	106.5625	106.5632
Levelling Point	C305-LP14290	04-09-13	Installed	88004.921	37763.365	106.492	106.49	106.4914	106.4923	106.4923
Levelling Point	C305-LP14291	04-09-13	Installed	88007.310	37756.817	106.188	106.19	106.1878	106.1882	106.1880
							Average	08-04-14	08-04-14	08-04-14
Levelling Point	C305-LP14382	08-04-14	Installed	87961.409	37782.164	109.946	109.95	109.9458	109.9463	109.9459
Levelling Point	C305-LP14383	08-04-14	Installed	87966.614	37782.142	109.610	109.61	109.6105	109.6098	109.6097
Levelling Point	C305-LP14384	08-04-14	Installed	87969.357	37778.587	107.635	107.64	107.6354	107.6348	107.6348
Levelling Point	C305-LP14385	08-04-14	Installed	87982.743	37786.012	105.341	105.34	105.3409	105.3414	105.3407
Levelling Point	C305-LP14386	08-04-14	Installed	87986.042	37783.307	105.379	105.38	105.3794	105.3789	105.3787
Levelling Point	C305-LP14387	08-04-14	Installed	87990.759	37779.942	105.413	105.41	105.4128	105.4136	105.4126
Levelling Point	C305-LP14388	08-04-14	Installed	87995.081	37776.834	105.449	105.45	105.4489	105.4492	105.4489
Levelling Point	C305-LP14389	08-04-14	Installed	88000.132	37772.873	105.492	105.49	105.4918	105.4920	105.4922
Levelling Point	C305-LP14390	08-04-14	Installed	88006.506	37768.253	105.551	105.55	105.5507	105.5511	105.5512
Levelling Point	C305-LP14391	08-04-14	Installed	88011.241	37764.641	105.628	105.63	105.6283	105.6276	105.6281
							Average	08-07-13	08-07-13	08-07-13
Levelling Point	C305-LP140301	28-06-13	Installed	87864.187	37627.599	110.144	110.14	110.1433	110.1440	110.1444
Levelling Point	C305-LP140302	28-06-13	Installed	87868.050	37630.774	110.128	110.13	110.1286	110.1283	110.1283
Levelling Point	C305-LP140303	28-06-13	Installed	87871.913	37633.948	110.105	110.11	110.1054	110.1056	110.1055

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP140304	28-06-13	Installed	87875.776	37637.123	110.072	110.07	110.0723	110.0718	110.0716
Levelling Point	C305-LP140305	28-06-13	Installed	87879.638	37640.298	110.049	110.05	110.0485	110.0494	110.0485
Levelling Point	C305-LP140306	28-06-13	Installed	87883.501	37643.473	110.019	110.02	110.0189	110.0180	110.0189
Levelling Point	C305-LP140307	28-06-13	Installed	87887.364	37646.647	109.985	109.98	109.9845	109.9853	109.9846
Levelling Point	C305-LP140308	28-06-13	Installed	87891.227	37649.822	109.957	109.96	109.9569	109.9580	109.9576
Levelling Point	C305-LP140309	28-06-13	Installed	87893.158	37651.410	109.923	109.92	109.9234	109.9224	109.9229
Levelling Point	C305-LP140310	28-06-13	Installed	87895.089	37652.997	109.911	109.91	109.9104	109.9111	109.9112
Levelling Point	C305-LP140311	28-06-13	Installed	87897.021	37654.584	109.893	109.89	109.8929	109.8936	109.8934
Levelling Point	C305-LP140312	28-06-13	Installed	87898.952	37656.172	109.855	109.85	109.8552	109.8544	109.8542
Levelling Point	C305-LP140313	28-06-13	Installed	87900.883	37657.759	109.843	109.84	109.8429	109.8434	109.8427
Levelling Point	C305-LP140314	28-06-13	Installed	87902.815	37659.347	109.821	109.82	109.8208	109.8211	109.8211
Levelling Point	C305-LP140315	28-06-13	Installed	87904.746	37660.934	109.795	109.79	109.7951	109.7945	109.7942
Levelling Point	C305-LP140316	28-06-13	Installed	87906.678	37662.521	109.764	109.76	109.7630	109.7641	109.7637
Levelling Point	C305-LP140317	28-06-13	Installed	87908.609	37664.109	109.760	109.76	109.7601	109.7607	109.7607
Levelling Point	C305-LP140318	28-06-13	Installed	87910.540	37665.696	109.712	109.71	109.7125	109.7118	109.7114
Levelling Point	C305-LP140319	28-06-13	Installed	87912.472	37667.283	109.682	109.68	109.6822	109.6815	109.6826
Levelling Point	C305-LP140320	28-06-13	Installed	87916.334	37670.458	109.678	109.68	109.6775	109.6785	109.6777
Levelling Point	C305-LP140321	28-06-13	Installed	87920.197	37673.633	109.614	109.61	109.6140	109.6144	109.6145
Levelling Point	C305-LP140322	28-06-13	Installed	87924.060	37676.808	109.563	109.56	109.5634	109.5637	109.5634
Levelling Point	C305-LP140323	28-06-13	Installed	87927.923	37679.983	109.531	109.53	109.5308	109.5305	109.5305
Levelling Point	C305-LP140324	27-06-13	Installed	87929.854	37681.570	109.462	109.46	109.4613	109.4620	109.4618
Levelling Point	C305-LP140325	27-06-13	Installed	87931.785	37683.157	109.451	109.45	109.4515	109.4510	109.4514
Levelling Point	C305-LP140326	27-06-13	Installed	87933.717	37684.745	109.430	109.43	109.4298	109.4305	109.4297
Levelling Point	C305-LP140327	27-06-13	Installed	87935.648	37686.332	109.403	109.40	109.4025	109.4030	109.4032
Levelling Point	C305-LP140328	27-06-13	Installed	87937.579	37687.919	109.385	109.39	109.3858	109.3854	109.3853
Levelling Point	C305-LP140329	27-06-13	Installed	87939.511	37689.507	109.368	109.37	109.3674	109.3680	109.3680
Levelling Point	C305-LP140330	27-06-13	Installed	87941.442	37691.094	109.373	109.37	109.3735	109.3726	109.3735
Levelling Point	C305-LP140331	27-06-13	Installed	87943.374	37692.682	109.376	109.38	109.3768	109.3759	109.3762



**IRS Installation Record Sheets – Levelling Points**

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				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP140332	27-06-13	Installed	87945.305	37694.269	109.250	109.25	109.2502	109.2498	109.2503
Levelling Point	C305-LP140333	27-06-13	Installed	87947.236	37695.856	109.182	109.18	109.1817	109.1812	109.1819
Levelling Point	C305-LP140334	27-06-13	Installed	87949.168	37697.444	109.127	109.13	109.1281	109.1273	109.1271
Levelling Point	C305-LP140335	27-06-13	Installed	87951.099	37699.031	109.089	109.09	109.0888	109.0882	109.0891
Levelling Point	C305-LP140336	27-06-13	Installed	87953.030	37700.619	109.025	109.03	109.0257	109.0252	109.0250
Levelling Point	C305-LP140337	27-06-13	Installed	87954.962	37702.206	108.946	108.95	108.9459	108.9464	108.9457
Levelling Point	C305-LP140338	27-06-13	Installed	87956.893	37703.793	108.880	108.88	108.8803	108.8795	108.8793
Levelling Point	C305-LP140339	27-06-13	Installed	87958.825	37705.381	108.825	108.82	108.8241	108.8251	108.8246
Levelling Point	C305-LP140340	27-06-13	Installed	87962.687	37708.556	108.779	108.78	108.7788	108.7781	108.7792
Levelling Point	C305-LP140341	27-06-13	Installed	87966.550	37711.730	108.625	108.63	108.6249	108.6260	108.6253
Levelling Point	C305-LP140342	27-06-13	Installed	87970.413	37714.905	108.502	108.50	108.5021	108.5018	108.5018
Levelling Point	C305-LP140343	27-06-13	Installed	87974.276	37718.080	108.364	108.36	108.3650	108.3640	108.3645
Levelling Point	C305-LP140344	27-06-13	Installed	87978.138	37721.255	108.228	108.23	108.2286	108.2276	108.2284
Levelling Point	C305-LP140345	27-06-13	Installed	87982.001	37724.429	108.087	108.09	108.0865	108.0870	108.0869
Levelling Point	C305-LP140346	27-06-13	Installed	87985.864	37727.604	108.026	108.03	108.0271	108.0259	108.0265
Levelling Point	C305-LP140347	28-06-13	Installed	87991.059	37725.935	108.063	108.06	108.0629	108.0636	108.0637
							Average	08-07-13	08-07-13	08-07-13
Levelling Point	C305-LP140401	01-07-13	Installed	87876.847	37609.878	110.658	110.66	110.6587	110.6580	110.6585
Levelling Point	C305-LP140402	01-07-13	Installed	87879.812	37612.174	110.647	110.65	110.6467	110.6470	110.6470
Levelling Point	C305-LP140403	01-07-13	Installed	87882.776	37614.471	110.610	110.61	110.6096	110.6102	110.6096
Levelling Point	C305-LP140404	01-07-13	Installed	87885.741	37616.767	110.560	110.56	110.5600	110.5609	110.5603
Levelling Point	C305-LP140405	01-07-13	Installed	87887.223	37617.915	110.556	110.56	110.5563	110.5554	110.5563
Levelling Point	C305-LP140406	01-07-13	Installed	87888.705	37619.063	110.545	110.54	110.5443	110.5451	110.5453
Levelling Point	C305-LP140407	01-07-13	Installed	87890.188	37620.211	110.529	110.53	110.5292	110.5290	110.5291
Levelling Point	C305-LP140408	01-07-13	Installed	87892.685	37620.090	110.483	110.48	110.4829	110.4822	110.4827
Levelling Point	C305-LP140409	01-07-13	Installed	87895.185	37620.083	110.472	110.47	110.4714	110.4721	110.4716
Levelling Point	C305-LP140410	01-07-13	Installed	87897.649	37619.660	110.502	110.50	110.5019	110.5026	110.5015
Levelling Point	C305-LP140411	01-07-13	Installed	87900.136	37619.413	110.539	110.54	110.5394	110.5386	110.5387

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				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP140412	01-07-13	Installed	87902.623	37619.152	110.518	110.52	110.5179	110.5186	110.5181
Levelling Point	C305-LP140413	01-07-13	Installed	87905.122	37619.086	110.499	110.50	110.4997	110.4987	110.4992
Levelling Point	C305-LP140414	01-07-13	Installed	87907.614	37618.889	110.509	110.51	110.5084	110.5090	110.5087
Levelling Point	C305-LP140415	01-07-13	Installed	87910.106	37618.688	110.529	110.53	110.5295	110.5291	110.5293
Levelling Point	C305-LP140416	01-07-13	Installed	87912.602	37618.539	110.545	110.55	110.5448	110.5452	110.5450
Levelling Point	C305-LP140417	01-07-13	Installed	87915.002	37617.841	110.546	110.55	110.5464	110.5455	110.5458
Levelling Point	C305-LP140418	01-07-13	Installed	87919.240	37615.241	110.589	110.59	110.5887	110.5881	110.5890
Levelling Point	C305-LP140419	01-07-13	Installed	87922.813	37611.743	110.628	110.63	110.6278	110.6285	110.6277
Levelling Point	C305-LP140420	28-06-13	Installed	87924.635	37610.032	110.635	110.63	110.6344	110.6352	110.6351
Levelling Point	C305-LP140421	01-07-13	Installed	87926.528	37608.396	110.638	110.64	110.6384	110.6376	110.6386
Levelling Point	C305-LP140422	01-07-13	Installed	87928.580	37606.966	110.640	110.64	110.6396	110.6404	110.6406
Levelling Point	C305-LP140423	01-07-13	Installed	87930.638	37605.550	110.648	110.65	110.6477	110.6473	110.6478
Levelling Point	C305-LP140424	01-07-13	Installed	87932.743	37604.201	110.661	110.66	110.6620	110.6610	110.6615
Levelling Point	C305-LP140425	01-07-13	Installed	87934.787	37602.761	110.695	110.69	110.6945	110.6950	110.6952
Levelling Point	C305-LP140426	01-07-13	Installed	87937.352	37601.314	110.734	110.73	110.7341	110.7338	110.7338
Levelling Point	C305-LP140427	01-07-13	Installed	87939.992	37600.034	110.745	110.74	110.7444	110.7450	110.7444
Levelling Point	C305-LP140428	01-07-13	Installed	87942.899	37599.367	110.776	110.78	110.7759	110.7770	110.7766
Levelling Point	C305-LP140429	01-07-13	Installed	87946.177	37599.348	110.750	110.75	110.7494	110.7505	110.7501
Levelling Point	C305-LP140430	01-07-13	Installed	87951.253	37600.912	110.744	110.74	110.7440	110.7447	110.7445
Levelling Point	C305-LP140431	01-07-13	Installed	87956.372	37602.767	110.647	110.69	110.6932	110.6935	110.6932
Levelling Point	C305-LP140432	01-07-13	Installed	87955.928	37597.955	110.646	110.65	110.6466	110.6457	110.6466
Levelling Point	C305-LP140433	01-07-13	Installed	87955.280	37592.816	110.603	110.60	110.6033	110.6037	110.6035
Levelling Point	C305-LP140434	01-07-13	Installed	87956.535	37588.607	110.680	110.68	110.6794	110.6800	110.6803
Levelling Point	C305-LP140435	01-07-13	Installed	87959.735	37585.410	110.710	110.71	110.7104	110.7101	110.7101
							Average	08-07-13	08-07-13	08-07-13
Levelling Point	C305-LP140501	04-07-13	Installed	87827.642	37440.603	110.987	110.99	110.9877	110.9868	110.9874
Levelling Point	C305-LP140502	04-07-13	Installed	87832.566	37441.374	110.936	110.94	110.9352	110.9358	110.9361
Levelling Point	C305-LP140503	04-07-13	Installed	87837.538	37442.113	110.855	110.86	110.8554	110.8559	110.8552

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Levelling Point	C305-LP140504	04-07-13	Installed	87842.562	37442.918	110.783	110.78	110.7825	110.7834	110.7825
Levelling Point	C305-LP140505	04-07-13	Installed	87847.097	37446.160	110.614	110.61	110.6139	110.6133	110.6139
Levelling Point	C305-LP140506	04-07-13	Installed	87849.516	37446.740	110.576	110.58	110.5755	110.5763	110.5765
Levelling Point	C305-LP140507	04-07-13	Installed	87851.935	37447.320	110.553	110.55	110.5541	110.5534	110.5530
Levelling Point	C305-LP140508	04-07-13	Installed	87854.354	37447.900	110.532	110.53	110.5322	110.5316	110.5322
Levelling Point	C305-LP140509	04-07-13	Installed	87856.774	37448.480	110.507	110.51	110.5067	110.5071	110.5066
Levelling Point	C305-LP140510	04-07-13	Installed	87859.193	37449.060	110.491	110.49	110.4915	110.4909	110.4912
Levelling Point	C305-LP140511	04-07-13	Installed	87861.612	37449.641	110.475	110.47	110.4752	110.4742	110.4750
Levelling Point	C305-LP140512	04-07-13	Installed	87864.031	37450.221	110.460	110.46	110.4591	110.4601	110.4596
Levelling Point	C305-LP140513	04-07-13	Installed	87866.450	37450.801	110.472	110.47	110.4724	110.4715	110.4718
Levelling Point	C305-LP140514	04-07-13	Installed	87868.870	37451.381	110.482	110.48	110.4816	110.4820	110.4818
Levelling Point	C305-LP140515	04-07-13	Installed	87871.289	37451.961	110.488	110.49	110.4881	110.4886	110.4888
Levelling Point	C305-LP140516	04-07-13	Installed	87873.708	37452.541	110.401	110.40	110.4017	110.4008	110.4008
Levelling Point	C305-LP140517	04-07-13	Installed	87876.127	37453.121	110.514	110.51	110.5137	110.5145	110.5147
Levelling Point	C305-LP140518	04-07-13	Installed	87881.047	37454.201	110.563	110.56	110.5634	110.5626	110.5633
Levelling Point	C305-LP140519	04-07-13	Installed	87885.933	37455.175	110.600	110.60	110.6010	110.6002	110.6000
Levelling Point	C305-LP140520	04-07-13	Installed	87890.792	37456.135	110.627	110.63	110.6263	110.6268	110.6270
Levelling Point	C305-LP140521	04-07-13	Installed	87895.696	37457.047	110.641	110.64	110.6409	110.6401	110.6408
Levelling Point	C305-LP140522	04-07-13	Installed	87900.650	37458.025	110.649	110.65	110.6484	110.6492	110.6491
Levelling Point	C305-LP140523	04-07-13	Installed	87905.484	37459.081	110.668	110.67	110.6684	110.6686	110.6685
Levelling Point	C305-LP140524	04-07-13	Installed	87910.391	37460.049	110.718	110.72	110.7177	110.7181	110.7176
Levelling Point	C305-LP140525	04-07-13	Installed	87912.860	37460.554	110.739	110.74	110.7389	110.7385	110.7390
Levelling Point	C305-LP140526	04-07-13	Installed	87915.283	37461.047	110.750	110.75	110.7505	110.7498	110.7509
Levelling Point	C305-LP140527	04-07-13	Installed	87917.657	37461.532	110.756	110.76	110.7558	110.7566	110.7556
Levelling Point	C305-LP140528	04-07-13	Installed	87920.161	37462.072	110.754	110.75	110.7538	110.7544	110.7547
Levelling Point	C305-LP140529	04-07-13	Installed	87922.590	37462.559	110.757	110.76	110.7564	110.7574	110.7566
Levelling Point	C305-LP140530	04-07-13	Installed	87925.062	37463.062	110.750	110.75	110.7506	110.7499	110.7507
Levelling Point	C305-LP140531	04-07-13	Installed	87927.495	37463.558	110.747	110.75	110.7469	110.7463	110.7469

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP140532	04-07-13	Installed	87929.973	37464.061	110.745	110.74	110.7451	110.7442	110.7445
Levelling Point	C305-LP140533	04-07-13	Installed	87932.339	37464.529	110.740	110.74	110.7393	110.7400	110.7404
Levelling Point	C305-LP140534	04-07-13	Installed	87934.820	37465.014	110.731	110.73	110.7310	110.7320	110.7312
Levelling Point	C305-LP140535	04-07-13	Installed	87937.295	37465.500	110.728	110.73	110.7284	110.7278	110.7278
Levelling Point	C305-LP140536	04-07-13	Installed	87942.356	37466.471	110.722	110.72	110.7213	110.7217	110.7218
Levelling Point	C305-LP140537	04-07-13	Installed	87947.064	37467.395	110.728	110.73	110.7271	110.7280	110.7277
Levelling Point	C305-LP140538	04-07-13	Installed	87951.990	37468.405	110.729	110.73	110.7293	110.7288	110.7292
Levelling Point	C305-LP140539	04-07-13	Installed	87956.754	37469.640	110.714	110.71	110.7135	110.7145	110.7140
Levelling Point	C305-LP140540	04-07-13	Installed	87961.606	37470.993	110.704	110.70	110.7045	110.7035	110.7037
							Average	09-07-13	09-07-13	09-07-13
Levelling Point	C305-LP140601	02-07-13	Installed	87815.505	37394.211	109.006	109.05	109.0512	109.0504	109.0502
Levelling Point	C305-LP140602	02-07-13	Installed	87820.231	37395.266	109.118	109.16	109.1631	109.1626	109.1633
Levelling Point	C305-LP140603	02-07-13	Installed	87825.037	37396.347	109.461	109.51	109.5051	109.5057	109.5051
Levelling Point	C305-LP140604	02-07-13	Installed	87829.918	37397.335	109.689	109.73	109.7348	109.7341	109.7337
Levelling Point	C305-LP140605	02-07-13	Installed	87832.690	37397.946	109.902	109.95	109.9471	109.9465	109.9465
Levelling Point	C305-LP140606	02-07-13	Installed	87835.462	37398.558	109.997	110.04	110.0407	110.0415	110.0417
Levelling Point	C305-LP140607	02-07-13	Installed	87838.234	37399.169	110.091	110.14	110.1353	110.1362	110.1362
Levelling Point	C305-LP140608	02-07-13	Installed	87841.006	37399.781	110.174	110.22	110.2183	110.2186	110.2183
Levelling Point	C305-LP140609	02-07-13	Installed	87843.778	37400.393	110.141	110.19	110.1861	110.1855	110.1861
Levelling Point	C305-LP140610	02-07-13	Installed	87846.550	37401.004	110.220	110.27	110.2652	110.2649	110.2652
Levelling Point	C305-LP140611	02-07-13	Installed	87849.322	37401.616	110.381	110.43	110.4262	110.4258	110.4260
Levelling Point	C305-LP140612	02-07-13	Installed	87852.094	37402.227	110.433	110.48	110.4781	110.4772	110.4772
Levelling Point	C305-LP140613	02-07-13	Installed	87854.327	37402.761	110.453	110.50	110.4981	110.4976	110.4974
Levelling Point	C305-LP140614	02-07-13	Installed	87856.780	37403.228	110.458	110.50	110.5029	110.5023	110.5023
Levelling Point	C305-LP140615	02-07-13	Installed	87858.987	37403.738	110.462	110.51	110.5067	110.5060	110.5071
Levelling Point	C305-LP140616	02-07-13	Installed	87861.653	37404.351	110.352	110.40	110.3968	110.3975	110.3964
Levelling Point	C305-LP140617	02-07-13	Installed	87869.627	37400.061	110.332	110.38	110.3767	110.3761	110.3761
Levelling Point	C305-LP140618	02-07-13	Installed	87873.964	37401.048	110.307	110.35	110.3514	110.3521	110.3525

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP140619	02-07-13	Installed	87878.301	37402.034	110.286	110.33	110.3301	110.3308	110.3309
Levelling Point	C305-LP140620	02-07-13	Installed	87882.638	37403.021	110.251	110.30	110.2957	110.2948	110.2957
Levelling Point	C305-LP140621	02-07-13	Installed	87886.975	37404.008	110.204	110.25	110.2483	110.2488	110.2484
Levelling Point	C305-LP140622	02-07-13	Installed	87891.312	37404.994	110.167	110.21	110.2122	110.2117	110.2118
Levelling Point	C305-LP140623	02-07-13	Installed	87895.648	37405.981	110.122	110.17	110.1669	110.1674	110.1673
Levelling Point	C305-LP140624	02-07-13	Installed	87899.985	37406.967	110.086	110.13	110.1302	110.1306	110.1307
Levelling Point	C305-LP140625	02-07-13	Installed	87904.322	37407.954	110.056	110.10	110.1012	110.1003	110.1009
Levelling Point	C305-LP140626	02-07-13	Installed	87906.831	37408.423	110.038	110.08	110.0822	110.0827	110.0826
Levelling Point	C305-LP140627	02-07-13	Installed	87909.181	37408.976	110.027	110.07	110.0712	110.0723	110.0719
Levelling Point	C305-LP140628	02-07-13	Installed	87911.641	37409.530	110.011	110.06	110.0564	110.0552	110.0558
Levelling Point	C305-LP140629	02-07-13	Installed	87914.035	37410.070	109.989	110.03	110.0327	110.0334	110.0338
Levelling Point	C305-LP140630	02-07-13	Installed	87916.510	37410.562	109.966	110.01	110.0104	110.0098	110.0107
Levelling Point	C305-LP140631	02-07-13	Installed	87918.944	37411.132	109.943	109.99	109.9887	109.9877	109.9879
Levelling Point	C305-LP140632	02-07-13	Installed	87921.236	37411.642	109.936	109.98	109.9805	109.9816	109.9812
Levelling Point	C305-LP140633	02-07-13	Installed	87923.792	37412.209	109.846	109.89	109.8905	109.8898	109.8906
Levelling Point	C305-LP140634	02-07-13	Installed	87926.270	37412.723	109.803	109.85	109.8477	109.8469	109.8473
Levelling Point	C305-LP140635	02-07-13	Installed	87928.714	37413.263	109.910	109.96	109.9551	109.9549	109.9550
Levelling Point	C305-LP140636	02-07-13	Installed	87931.149	37413.797	109.910	109.95	109.9552	109.9548	109.9547
Levelling Point	C305-LP140637	02-07-13	Installed	87935.624	37414.799	109.917	109.96	109.9622	109.9612	109.9614
Levelling Point	C305-LP140638	02-07-13	Installed	87940.633	37415.847	109.941	109.99	109.9853	109.9859	109.9862
Levelling Point	C305-LP140639	02-07-13	Installed	87951.563	37417.750	110.078	110.12	110.1220	110.1227	110.1231
							Average	09-07-13	09-07-13	09-07-13
Levelling Point	C305-LP140701	18-09-13	Installed	87861.219	37398.598	110.398	110.40	110.3979	110.3985	110.3982
Levelling Point	C305-LP140702	18-09-13	Installed	87858.378	37395.756	110.442	110.44	110.4425	110.4419	110.4416
Levelling Point	C305-LP140703	18-09-13	Installed	87859.660	37391.655	110.483	110.48	110.4828	110.4838	110.4833
Levelling Point	C305-LP140704	18-09-13	Installed	87861.446	37386.659	110.503	110.50	110.5032	110.5024	110.5025
Levelling Point	C305-LP140705	18-09-13	Installed	87863.231	37382.314	110.514	110.51	110.5143	110.5150	110.5139
Levelling Point	C305-LP140706	18-09-13	Installed	87864.893	37377.599	110.539	110.54	110.5394	110.5391	110.5391



**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP140707	18-09-13	Installed	87866.593	37372.897	110.550	110.55	110.5504	110.5494	110.5502
Levelling Point	C305-LP140708	18-09-13	Installed	87868.311	37368.201	110.589	110.59	110.5885	110.5896	110.5892
Levelling Point	C305-LP140709	18-09-13	Installed	87869.103	37365.830	110.587	110.59	110.5870	110.5876	110.5867
Levelling Point	C305-LP140710	18-09-13	Installed	87869.895	37363.459	110.592	110.59	110.5920	110.5916	110.5918
Levelling Point	C305-LP140711	18-09-13	Installed	87870.699	37361.092	110.590	110.59	110.5896	110.5903	110.5904
Levelling Point	C305-LP140712	18-09-13	Installed	87871.568	37358.747	110.597	110.60	110.5970	110.5972	110.5971
Levelling Point	C305-LP140713	18-09-13	Installed	87872.402	37356.392	110.600	110.60	110.6001	110.6009	110.5999
Levelling Point	C305-LP140714	18-09-13	Installed	87876.021	37351.833	110.622	110.62	110.6213	110.6222	110.6219
Levelling Point	C305-LP140715	18-09-13	Installed	87878.365	37350.964	110.637	110.64	110.6371	110.6364	110.6363
Levelling Point	C305-LP140716	18-09-13	Installed	87880.823	37350.507	110.636	110.64	110.6369	110.6358	110.6365
Levelling Point	C305-LP140717	18-09-13	Installed	87883.319	37350.651	110.653	110.65	110.6521	110.6529	110.6531
Levelling Point	C305-LP140718	04-07-13	Installed	87829.152	37316.297	110.224	110.22	110.2237	110.2243	110.2234
Levelling Point	C305-LP140719	04-07-13	Installed	87830.387	37311.501	110.486	110.49	110.4857	110.4862	110.4855
Levelling Point	C305-LP140720	04-07-13	Installed	87831.575	37306.842	110.730	110.73	110.7299	110.7308	110.7299
Levelling Point	C305-LP140721	04-07-13	Installed	87832.869	37301.803	111.005	111.01	111.0053	111.0060	111.0049
Levelling Point	C305-LP140722	04-07-13	Installed	87834.526	37297.152	111.251	111.25	111.2511	111.2503	111.2501
Levelling Point	C305-LP140723	04-07-13	Installed	87836.397	37292.477	111.501	111.50	111.5015	111.5005	111.5013
Levelling Point	C305-LP140724	04-07-13	Installed	87838.255	37287.855	111.741	111.74	111.7414	111.7410	111.7415
Levelling Point	C305-LP140725	04-07-13	Installed	87840.125	37283.231	111.992	111.99	111.9911	111.9918	111.9919
Levelling Point	C305-LP140726	04-07-13	Installed	87841.994	37278.606	112.242	112.24	112.2413	112.2418	112.2417
Levelling Point	C305-LP140727	04-07-13	Installed	87843.870	37274.009	112.502	112.50	112.5027	112.5019	112.5023
Levelling Point	C305-LP140728	04-07-13	Installed	87845.747	37269.317	112.770	112.77	112.7700	112.7697	112.7697
Levelling Point	C305-LP140729	04-07-13	Installed	87848.233	37265.104	112.791	112.79	112.7906	112.7901	112.7908
							Average	09-07-13	09-07-13	09-07-13
Levelling Point	C305-LP140801	02-07-13	Installed	87874.589	37308.781	110.591	110.59	110.5912	110.5915	110.5915
Levelling Point	C305-LP140802	02-07-13	Installed	87876.516	37304.003	110.514	110.51	110.5140	110.5130	110.5138
Levelling Point	C305-LP140803	02-07-13	Installed	87878.443	37299.478	110.396	110.40	110.3958	110.3953	110.3954
Levelling Point	C305-LP140804	02-07-13	Installed	87880.361	37294.911	110.330	110.33	110.3308	110.3302	110.3299

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP140805	02-07-13	Installed	87881.404	37292.527	110.220	110.22	110.2203	110.2201	110.2205
Levelling Point	C305-LP140806	02-07-13	Installed	87882.519	37290.225	110.193	110.19	110.1922	110.1932	110.1927
Levelling Point	C305-LP140807	02-07-13	Installed	87883.487	37287.897	110.245	110.25	110.2447	110.2452	110.2451
Levelling Point	C305-LP140808	02-07-13	Installed	87884.456	37285.597	110.158	110.16	110.1581	110.1583	110.1582
Levelling Point	C305-LP140809	02-07-13	Installed	87885.419	37283.250	110.163	110.16	110.1629	110.1625	110.1624
Levelling Point	C305-LP140810	02-07-13	Installed	87886.373	37280.924	110.163	110.16	110.1627	110.1635	110.1625
Levelling Point	C305-LP140811	02-07-13	Installed	87887.323	37278.608	110.158	110.16	110.1585	110.1578	110.1589
Levelling Point	C305-LP140812	02-07-13	Installed	87888.266	37276.297	110.160	110.16	110.1605	110.1601	110.1606
Levelling Point	C305-LP140813	02-07-13	Installed	87889.278	37274.009	110.163	110.16	110.1632	110.1625	110.1624
Levelling Point	C305-LP140814	02-07-13	Installed	87890.189	37271.671	110.205	110.20	110.2052	110.2042	110.2047
Levelling Point	C305-LP140815	02-07-13	Installed	87891.375	37257.138	110.340	110.34	110.3405	110.3395	110.3400
Levelling Point	C305-LP140816	02-07-13	Installed	87892.000	37252.347	110.365	110.37	110.3646	110.3655	110.3652
Levelling Point	C305-LP140817	02-07-13	Installed	87892.023	37267.059	110.313	110.31	110.3124	110.3135	110.3128
Levelling Point	C305-LP140818	02-07-13	Installed	87892.373	37262.086	110.217	110.22	110.2170	110.2165	110.2172
Levelling Point	C305-LP140819	02-07-13	Installed	87895.350	37248.750	109.993	109.99	109.9919	109.9928	109.9928
Levelling Point	C305-LP140820	02-07-13	Installed	87898.722	37245.022	109.650	109.65	109.6495	109.6500	109.6496
Levelling Point	C305-LP140821	02-07-13	Installed	87901.693	37240.952	109.513	109.51	109.5123	109.5127	109.5125
							Average	19-09-13	19-09-13	19-09-13
Levelling Point	C305-LP140901	18-09-13	Installed	87898.112	37232.952	109.340	109.34	109.3398	109.3403	109.3405
Levelling Point	C305-LP140902	18-09-13	Installed	87895.517	37237.105	109.562	109.56	109.5614	109.5620	109.5620
Levelling Point	C305-LP140903	18-09-13	Installed	87892.483	37241.080	109.845	109.85	109.8445	109.8454	109.8451
Levelling Point	C305-LP140904	18-09-13	Installed	87888.930	37244.597	110.150	110.15	110.1491	110.1498	110.1502
Levelling Point	C305-LP140905	18-09-13	Installed	87885.147	37247.866	110.441	110.44	110.4403	110.4409	110.4412
Levelling Point	C305-LP140906	18-09-13	Installed	87880.923	37250.542	110.603	110.60	110.6024	110.6032	110.6028
Levelling Point	C305-LP140907	18-09-13	Installed	87876.306	37252.463	110.945	110.94	110.9441	110.9450	110.9444
Levelling Point	C305-LP140908	18-09-13	Installed	87871.304	37253.436	111.285	111.29	111.2848	111.2856	111.2852
Levelling Point	C305-LP140909	18-09-13	Installed	87866.307	37253.624	111.607	111.61	111.6065	111.6071	111.6062
Levelling Point	C305-LP140910	18-09-13	Installed	87861.424	37252.550	111.926	111.93	111.9253	111.9262	111.9253

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
							Average	29-07-13	29-07-13	29-07-13
Levelling Point	C305-LP141001	11-07-13	Installed	87770.319	37273.809	112.603	112.60	112.6030	112.6034	112.6029
Levelling Point	C305-LP141002	11-07-13	Installed	87772.012	37269.111	112.688	112.69	112.6874	112.6886	112.6880
Levelling Point	C305-LP141003	11-07-13	Installed	87773.052	37264.089	112.746	112.75	112.7458	112.7451	112.7462
Levelling Point	C305-LP141004	11-07-13	Installed	87774.807	37259.429	112.838	112.84	112.8384	112.8376	112.8374
Levelling Point	C305-LP141005	11-07-13	Installed	87776.540	37254.736	112.939	112.94	112.9395	112.9390	112.9397
Levelling Point	C305-LP141006	11-07-13	Installed	87778.394	37250.103	113.036	113.04	113.0360	113.0363	113.0360
Levelling Point	C305-LP141007	11-07-13	Installed	87780.521	37245.545	113.122	113.12	113.1213	113.1220	113.1218
Levelling Point	C305-LP141008	11-07-13	Installed	87782.926	37241.186	113.277	113.28	113.2766	113.2771	113.2770
Levelling Point	C305-LP141009	11-07-13	Installed	87784.251	37238.833	113.394	113.39	113.3938	113.3940	113.3939
Levelling Point	C305-LP141010	11-07-13	Installed	87785.354	37236.814	113.520	113.52	113.5206	113.5199	113.5198
Levelling Point	C305-LP141011	11-07-13	Installed	87786.644	37234.665	113.760	113.76	113.7598	113.7601	113.7601
Levelling Point	C305-LP141012	11-07-13	Installed	87787.732	37232.416	113.897	113.90	113.8973	113.8966	113.8962
Levelling Point	C305-LP141013	11-07-13	Installed	87788.960	37230.279	114.047	114.05	114.0466	114.0473	114.0474
Levelling Point	C305-LP141014	11-07-13	Installed	87790.209	37228.133	114.201	114.20	114.2004	114.2011	114.2006
Levelling Point	C305-LP141015	11-07-13	Installed	87791.471	37225.936	114.324	114.32	114.3231	114.3240	114.3237
Levelling Point	C305-LP141016	11-07-13	Installed	87792.716	37223.790	114.369	114.37	114.3699	114.3694	114.3692
Levelling Point	C305-LP141017	11-07-13	Installed	87793.982	37221.623	114.399	114.40	114.3989	114.3995	114.3998
Levelling Point	C305-LP141018	11-07-13	Installed	87795.381	37219.552	114.400	114.40	114.4004	114.4006	114.4005
Levelling Point	C305-LP141019	11-07-13	Installed	87796.653	37217.402	114.395	114.40	114.3951	114.3959	114.3955
Levelling Point	C305-LP141020	11-07-13	Installed	87797.941	37215.212	114.359	114.36	114.3590	114.3583	114.3585
Levelling Point	C305-LP141021	11-07-13	Installed	87800.478	37210.860	114.149	114.15	114.1489	114.1494	114.1496
Levelling Point	C305-LP141022	11-07-13	Installed	87802.982	37206.508	113.939	113.94	113.9385	113.9393	113.9392
Levelling Point	C305-LP141023	11-07-13	Installed	87805.473	37202.173	113.732	113.73	113.7328	113.7322	113.7319
Levelling Point	C305-LP141024	11-07-13	Installed	87807.861	37197.775	113.473	113.47	113.4725	113.4731	113.4734
Levelling Point	C305-LP141025	11-07-13	Installed	87809.930	37193.241	113.286	113.29	113.2860	113.2856	113.2858
Levelling Point	C305-LP141026	11-07-13	Installed	87812.006	37188.709	113.153	113.15	113.1528	113.1524	113.1529
Levelling Point	C305-LP141027	11-07-13	Installed	87814.015	37184.160	112.993	112.99	112.9922	112.9932	112.9924

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP141028	11-07-13	Installed	87816.003	37179.515	112.831	112.83	112.8305	112.8313	112.8306
Levelling Point	C305-LP141029	11-07-13	Installed	87817.940	37174.946	112.678	112.68	112.6784	112.6788	112.6783
Levelling Point	C305-LP141030	11-07-13	Installed	87818.927	37172.614	112.484	112.48	112.4842	112.4835	112.4834
Levelling Point	C305-LP141031	11-07-13	Installed	87819.900	37170.322	112.534	112.53	112.5340	112.5336	112.5341
Levelling Point	C305-LP141032	11-07-13	Installed	87820.865	37168.059	112.464	112.46	112.4634	112.4643	112.4643
Levelling Point	C305-LP141033	11-07-13	Installed	87821.842	37165.697	112.392	112.39	112.3924	112.3917	112.3913
Levelling Point	C305-LP141034	11-07-13	Installed	87823.246	37163.616	112.366	112.37	112.3661	112.3657	112.3662
Levelling Point	C305-LP141035	11-07-13	Installed	87823.814	37161.089	112.117	112.12	112.1163	112.1172	112.1169
Levelling Point	C305-LP141036	11-07-13	Installed	87824.786	37158.810	112.049	112.05	112.0489	112.0499	112.0491
Levelling Point	C305-LP141037	11-07-13	Installed	87825.779	37156.513	111.987	111.99	111.9868	111.9876	111.9875
Levelling Point	C305-LP141038	11-07-13	Installed	87827.309	37154.324	112.094	112.09	112.0937	112.0947	112.0945
Levelling Point	C305-LP141039	11-07-13	Installed	87827.740	37151.794	111.998	112.00	111.9983	111.9975	111.9982
Levelling Point	C305-LP141040	11-07-13	Installed	87828.715	37149.512	111.925	111.93	111.9258	111.9249	111.9255
Levelling Point	C305-LP141041	11-07-13	Installed	87829.703	37147.197	111.765	111.76	111.7653	111.7641	111.7647
Levelling Point	C305-LP141042	11-07-13	Installed	87830.693	37144.832	111.787	111.79	111.7864	111.7871	111.7869
Levelling Point	C305-LP141043	11-07-13	Installed	87832.628	37140.195	111.625	111.63	111.6247	111.6259	111.6253
Levelling Point	C305-LP141044	11-07-13	Installed	87834.552	37135.599	111.473	111.47	111.4731	111.4725	111.4734
Levelling Point	C305-LP141045	11-07-13	Installed	87836.470	37130.972	111.327	111.33	111.3281	111.3272	111.3272
Levelling Point	C305-LP141046	11-07-13	Installed	87838.391	37126.353	111.179	111.18	111.1795	111.1787	111.1788
Levelling Point	C305-LP141047	11-07-13	Installed	87840.318	37121.741	111.021	111.02	111.0204	111.0214	111.0206
Levelling Point	C305-LP141048	11-07-13	Installed	87842.164	37117.121	110.858	110.86	110.8581	110.8584	110.8584
Levelling Point	C305-LP141049	11-07-13	Installed	87843.938	37112.452	110.698	110.70	110.6975	110.6983	110.6973
Levelling Point	C305-LP141050	11-07-13	Installed	87845.743	37107.776	110.537	110.54	110.5371	110.5375	110.5370
							Average	29-07-13	29-07-13	29-07-13
Levelling Point	C305-LP141101	11-07-13	Installed	87725.847	37152.833	111.015	111.01	111.0146	111.0143	111.0146
Levelling Point	C305-LP141102	11-07-13	Installed	87730.375	37154.698	110.966	110.97	110.9660	110.9657	110.9660
Levelling Point	C305-LP141103	11-07-13	Installed	87734.984	37156.539	110.975	110.97	110.9749	110.9740	110.9746
Levelling Point	C305-LP141104	11-07-13	Installed	87739.603	37158.470	110.993	110.99	110.9927	110.9938	110.9931

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP141105	11-07-13	Installed	87744.751	37159.215	110.945	110.94	110.9449	110.9440	110.9446
Levelling Point	C305-LP141106	11-07-13	Installed	87749.000	37161.975	110.910	110.91	110.9104	110.9095	110.9104
Levelling Point	C305-LP141107	11-07-13	Installed	87751.287	37162.954	110.898	110.90	110.8982	110.8975	110.8983
Levelling Point	C305-LP141108	11-07-13	Installed	87753.578	37163.915	110.881	110.88	110.8803	110.8807	110.8805
Levelling Point	C305-LP141109	11-07-13	Installed	87755.886	37164.882	110.868	110.87	110.8682	110.8676	110.8679
Levelling Point	C305-LP141110	11-07-13	Installed	87758.187	37165.848	110.855	110.85	110.8550	110.8543	110.8545
Levelling Point	C305-LP141111	11-07-13	Installed	87760.452	37166.798	110.840	110.84	110.8410	110.8402	110.8400
Levelling Point	C305-LP141112	11-07-13	Installed	87745.792	37147.214	110.837	110.84	110.8365	110.8372	110.8361
Levelling Point	C305-LP141113	11-07-13	Installed	87745.989	37144.707	110.818	110.82	110.8182	110.8184	110.8186
Levelling Point	C305-LP141114	11-07-13	Installed	87746.654	37142.482	110.775	110.78	110.7746	110.7753	110.7751
Levelling Point	C305-LP141115	11-07-13	Installed	87748.121	37140.155	110.772	110.77	110.7722	110.7717	110.7715
Levelling Point	C305-LP141116	11-07-13	Installed	87749.659	37138.316	110.754	110.75	110.7545	110.7535	110.7537
Levelling Point	C305-LP141117	11-07-13	Installed	87751.521	37136.708	110.740	110.74	110.7399	110.7404	110.7397
Levelling Point	C305-LP141118	11-07-13	Installed	87753.488	37135.093	110.712	110.71	110.7121	110.7129	110.7119
Levelling Point	C305-LP141119	11-07-13	Installed	87755.409	37133.505	110.690	110.69	110.6902	110.6891	110.6895
Levelling Point	C305-LP141120	11-07-13	Installed	87757.342	37131.920	110.662	110.66	110.6621	110.6626	110.6622
Levelling Point	C305-LP141121	11-07-13	Installed	87761.181	37128.754	110.599	110.60	110.5993	110.5986	110.5985
Levelling Point	C305-LP141122	11-07-13	Installed	87764.965	37125.520	110.471	110.47	110.4708	110.4714	110.4708
Levelling Point	C305-LP141123	11-07-13	Installed	87776.207	37115.641	110.362	110.36	110.3620	110.3623	110.3620
Levelling Point	C305-LP141124	11-07-13	Installed	87779.616	37112.600	110.421	110.42	110.4211	110.4216	110.4212
Levelling Point	C305-LP141125	11-07-13	Installed	87783.592	37109.197	110.475	110.48	110.4747	110.4756	110.4750
Levelling Point	C305-LP141126	11-07-13	Installed	87787.363	37105.929	110.467	110.47	110.4671	110.4676	110.4669
Levelling Point	C305-LP141127	11-07-13	Installed	87789.344	37104.379	110.467	110.47	110.4670	110.4660	110.4665
Levelling Point	C305-LP141128	11-07-13	Installed	87791.271	37103.087	110.478	110.48	110.4771	110.4783	110.4777
Levelling Point	C305-LP141129	11-07-13	Installed	87793.724	37102.114	110.480	110.48	110.4798	110.4803	110.4796
Levelling Point	C305-LP141130	11-07-13	Installed	87796.226	37101.939	110.499	110.50	110.4989	110.4980	110.4989
Levelling Point	C305-LP141131	11-07-13	Installed	87798.646	37102.392	110.527	110.53	110.5270	110.5277	110.5275
Levelling Point	C305-LP141132	11-07-13	Installed	87800.784	37103.667	110.563	110.56	110.5629	110.5640	110.5633



## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP141133	11-07-13	Installed	87802.918	37104.954	110.569	110.57	110.5683	110.5688	110.5690
Levelling Point	C305-LP141134	11-07-13	Installed	87805.121	37106.078	110.595	110.59	110.5946	110.5940	110.5949
Levelling Point	C305-LP141135	11-07-13	Installed	87809.824	37107.853	110.637	110.64	110.6374	110.6368	110.6371
Levelling Point	C305-LP141136	11-07-13	Installed	87814.468	37109.598	110.711	110.71	110.7101	110.7112	110.7105
Levelling Point	C305-LP141137	11-07-13	Installed	87819.155	37111.375	110.804	110.80	110.8039	110.8031	110.8041
Levelling Point	C305-LP141138	11-07-13	Installed	87823.833	37113.116	110.914	110.91	110.9147	110.9138	110.9141
Levelling Point	C305-LP141139	11-07-13	Installed	87828.452	37114.955	110.996	111.00	110.9959	110.9967	110.9957
							Average	31-01-14	31-01-14	31-01-14
Levelling Point	C305-LP141410	12-07-13	Installed	87710.967	36999.449	109.301	109.30	109.3013	109.3007	109.3010
Levelling Point	C305-LP141411	12-07-13	Installed	87707.720	36995.647	109.294	109.29	109.2942	109.2937	109.2944
Levelling Point	C305-LP141412	12-07-13	Installed	87704.220	36992.076	109.284	109.28	109.2841	109.2833	109.2834
Levelling Point	C305-LP141413	12-07-13	Installed	87700.935	36988.209	109.289	109.29	109.2888	109.2897	109.2894
Levelling Point	C305-LP141414	12-07-13	Installed	87697.786	36984.651	109.291	109.29	109.2913	109.2906	109.2902
Levelling Point	C305-LP141415	12-07-13	Installed	87694.525	36980.817	109.282	109.28	109.2810	109.2820	109.2818
Levelling Point	C305-LP141416	12-07-13	Installed	87691.264	36976.982	109.283	109.28	109.2835	109.2824	109.2831
Levelling Point	C305-LP141417	12-07-13	Installed	87688.368	36972.860	109.191	109.19	109.1909	109.1915	109.1918
Levelling Point	C305-LP141418	12-07-13	Installed	87685.021	36969.089	109.113	109.11	109.1138	109.1129	109.1135
Levelling Point	C305-LP141419	12-07-13	Installed	87681.770	36965.333	109.119	109.12	109.1189	109.1199	109.1197
Levelling Point	C305-LP141420	12-07-13	Installed	87683.675	36963.713	109.066	109.07	109.0665	109.0660	109.0664
Levelling Point	C305-LP141421	12-07-13	Installed	87685.110	36961.461	109.148	109.15	109.1484	109.1477	109.1482
Levelling Point	C305-LP141422	12-07-13	Installed	87687.333	36960.241	109.094	109.09	109.0945	109.0941	109.0943
Levelling Point	C305-LP141423	12-07-13	Installed	87690.784	36956.624	109.098	109.10	109.0988	109.0978	109.0986
Levelling Point	C305-LP141424	12-07-13	Installed	87694.228	36952.999	109.126	109.13	109.1257	109.1268	109.1261
Levelling Point	C305-LP141425	12-07-13	Installed	87697.672	36949.375	109.154	109.15	109.1548	109.1540	109.1544
Levelling Point	C305-LP141426	12-07-13	Installed	87701.191	36945.822	109.150	109.15	109.1504	109.1500	109.1505
							Average	29-07-13	29-07-13	29-07-13
Levelling Point	C305-LP141501	25-07-13	Installed	87647.211	37034.951	109.291	109.29	109.2911	109.2917	109.2911
Levelling Point	C305-LP141502	25-07-13	Installed	87646.568	37030.015	109.232	109.23	109.2313	109.2319	109.2313

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP141503	25-07-13	Installed	87647.787	37025.278	109.090	109.09	109.0904	109.0893	109.0900
Levelling Point	C305-LP141504	25-07-13	Installed	87650.464	37021.079	109.013	109.01	109.0134	109.0129	109.0136
Levelling Point	C305-LP141505	25-07-13	Installed	87652.098	37019.187	108.912	108.91	108.9119	108.9125	108.9119
Levelling Point	C305-LP141506	25-07-13	Installed	87653.460	37017.076	108.833	108.83	108.8336	108.8324	108.8330
Levelling Point	C305-LP141507	25-07-13	Installed	87654.869	37015.011	108.787	108.79	108.7880	108.7870	108.7872
Levelling Point	C305-LP141508	25-07-13	Installed	87656.166	37012.889	108.781	108.78	108.7815	108.7809	108.7812
Levelling Point	C305-LP141509	25-07-13	Installed	87657.626	37010.860	108.771	108.77	108.7713	108.7704	108.7704
Levelling Point	C305-LP141510	25-07-13	Installed	87658.935	37008.738	108.765	108.76	108.7640	108.7651	108.7644
Levelling Point	C305-LP141511	25-07-13	Installed	87659.929	37006.312	108.663	108.66	108.6636	108.6625	108.6629
Levelling Point	C305-LP141512	25-07-13	Installed	87661.292	37004.256	108.641	108.64	108.6406	108.6412	108.6406
Levelling Point	C305-LP141513	25-07-13	Installed	87664.530	37000.609	108.594	108.59	108.5947	108.5940	108.5945
Levelling Point	C305-LP141514	25-07-13	Installed	87669.170	36999.640	108.635	108.64	108.6358	108.6349	108.6352
Levelling Point	C305-LP141515	25-07-13	Installed	87673.595	37001.863	108.653	108.65	108.6532	108.6526	108.6523
Levelling Point	C305-LP141516	25-07-13	Installed	87677.464	37005.176	108.692	108.69	108.6915	108.6922	108.6923
Levelling Point	C305-LP141517	25-07-13	Installed	87681.198	37008.390	108.729	108.73	108.7293	108.7285	108.7286
Levelling Point	C305-LP141518	25-07-13	Installed	87685.015	37011.572	108.770	108.77	108.7705	108.7698	108.7697
Levelling Point	C305-LP141519	25-07-13	Installed	87650.416	37013.515	108.796	108.80	108.7964	108.7956	108.7963
Levelling Point	C305-LP141520	25-07-13	Installed	87651.800	37011.432	108.781	108.78	108.7813	108.7805	108.7806
Levelling Point	C305-LP141521	25-07-13	Installed	87652.926	37009.200	108.775	108.77	108.7742	108.7751	108.7742
Levelling Point	C305-LP141522	25-07-13	Installed	87654.097	37006.991	108.776	108.78	108.7757	108.7767	108.7759
							Average	15-04-14	15-04-14	15-04-14
Levelling Point	C305-LP141601	22-07-13	Installed	87642.415	37042.284	109.364	109.36	109.3633	109.3639	109.3633
Levelling Point	C305-LP141602	22-07-13	Installed	87641.444	37037.358	109.336	109.34	109.3366	109.3362	109.3364
Levelling Point	C305-LP141603	22-07-13	Installed	87640.676	37032.377	109.288	109.29	109.2869	109.2881	109.2875
Levelling Point	C305-LP141604	22-07-13	Installed	87640.209	37027.426	109.260	109.26	109.2606	109.2599	109.2601
Levelling Point	C305-LP141605	22-07-13	Installed	87639.435	37022.463	109.206	109.21	109.2063	109.2055	109.2056
Levelling Point	C305-LP141606	22-07-13	Installed	87638.485	37017.512	109.149	109.15	109.1482	109.1490	109.1486
Levelling Point	C305-LP141607	22-07-13	Installed	87637.497	37012.633	109.095	109.10	109.0960	109.0952	109.0950

## IRS Installation Record Sheets – Levelling Points

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				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP141608	22-07-13	Installed	87636.086	37007.870	109.026	109.03	109.0257	109.0254	109.0257
Levelling Point	C305-LP141609	22-07-13	Installed	87634.262	37003.242	108.977	108.98	108.9771	108.9763	108.9770
Levelling Point	C305-LP141610	22-07-13	Installed	87631.202	36993.722	109.019	109.02	109.0196	109.0189	109.0197
Levelling Point	C305-LP141611	22-07-13	Installed	87628.316	36989.499	109.046	109.05	109.0460	109.0470	109.0462
Levelling Point	C305-LP141612	22-07-13	Installed	87626.264	36984.939	109.093	109.09	109.0933	109.0927	109.0933
Levelling Point	C305-LP141613	22-07-13	Installed	87624.271	36975.140	109.256	109.26	109.2561	109.2564	109.2564
Levelling Point	C305-LP141614	22-07-13	Installed	87622.961	36970.382	109.357	109.36	109.3561	109.3567	109.3570
Levelling Point	C305-LP141615	22-07-13	Installed	87619.465	36966.886	109.456	109.46	109.4557	109.4562	109.4561
Levelling Point	C305-LP141616	22-07-13	Installed	87615.157	36964.376	109.408	109.41	109.4081	109.4073	109.4077
Levelling Point	C305-LP141617	22-07-13	Installed	87611.455	36960.950	109.370	109.37	109.3702	109.3695	109.3691
Levelling Point	C305-LP141618	22-07-13	Installed	87609.195	36956.401	109.323	109.32	109.3231	109.3236	109.3232
Levelling Point	C305-LP141619	22-07-13	Installed	87607.024	36951.979	109.309	109.31	109.3084	109.3092	109.3085
Levelling Point	C305-LP141620	22-07-13	Installed	87604.818	36947.504	109.313	109.31	109.3124	109.3128	109.3123
Levelling Point	C305-LP141621	22-07-13	Installed	87602.607	36943.037	109.233	109.23	109.2331	109.2322	109.2331
Levelling Point	C305-LP141622	22-07-13	Installed	87600.393	36938.549	109.108	109.11	109.1074	109.1078	109.1076
Levelling Point	C305-LP141623	22-07-13	Installed	87598.173	36934.128	109.004	109.00	109.0035	109.0044	109.0044
Levelling Point	C305-LP141624	22-07-13	Installed	87595.649	36929.842	108.921	108.92	108.9204	108.9208	108.9206
Levelling Point	C305-LP141625	22-07-13	Installed	87592.922	36925.637	108.892	108.89	108.8911	108.8923	108.8917
Levelling Point	C305-LP141626	22-07-13	Installed	87590.169	36921.495	108.859	108.86	108.8589	108.8597	108.8590
Levelling Point	C305-LP141627	22-07-13	Installed	87587.403	36917.330	108.824	108.82	108.8247	108.8236	108.8243
Levelling Point	C305-LP141628	22-07-13	Installed	87584.651	36913.154	108.795	108.79	108.7944	108.7954	108.7946
Levelling Point	C305-LP141629	22-07-13	Installed	87581.878	36908.986	108.761	108.76	108.7615	108.7608	108.7607
Levelling Point	C305-LP141630	22-07-13	Installed	87579.301	36905.061	108.730	108.73	108.7302	108.7293	108.7299
Levelling Point	C305-LP141631	22-07-13	Installed	87576.326	36900.662	108.709	108.71	108.7090	108.7096	108.7093
Levelling Point	C305-LP141632	22-07-13	Installed	87573.527	36896.490	108.705	108.71	108.7054	108.7046	108.7053
Levelling Point	C305-LP141633	22-07-13	Installed	87570.073	36893.491	108.648	108.65	108.6485	108.6480	108.6487
Levelling Point	C305-LP141634	22-07-13	Installed	87566.145	36890.418	108.628	108.63	108.6278	108.6287	108.6287
Levelling Point	C305-LP141635	22-07-13	Installed	87561.103	36891.009	108.604	108.60	108.6046	108.6039	108.6044

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
							Average	05-12-13	05-12-13	05-12-13
Levelling Point	C305-LP141701	20-09-13	Installed	87667.016	36945.478	119.347	109.35	109.3464	109.3467	109.3464
Levelling Point	C305-LP141702	20-09-13	Installed	87663.228	36942.215	119.462	109.46	109.4621	109.4613	109.4620
Levelling Point	C305-LP141703	20-09-13	Installed	87659.726	36938.646	119.559	109.56	109.5587	109.5597	109.5595
Levelling Point	C305-LP141704	20-09-13	Installed	87656.134	36935.200	119.559	109.54	109.5402	109.5396	109.5402
Levelling Point	C305-LP141705	20-09-13	Installed	87652.589	36931.674	119.541	109.56	109.5553	109.5560	109.5555
Levelling Point	C305-LP141706	20-09-13	Installed	87649.210	36928.042	119.556	109.57	109.5659	109.5670	109.5663
Levelling Point	C305-LP141707	20-09-13	Installed	87645.834	36924.480	119.566	109.66	109.6586	109.6576	109.6581
Levelling Point	C305-LP141708	20-09-13	Installed	87644.721	36920.044	119.656	109.57	109.5691	109.5697	109.5691
Levelling Point	C305-LP141709	20-09-13	Installed	87646.078	36913.653	119.569	109.32	109.3180	109.3183	109.3180
Levelling Point	C305-LP141710	20-09-13	Installed	87642.582	36910.086	119.318	109.35	109.3540	109.3542	109.3541
Levelling Point	C305-LP141711	20-09-13	Installed	87639.062	36906.535	119.354	109.38	109.3840	109.3832	109.3839
Levelling Point	C305-LP141712	20-09-13	Installed	87635.541	36902.985	119.384	109.43	109.4266	109.4269	109.4269
Levelling Point	C305-LP141713	20-09-13	Installed	87631.915	36899.555	119.426	109.47	109.4738	109.4727	109.4731
Levelling Point	C305-LP141714	20-09-13	Installed	87624.355	36893.015	119.473	109.47	109.4685	109.4677	109.4678
Levelling Point	C305-LP141715	20-09-13	Installed	87620.818	36889.546	119.469	109.47	109.4714	109.4705	109.4705
Levelling Point	C305-LP141716	20-09-13	Installed	87617.170	36886.253	119.471	109.47	109.4712	109.4701	109.4705
Levelling Point	C305-LP141717	20-09-13	Installed	87613.363	36883.012	119.471	109.47	109.4749	109.4743	109.4752
Levelling Point	C305-LP141718	20-09-13	Installed	87609.743	36879.627	119.475	109.47	109.4649	109.4657	109.4647
Levelling Point	C305-LP141719	20-09-13	Installed	87605.988	36876.370	119.466	109.47	109.4656	109.4663	109.4655
Levelling Point	C305-LP141720	20-09-13	Installed	87602.253	36873.270	119.466	109.48	109.4775	109.4768	109.4767
Levelling Point	C305-LP141721	20-09-13	Installed	87598.199	36870.343	119.478	109.47	109.4718	109.4715	109.4718
Levelling Point	C305-LP141722	20-09-13	Installed	87594.538	36867.086	119.472	109.48	109.4769	109.4780	109.4773
Levelling Point	C305-LP141723	20-09-13	Installed	87590.866	36863.721	119.477	109.50	109.4985	109.4981	109.4986
Levelling Point	C305-LP141724	20-09-13	Installed	87587.116	36860.800	119.498	109.51	109.5059	109.5067	109.5066
Levelling Point	C305-LP141725	20-09-13	Installed	87582.897	36858.117	119.506	109.55	109.5490	109.5485	109.5483
Levelling Point	C305-LP141726	20-09-13	Installed	87579.281	36854.836	119.548	109.58	109.5753	109.5758	109.5760
Levelling Point	C305-LP141727	20-09-13	Installed	87575.359	36852.088	119.575	109.55	109.5455	109.5444	109.5451

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				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP141728	20-09-13	Installed	87571.841	36848.778	119.545	109.54	109.5351	109.5360	109.5354
Levelling Point	C305-LP141729	20-09-13	Installed	87567.001	36845.212	119.535	109.52	109.5233	109.5228	109.5235
Levelling Point	C305-LP141730	20-09-13	Installed	87562.870	36842.423	119.523	109.93	109.9307	109.9315	109.9305
Levelling Point	C305-LP141731	20-09-13	Installed	87558.716	36839.639	119.935	109.94	109.9360	109.9355	109.9359
Levelling Point	C305-LP141732	20-09-13	Installed	87554.703	36836.657	119.946	109.95	109.9474	109.9477	109.9474
Levelling Point	C305-LP141733	20-09-13	Installed	87550.459	36834.014	119.946	109.95	109.9478	109.9467	109.9471
Levelling Point	C305-LP141734	20-09-13	Installed	87546.310	36831.223	119.955	109.96	109.9564	109.9558	109.9558
							Average	05-12-13	05-12-13	05-12-13
Levelling Point	C305-LP141801	20-09-13	Installed	87630.021	36895.085	109.437	109.44	109.4376	109.4371	109.4369
Levelling Point	C305-LP141802	20-09-13	Installed	87631.550	36893.282	109.428	109.43	109.4276	109.4269	109.4280
Levelling Point	C305-LP141803	20-09-13	Installed	87633.203	36891.443	109.401	109.40	109.4015	109.4012	109.4015
Levelling Point	C305-LP141804	20-09-13	Installed	87634.844	36889.521	109.417	109.42	109.4170	109.4164	109.4164
Levelling Point	C305-LP141805	20-09-13	Installed	87636.530	36887.675	109.451	109.45	109.4509	109.4511	109.4510
Levelling Point	C305-LP141806	20-09-13	Installed	87638.205	36885.819	109.520	109.52	109.5198	109.5203	109.5196
Levelling Point	C305-LP141807	20-09-13	Installed	87639.853	36883.939	109.543	109.54	109.5432	109.5422	109.5424
Levelling Point	C305-LP141808	20-09-13	Installed	87641.743	36882.286	109.473	109.47	109.4728	109.4721	109.4726
Levelling Point	C305-LP141809	20-09-13	Installed	87643.337	36880.264	109.414	109.41	109.4130	109.4138	109.4137
Levelling Point	C305-LP141810	20-09-13	Installed	87645.067	36878.459	109.355	109.35	109.3548	109.3541	109.3546
Levelling Point	C305-LP141811	20-09-13	Installed	87646.555	36876.450	109.301	109.30	109.3001	109.3007	109.3007
Levelling Point	C305-LP141812	20-09-13	Installed	87648.302	36874.647	109.208	109.21	109.2078	109.2089	109.2082
Levelling Point	C305-LP141813	20-09-13	Installed	87652.398	36870.322	109.100	109.10	109.1002	109.0995	109.1006
							Average	29-07-13	29-07-13	29-07-13
Levelling Point	C305-LP141901	25-07-13	Installed	87566.734	36802.705	109.559	109.56	109.5592	109.5588	109.5590
Levelling Point	C305-LP141902	25-07-13	Installed	87560.611	36801.395	109.592	109.59	109.5921	109.5929	109.5922
Levelling Point	C305-LP141903	25-07-13	Installed	87556.733	36798.731	109.530	109.53	109.5292	109.5301	109.5301
Levelling Point	C305-LP141904	25-07-13	Installed	87552.100	36796.890	109.699	109.70	109.6990	109.6982	109.6989
Levelling Point	C305-LP141905	25-07-13	Installed	87547.451	36795.049	109.713	109.71	109.7131	109.7124	109.7129
Levelling Point	C305-LP141906	25-07-13	Installed	87542.169	36792.946	109.682	109.68	109.6818	109.6823	109.6819



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				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP141907	25-07-13	Installed	87522.466	36781.191	109.645	109.65	109.6449	109.6456	109.6451
Levelling Point	C305-LP141908	25-07-13	Installed	87517.548	36780.336	109.635	109.64	109.6353	109.6347	109.6350
Levelling Point	C305-LP141909	25-07-13	Installed	87505.983	36778.292	109.838	109.84	109.8388	109.8381	109.8380
Levelling Point	C305-LP141910	25-07-13	Installed	87501.060	36777.427	109.773	109.77	109.7729	109.7723	109.7726
Levelling Point	C305-LP141911	25-07-13	Installed	87496.126	36776.705	109.716	109.72	109.7155	109.7159	109.7160
Levelling Point	C305-LP141912	25-07-13	Installed	87491.141	36775.967	109.591	109.59	109.5906	109.5901	109.5911
Levelling Point	C305-LP141943	20-10-13	Installed	87352.684	36609.358	108.651	108.65	108.6509	108.6504	108.6502
Levelling Point	C305-LP141944	20-10-13	Installed	87349.361	36605.510	108.659	108.66	108.6590	108.6584	108.6581
Levelling Point	C305-LP141945	20-10-13	Installed	87345.927	36601.855	108.687	108.69	108.6863	108.6869	108.6863
Levelling Point	C305-LP141946	20-10-13	Installed	87342.577	36598.179	108.719	108.72	108.7179	108.7186	108.7190
Levelling Point	C305-LP141947	20-10-13	Installed	87339.284	36594.527	108.783	108.78	108.7820	108.7830	108.7825
Levelling Point	C305-LP141948	20-10-13	Installed	87335.649	36590.492	108.836	108.84	108.8352	108.8356	108.8357
Levelling Point	C305-LP141949	20-10-13	Installed	87332.560	36587.068	108.847	108.85	108.8466	108.8463	108.8466
Levelling Point	C305-LP141950	20-10-13	Installed	87329.144	36583.411	108.888	108.89	108.8869	108.8878	108.8878
Levelling Point	C305-LP141951	20-10-13	Installed	87325.901	36579.735	108.913	108.91	108.9122	108.9129	108.9124
Levelling Point	C305-LP141952	20-10-13	Installed	87322.631	36576.149	108.932	108.93	108.9309	108.9316	108.9320
Levelling Point	C305-LP141953	20-10-13	Installed	87319.388	36572.599	108.964	108.96	108.9641	108.9634	108.9630
Levelling Point	C305-LP141954	20-10-13	Installed	87315.633	36568.700	108.980	108.98	108.9800	108.9789	108.9796
Levelling Point	C305-LP141955	20-10-13	Installed	87312.030	36564.625	108.997	109.00	108.9963	108.9971	108.9961
Levelling Point	C305-LP141956	20-10-13	Installed	87308.833	36561.417	109.021	109.02	109.0206	109.0204	109.0205
Levelling Point	C305-LP141957	20-10-13	Installed	87302.181	36553.855	108.997	109.00	108.9961	108.9966	108.9968
Levelling Point	C305-LP141958	20-10-13	Installed	87298.630	36550.214	109.036	109.04	109.0357	109.0350	109.0358
Levelling Point	C305-LP141959	20-10-13	Installed	87295.598	36546.634	109.036	109.04	109.0356	109.0353	109.0356
Levelling Point	C305-LP141960	20-10-13	Installed	87292.119	36542.890	109.052	109.05	109.0509	109.0517	109.0519
Levelling Point	C305-LP141961	20-10-13	Installed	87288.718	36539.251	109.095	109.09	109.0949	109.0942	109.0944
Levelling Point	C305-LP141962	20-10-13	Installed	87285.376	36535.558	109.118	109.12	109.1170	109.1181	109.1174
							Average	25-10-13	25-10-13	25-10-13
Levelling Point	C305-LP142017	23-10-13	Installed	87447.587	36788.254	109.446	109.45	109.4460	109.4451	109.4460

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				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP142018	23-10-13	Installed	87444.292	36784.493	109.326	109.33	109.3264	109.3256	109.3263
Levelling Point	C305-LP142019	23-10-13	Installed	87440.997	36780.732	109.410	109.41	109.4105	109.4099	109.4105
Levelling Point	C305-LP142020	24-10-13	Installed	87434.526	36771.929	109.496	109.50	109.4953	109.4958	109.4954
Levelling Point	C305-LP142021	24-10-13	Installed	87430.223	36769.384	109.623	109.62	109.6219	109.6230	109.6226
Levelling Point	C305-LP142022	24-10-13	Installed	87426.865	36765.679	109.776	109.78	109.7757	109.7750	109.7758
Levelling Point	C305-LP142023	24-10-13	Installed	87423.507	36761.975	109.862	109.86	109.8618	109.8611	109.8616
Levelling Point	C305-LP142024	24-10-13	Installed	87420.149	36758.270	109.888	109.89	109.8874	109.8879	109.8872
Levelling Point	C305-LP142025	24-10-13	Installed	87416.791	36754.565	109.926	109.93	109.9253	109.9260	109.9252
Levelling Point	C305-LP142026	24-10-13	Installed	87413.433	36750.861	109.943	109.94	109.9421	109.9431	109.9423
Levelling Point	C305-LP142027	24-10-13	Installed	87410.075	36747.156	109.957	109.96	109.9559	109.9567	109.9569
Levelling Point	C305-LP142028	24-10-13	Installed	87406.717	36743.452	110.001	110.00	109.9999	110.0010	110.0006
Levelling Point	C305-LP142029	24-10-13	Installed	87403.411	36739.699	110.054	110.05	110.0538	110.0532	110.0535
Levelling Point	C305-LP142030	24-10-13	Installed	87400.001	36736.042	110.079	110.08	110.0784	110.0786	110.0785
Levelling Point	C305-LP142031	24-10-13	Installed	87396.682	36732.303	110.145	110.14	110.1449	110.1443	110.1443
Levelling Point	C305-LP142032	24-10-13	Installed	87393.318	36728.603	110.266	110.27	110.2657	110.2650	110.2658
Levelling Point	C305-LP142033	24-10-13	Installed	87389.960	36724.899	110.271	110.27	110.2702	110.2706	110.2707
Levelling Point	C305-LP142034	24-10-13	Installed	87386.602	36721.194	110.327	110.33	110.3267	110.3264	110.3264
Levelling Point	C305-LP142035	24-10-13	Installed	87383.245	36717.489	110.354	110.35	110.3536	110.3531	110.3538
Levelling Point	C305-LP142036	24-10-13	Installed	87379.887	36713.785	110.370	110.37	110.3697	110.3692	110.3696
Levelling Point	C305-LP142037	24-10-13	Installed	87376.529	36710.080	110.333	110.33	110.3331	110.3324	110.3320
Levelling Point	C305-LP142038	24-10-13	Installed	87373.171	36706.376	110.359	110.36	110.3581	110.3590	110.3584
Levelling Point	C305-LP142039	24-10-13	Installed	87369.813	36702.671	110.391	110.39	110.3907	110.3900	110.3908
Levelling Point	C305-LP142040	24-10-13	Installed	87366.493	36698.932	110.423	110.42	110.4231	110.4223	110.4221
Levelling Point	C305-LP142041	24-10-13	Installed	87363.135	36695.228	110.403	110.40	110.4029	110.4020	110.4026
Levelling Point	C305-LP142042	24-10-13	Installed	87359.777	36691.523	110.378	110.38	110.3771	110.3780	110.3774
Levelling Point	C305-LP142043	24-10-13	Installed	87356.419	36687.818	110.380	110.38	110.3800	110.3790	110.3795
Levelling Point	C305-LP142044	24-10-13	Installed	87353.061	36684.114	110.296	110.30	110.2960	110.2950	110.2955
Levelling Point	C305-LP142045	24-10-13	Installed	87349.703	36680.409	110.161	110.16	110.1603	110.1609	110.1603

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Levelling Point	C305-LP142046	24-10-13	Installed	87346.374	36676.679	110.091	110.09	110.0910	110.0903	110.0902
Levelling Point	C305-LP142047	24-10-13	Installed	87343.020	36672.970	110.021	110.02	110.0204	110.0208	110.0203
Levelling Point	C305-LP142048	24-10-13	Installed	87339.667	36669.261	109.962	109.96	109.9618	109.9612	109.9615
Levelling Point	C305-LP142049	24-10-13	Installed	87336.309	36665.557	109.921	109.92	109.9203	109.9209	109.9203
Levelling Point	C305-LP142050	24-10-13	Installed	87332.951	36661.852	109.854	109.85	109.8541	109.8529	109.8535
Levelling Point	C305-LP142051	24-10-13	Installed	87329.593	36658.147	109.817	109.82	109.8170	109.8162	109.8163
Levelling Point	C305-LP142052	24-10-13	Installed	87326.235	36654.443	109.783	109.78	109.7820	109.7828	109.7827
Levelling Point	C305-LP142053	24-10-13	Installed	87322.877	36650.738	109.726	109.73	109.7260	109.7249	109.7256
Levelling Point	C305-LP142054	24-10-13	Installed	87319.519	36647.033	109.581	109.58	109.5802	109.5806	109.5807
Levelling Point	C305-LP142055	24-10-13	Installed	87316.161	36643.329	109.301	109.30	109.3010	109.3003	109.3002
Levelling Point	C305-LP142056	24-10-13	Installed	87312.520	36639.908	109.119	109.12	109.1179	109.1186	109.1190
							Average	29-07-13	29-07-13	29-07-13
Levelling Point	C305-LP142101	12-07-13	Installed	87404.615	36769.169	109.478	109.48	109.4789	109.4782	109.4778
Levelling Point	C305-LP142102	12-07-13	Installed	87409.562	36769.705	109.426	109.43	109.4260	109.4252	109.4259
Levelling Point	C305-LP142103	12-07-13	Installed	87414.416	36770.901	109.354	109.35	109.3537	109.3544	109.3542
Levelling Point	C305-LP142104	12-07-13	Installed	87419.061	36772.669	109.405	109.41	109.4046	109.4056	109.4051
Levelling Point	C305-LP142105	12-07-13	Installed	87423.432	36775.070	109.429	109.43	109.4289	109.4297	109.4293
Levelling Point	C305-LP142106	12-07-13	Installed	87425.680	36776.113	109.446	109.45	109.4458	109.4467	109.4461
Levelling Point	C305-LP142107	12-07-13	Installed	87428.136	36776.562	109.445	109.45	109.4452	109.4456	109.4454
Levelling Point	C305-LP142108	12-07-13	Installed	87430.645	36776.589	109.423	109.42	109.4231	109.4226	109.4227
Levelling Point	C305-LP142109	12-07-13	Installed	87433.129	36776.686	109.398	109.40	109.3982	109.3974	109.3981
Levelling Point	C305-LP142110	12-07-13	Installed	87435.630	36776.806	109.353	109.35	109.3529	109.3526	109.3526
Levelling Point	C305-LP142111	12-07-13	Installed	87438.074	36776.676	109.274	109.27	109.2737	109.2745	109.2741
Levelling Point	C305-LP142112	12-07-13	Installed	87440.518	36776.552	109.428	109.43	109.4288	109.4277	109.4284
Levelling Point	C305-LP142113	12-07-13	Installed	87443.960	36776.004	109.440	109.44	109.4397	109.4395	109.4396
Levelling Point	C305-LP142114	12-07-13	Installed	87448.917	36776.631	109.448	109.45	109.4480	109.4472	109.4473
Levelling Point	C305-LP142115	12-07-13	Installed	87453.854	36777.224	109.456	109.46	109.4562	109.4566	109.4564
Levelling Point	C305-LP142116	12-07-13	Installed	87458.754	36777.707	109.493	109.49	109.4932	109.4939	109.4928

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Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP142117	12-07-13	Installed	87468.100	36778.426	109.576	109.58	109.5756	109.5764	109.5763
Levelling Point	C305-LP142118	12-07-13	Installed	87472.952	36778.255	109.615	109.61	109.6140	109.6150	109.6148
Levelling Point	C305-LP142119	12-07-13	Installed	87475.482	36777.902	109.640	109.64	109.6396	109.6400	109.6395
Levelling Point	C305-LP142120	12-07-13	Installed	87478.124	36777.546	109.649	109.65	109.6486	109.6497	109.6493
Levelling Point	C305-LP142121	12-07-13	Installed	87480.677	36777.138	109.659	109.66	109.6585	109.6593	109.6583
Levelling Point	C305-LP142122	12-07-13	Installed	87482.856	36776.870	109.661	109.66	109.6601	109.6608	109.6606
Levelling Point	C305-LP142123	12-07-13	Installed	87485.334	36776.550	109.668	109.67	109.6677	109.6687	109.6679
Levelling Point	C305-LP142124	12-07-13	Installed	87487.777	36776.133	109.676	109.68	109.6758	109.6763	109.6759
Levelling Point	C305-LP142125	12-07-13	Installed	87490.263	36775.800	109.674	109.67	109.6743	109.6741	109.6742
Levelling Point	C305-LP142126	12-07-13	Installed	87492.775	36775.320	109.684	109.68	109.6839	109.6846	109.6838
Levelling Point	C305-LP142127	12-07-13	Installed	87495.278	36774.936	109.688	109.69	109.6883	109.6874	109.6877
Levelling Point	C305-LP142128	12-07-13	Installed	87497.749	36774.135	109.710	109.71	109.7091	109.7097	109.7100
Levelling Point	C305-LP142129	12-07-13	Installed	87501.250	36772.126	109.734	109.73	109.7332	109.7337	109.7339
Levelling Point	C305-LP142130	12-07-13	Installed	87505.971	36768.899	109.798	109.80	109.7981	109.7974	109.7973
Levelling Point	C305-LP142131	12-07-13	Installed	87509.984	36765.819	109.850	109.85	109.8510	109.8503	109.8499
Levelling Point	C305-LP142132	12-07-13	Installed	87513.832	36762.741	109.883	109.88	109.8830	109.8827	109.8830
Levelling Point	C305-LP142133	12-07-13	Installed	87517.693	36759.487	109.922	109.92	109.9216	109.9209	109.9220
Levelling Point	C305-LP142134	12-07-13	Installed	87521.478	36756.306	109.918	109.92	109.9187	109.9176	109.9180
Levelling Point	C305-LP142135	12-07-13	Installed	87452.226	36785.295	109.270	109.27	109.2702	109.2696	109.2702
Levelling Point	C305-LP142136	12-07-13	Installed	87457.225	36785.308	109.404	109.40	109.4039	109.4046	109.4038
Levelling Point	C305-LP142137	12-07-13	Installed	87462.218	36785.386	109.449	109.45	109.4499	109.4489	109.4494
Levelling Point	C305-LP142138	12-07-13	Installed	87467.206	36785.083	109.496	109.50	109.4956	109.4965	109.4959
							Average	22-08-13	22-08-13	22-08-13
Levelling Point	C305-LP142201	19-08-13	Installed	87295.243	36632.930	109.164	109.16	109.1633	109.1639	109.1642
Levelling Point	C305-LP142202	19-08-13	Installed	87293.698	36634.682	109.224	109.22	109.2246	109.2237	109.2243
Levelling Point	C305-LP142203	19-08-13	Installed	87291.211	36634.963	109.255	109.26	109.2546	109.2554	109.2550
Levelling Point	C305-LP142204	19-08-13	Installed	87288.742	36635.301	109.271	109.27	109.2710	109.2703	109.2702
Levelling Point	C305-LP142205	19-08-13	Installed	87286.274	36635.660	109.295	109.30	109.2955	109.2948	109.2953

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP142206	19-08-13	Installed	87283.785	36635.992	109.312	109.31	109.3130	109.3123	109.3119
Levelling Point	C305-LP142207	19-08-13	Installed	87281.321	36636.357	109.344	109.34	109.3428	109.3445	109.3448
Levelling Point	C305-LP142208	19-08-13	Installed	87278.893	36636.758	109.345	109.35	109.3439	109.3447	109.3459
Levelling Point	C305-LP142209	19-08-13	Installed	87273.959	36637.576	109.353	109.35	109.3535	109.3521	109.3537
Levelling Point	C305-LP142210	19-08-13	Installed	87269.056	36638.662	109.378	109.38	109.3780	109.3782	109.3781
Levelling Point	C305-LP142211	19-08-13	Installed	87264.412	36640.072	109.415	109.41	109.4154	109.4143	109.4147
Levelling Point	C305-LP142212	19-08-13	Installed	87259.555	36641.719	109.470	109.47	109.4692	109.4700	109.4693
Levelling Point	C305-LP142213	19-08-13	Installed	87254.903	36643.316	109.470	109.47	109.4694	109.4705	109.4701
							Average	22-08-13	22-08-13	22-08-13
Levelling Point	C305-LP142301	19-08-13	Installed	87245.048	36579.812	109.598	109.60	109.5989	109.5979	109.5981
Levelling Point	C305-LP142302	19-08-13	Installed	87244.923	36582.355	109.593	109.59	109.5933	109.5940	109.5929
Levelling Point	C305-LP142303	19-08-13	Installed	87244.737	36584.830	109.587	109.59	109.5880	109.5868	109.5874
Levelling Point	C305-LP142304	19-08-13	Installed	87244.599	36587.347	109.578	109.58	109.5780	109.5787	109.5779
Levelling Point	C305-LP142305	19-08-13	Installed	87244.481	36589.832	109.576	109.58	109.5754	109.5760	109.5754
Levelling Point	C305-LP142306	19-08-13	Installed	87244.351	36592.275	109.575	109.58	109.5751	109.5756	109.5755
Levelling Point	C305-LP142307	19-08-13	Installed	87244.162	36594.872	109.573	109.57	109.5736	109.5724	109.5730
Levelling Point	C305-LP142308	19-08-13	Installed	87244.043	36597.304	109.570	109.57	109.5699	109.5693	109.5702
Levelling Point	C305-LP142309	19-08-13	Installed	87243.940	36599.929	109.563	109.56	109.5622	109.5632	109.5630
Levelling Point	C305-LP142310	19-08-13	Installed	87243.783	36602.379	109.557	109.56	109.5567	109.5561	109.5570
Levelling Point	C305-LP142311	19-08-13	Installed	87243.481	36607.400	109.554	109.55	109.5548	109.5536	109.5542
Levelling Point	C305-LP142312	19-08-13	Installed	87243.195	36612.277	109.549	109.55	109.5482	109.5492	109.5490
Levelling Point	C305-LP142313	19-08-13	Installed	87242.901	36617.295	109.547	109.55	109.5471	109.5473	109.5472
Levelling Point	C305-LP142314	19-08-13	Installed	87242.623	36622.238	109.546	109.55	109.5471	109.5459	109.5465
Levelling Point	C305-LP142315	19-08-13	Installed	87242.345	36627.299	109.553	109.55	109.5524	109.5529	109.5528
Levelling Point	C305-LP142316	19-08-13	Installed	87241.989	36632.324	109.557	109.56	109.5568	109.5573	109.5575
							Average	22-08-13	22-08-13	22-08-13
Levelling Point	C305-LP142401	19-08-13	Installed	87213.588	36468.885	109.593	109.59	109.5928	109.5924	109.5929
Levelling Point	C305-LP142402	19-08-13	Installed	87209.635	36472.281	109.621	109.62	109.6212	109.6201	109.6208



## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP142403	19-08-13	Installed	87205.921	36475.584	109.576	109.58	109.5756	109.5764	109.5766
Levelling Point	C305-LP142404	19-08-13	Installed	87202.417	36478.882	109.641	109.64	109.6404	109.6407	109.6404
Levelling Point	C305-LP142405	19-08-13	Installed	87200.558	36480.598	109.643	109.64	109.6435	109.6427	109.6425
Levelling Point	C305-LP142406	19-08-13	Installed	87198.706	36482.250	109.648	109.65	109.6469	109.6478	109.6478
Levelling Point	C305-LP142407	19-08-13	Installed	87196.900	36483.994	109.681	109.68	109.6807	109.6801	109.6810
Levelling Point	C305-LP142408	19-08-13	Installed	87195.571	36486.180	109.645	109.64	109.6451	109.6445	109.6448
Levelling Point	C305-LP142409	19-08-13	Installed	87193.731	36487.872	109.644	109.64	109.6441	109.6433	109.6443
Levelling Point	C305-LP142410	19-08-13	Installed	87192.061	36489.733	109.650	109.65	109.6508	109.6496	109.6502
Levelling Point	C305-LP142411	19-08-13	Installed	87190.042	36491.207	109.671	109.67	109.6706	109.6714	109.6710
Levelling Point	C305-LP142412	19-08-13	Installed	87186.194	36494.556	109.680	109.68	109.6798	109.6805	109.6794
Levelling Point	C305-LP142413	19-08-13	Installed	87177.527	36501.248	109.792	109.79	109.7918	109.7910	109.7920
Levelling Point	C305-LP142414	19-08-13	Installed	87175.792	36503.048	109.793	109.79	109.7926	109.7932	109.7923
Levelling Point	C305-LP142415	19-08-13	Installed	87173.888	36504.616	109.776	109.78	109.7762	109.7755	109.7766
Levelling Point	C305-LP142416	19-08-13	Installed	87172.053	36506.318	109.757	109.76	109.7573	109.7570	109.7576
Levelling Point	C305-LP142417	19-08-13	Installed	87170.173	36507.983	109.737	109.74	109.7373	109.7362	109.7366
Levelling Point	C305-LP142418	19-08-13	Installed	87168.332	36509.700	109.723	109.72	109.7226	109.7235	109.7229
Levelling Point	C305-LP142419	19-08-13	Installed	87166.460	36511.339	109.717	109.72	109.7170	109.7176	109.7170
Levelling Point	C305-LP142420	19-08-13	Installed	87164.589	36513.049	109.695	109.70	109.6960	109.6948	109.6954
Levelling Point	C305-LP142421	19-08-13	Installed	87162.760	36514.699	109.673	109.67	109.6739	109.6731	109.6732
Levelling Point	C305-LP142422	19-08-13	Installed	87160.859	36516.356	109.662	109.66	109.6615	109.6620	109.6622
Levelling Point	C305-LP142423	19-08-13	Installed	87158.959	36517.978	109.587	109.59	109.5864	109.5873	109.5870
Levelling Point	C305-LP142424	19-08-13	Installed	87157.052	36519.531	109.712	109.71	109.7120	109.7115	109.7116
Levelling Point	C305-LP142425	19-08-13	Installed	87153.207	36522.702	109.779	109.78	109.7787	109.7798	109.7794
Levelling Point	C305-LP142426	19-08-13	Installed	87148.705	36524.739	109.743	109.74	109.7429	109.7433	109.7428
Levelling Point	C305-LP142427	19-08-13	Installed	87143.729	36524.472	109.787	109.79	109.7870	109.7878	109.7874
Levelling Point	C305-LP142428	19-08-13	Installed	87138.723	36524.210	109.795	109.80	109.7949	109.7955	109.7952
Levelling Point	C305-LP142430	19-08-13	Installed	87199.797	36490.583	109.602	109.60	109.6020	109.6011	109.6020
Levelling Point	C305-LP142431	19-08-13	Installed	87196.054	36493.847	109.625	109.63	109.6256	109.6248	109.6249

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP142432	19-08-13	Installed	87192.340	36497.164	109.671	109.67	109.6714	109.6704	109.6706
Levelling Point	C305-LP142433	19-08-13	Installed	87188.751	36500.572	109.707	109.71	109.7070	109.7078	109.7071
Levelling Point	C305-LP142440	15-08-13	Installed	87237.771	36532.140	109.492	109.49	109.4917	109.4924	109.4925
Levelling Point	C305-LP142441	15-08-13	Installed	87234.046	36535.447	109.514	109.51	109.5137	109.5131	109.5137
Levelling Point	C305-LP142442	15-08-13	Installed	87230.407	36538.770	109.512	109.51	109.5121	109.5125	109.5126
Levelling Point	C305-LP142443	15-08-13	Installed	87226.597	36542.257	109.469	109.47	109.4690	109.4699	109.4693
Levelling Point	C305-LP142450	15-08-13	Installed	87241.903	36536.626	109.421	109.42	109.4218	109.4212	109.4212
Levelling Point	C305-LP142451	15-08-13	Installed	87238.129	36540.123	109.453	109.45	109.4533	109.4524	109.4533
Levelling Point	C305-LP142452	15-08-13	Installed	87234.433	36543.427	109.464	109.46	109.4631	109.4638	109.4642
Levelling Point	C305-LP142453	15-08-13	Installed	87230.806	36546.769	109.417	109.42	109.4172	109.4175	109.4172
Levelling Point	C305-LP142460	15-08-13	Installed	87279.641	36577.629	109.153	109.15	109.1535	109.1528	109.1530
Levelling Point	C305-LP142461	15-08-13	Installed	87275.870	36580.966	109.154	109.15	109.1544	109.1536	109.1546
Levelling Point	C305-LP142462	15-08-13	Installed	87271.973	36584.470	109.233	109.23	109.2325	109.2333	109.2323
Levelling Point	C305-LP142463	15-08-13	Installed	87268.280	36587.581	109.213	109.21	109.2134	109.2127	109.2129
Levelling Point	C305-LP142470	15-08-13	Installed	87283.690	36582.279	109.122	109.12	109.1228	109.1220	109.1221
Levelling Point	C305-LP142471	15-08-13	Installed	87280.026	36585.603	109.170	109.17	109.1693	109.1699	109.1696
Levelling Point	C305-LP142472	15-08-13	Installed	87276.356	36588.936	109.214	109.21	109.2148	109.2136	109.2142
Levelling Point	C305-LP142473	15-08-13	Installed	87272.778	36592.615	109.242	109.24	109.2416	109.2427	109.2420
							Average	02-09-13	02-09-13	02-09-13
Levelling Point	C305-LP142501	27-08-13	Installed	87105.167	36353.897	109.145	109.15	109.1450	109.1458	109.1451
Levelling Point	C305-LP142502	27-08-13	Installed	87104.362	36359.667	108.965	108.97	108.9650	108.9655	108.9651
Levelling Point	C305-LP142503	27-08-13	Installed	87102.575	36363.929	109.097	109.10	109.0968	109.0963	109.0973
Levelling Point	C305-LP142504	27-08-13	Installed	87100.612	36368.527	109.083	109.08	109.0824	109.0830	109.0830
Levelling Point	C305-LP142505	27-08-13	Installed	87098.901	36373.226	109.050	109.05	109.0497	109.0504	109.0502
Levelling Point	C305-LP142506	27-08-13	Installed	87097.457	36378.013	109.032	109.03	109.0318	109.0322	109.0323
Levelling Point	C305-LP142507	27-08-13	Installed	87095.874	36382.756	109.034	109.03	109.0334	109.0342	109.0338
Levelling Point	C305-LP142508	27-08-13	Installed	87094.665	36384.944	109.038	109.04	109.0377	109.0370	109.0378
Levelling Point	C305-LP142509	27-08-13	Installed	87093.758	36387.273	109.044	109.04	109.0434	109.0444	109.0436

## IRS Installation Record Sheets – Levelling Points

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				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP142510	27-08-13	Installed	87092.846	36389.601	109.048	109.04	109.0390	109.0422	109.0453
Levelling Point	C305-LP142511	27-08-13	Installed	87092.108	36392.297	108.941	108.94	108.9420	109.9501	108.0942
Levelling Point	C305-LP142512	27-08-13	Installed	87091.389	36394.252	108.848	108.85	108.8482	108.8472	108.8477
Levelling Point	C305-LP142513	27-08-13	Installed	87090.567	36396.629	108.841	108.84	108.8408	108.8404	108.8403
Levelling Point	C305-LP142514	27-08-13	Installed	87089.630	36398.796	109.021	109.02	109.0214	109.0207	109.0218
Levelling Point	C305-LP142515	27-08-13	Installed	87088.735	36401.273	108.980	108.98	108.9804	108.9798	108.9807
Levelling Point	C305-LP142516	27-08-13	Installed	87086.886	36405.902	109.036	109.04	109.0363	109.0353	109.0361
Levelling Point	C305-LP142517	27-08-13	Installed	87085.121	36410.724	109.034	109.03	109.0341	109.0335	109.0344
Levelling Point	C305-LP142518	27-08-13	Installed	87083.365	36415.006	109.092	109.09	109.0924	109.0914	109.0916
Levelling Point	C305-LP142519	27-08-13	Installed	87081.609	36419.916	109.137	109.14	109.1370	109.1380	109.1372
Levelling Point	C305-LP142520	27-08-13	Installed	87080.614	36422.236	109.163	109.16	109.1626	109.1632	109.1623
Levelling Point	C305-LP142521	27-08-13	Installed	87079.646	36424.505	109.135	109.13	109.1344	109.1354	109.1346
Levelling Point	C305-LP142522	27-08-13	Installed	87078.809	36426.881	109.175	109.18	109.1754	109.1747	109.1752
Levelling Point	C305-LP142523	27-08-13	Installed	87077.855	36429.182	109.206	109.21	109.2059	109.2065	109.2056
Levelling Point	C305-LP142524	27-08-13	Installed	87076.939	36431.710	109.304	109.30	109.3037	109.3046	109.3043
Levelling Point	C305-LP142525	27-08-13	Installed	87076.171	36433.848	109.258	109.26	109.2582	109.2575	109.2577
Levelling Point	C305-LP142526	27-08-13	Installed	87075.311	36436.228	109.279	109.28	109.2788	109.2781	109.2792
Levelling Point	C305-LP142527	27-08-13	Installed	87074.459	36438.602	109.265	109.27	109.2652	109.2645	109.2656
Levelling Point	C305-LP142528	27-08-13	Installed	87072.702	36443.556	109.406	109.41	109.4058	109.4070	109.4064
Levelling Point	C305-LP142529	27-08-13	Installed	87071.129	36447.862	109.443	109.44	109.4427	109.4434	109.4429
Levelling Point	C305-LP142530	27-08-13	Installed	87069.305	36452.706	109.480	109.48	109.4794	109.4798	109.4796
							Average	04-09-13	04-09-13	04-09-13
Levelling Point	C305-LP142701	04-12-13	Installed	87043.141	36454.652	109.703	109.70	109.7042	109.7035	109.7031
Levelling Point	C305-LP142702	04-12-13	Installed	87037.852	36452.904	109.719	109.72	109.7188	109.7195	109.7193
Levelling Point	C305-LP142703	04-12-13	Installed	87033.522	36451.930	109.780	109.78	109.7807	109.7800	109.7811
Levelling Point	C305-LP142704	04-12-13	Installed	87033.029	36441.339	109.669	109.67	109.6696	109.6690	109.6690
Levelling Point	C305-LP142705	04-12-13	Installed	87037.309	36439.571	109.588	109.59	109.5892	109.5881	109.5888
Levelling Point	C305-LP142706	04-12-13	Installed	87038.787	36435.014	109.611	109.61	109.6114	109.6110	109.6115

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP142707	04-12-13	Installed	87037.827	36429.656	109.611	109.66	109.6625	109.6615	109.6617
Levelling Point	C305-LP142708	04-12-13	Installed	87036.361	36424.334	109.661	109.73	109.7257	109.7248	109.7254
Levelling Point	C305-LP142709	04-12-13	Installed	87034.407	36419.191	109.725	109.75	109.7449	109.7456	109.7448
Levelling Point	C305-LP142710	04-12-13	Installed	87031.830	36414.347	109.744	109.67	109.6672	109.6678	109.6684
Levelling Point	C305-LP142711	04-12-13	Installed	87028.869	36409.718	109.667	109.61	109.6070	109.6073	109.6070
Levelling Point	C305-LP142712	04-12-13	Installed	87025.674	36405.422	109.606	109.54	109.5414	109.5421	109.5410
Levelling Point	C305-LP142713	04-12-13	Installed	87024.940	36397.961	109.541	109.40	109.4037	109.4042	109.4044
Levelling Point	C305-LP142714	27-08-13	Installed	87027.204	36393.596	109.337	109.34	109.3363	109.3371	109.3373
Levelling Point	C305-LP142715	27-08-13	Installed	87025.508	36388.997	109.294	109.29	109.2941	109.2935	109.2935
Levelling Point	C305-LP142716	27-08-13	Installed	87022.114	36385.343	109.318	109.32	109.3177	109.3172	109.3176
Levelling Point	C305-LP142717	27-08-13	Installed	87018.729	36381.663	109.314	109.31	109.3134	109.3136	109.3135
Levelling Point	C305-LP142718	27-08-13	Installed	87015.362	36378.006	109.322	109.32	109.3221	109.3228	109.3217
Levelling Point	C305-LP142719	27-08-13	Installed	87011.980	36374.274	109.328	109.33	109.3282	109.3275	109.3283
Levelling Point	C305-LP142720	27-08-13	Installed	87008.635	36370.572	109.325	109.32	109.3250	109.3248	109.3249
Levelling Point	C305-LP142721	27-08-13	Installed	87005.230	36366.902	109.272	109.27	109.2713	109.2720	109.2718
Levelling Point	C305-LP142722	27-08-13	Installed	87001.844	36363.235	109.327	109.33	109.3268	109.3280	109.3274
Levelling Point	C305-LP142723	27-08-13	Installed	86998.448	36359.566	109.327	109.33	109.3265	109.3268	109.3265
Levelling Point	C305-LP142724	27-08-13	Installed	86995.093	36355.867	109.310	109.31	109.3105	109.3101	109.3106
Levelling Point	C305-LP142725	27-08-13	Installed	86991.801	36352.189	109.288	109.29	109.2881	109.2885	109.2886
							Average	22-08-13	22-08-13	22-08-13
Levelling Point	C305-LP142801	21-08-13	Installed	87040.171	36305.424	109.283	109.28	109.2826	109.2834	109.2836
Levelling Point	C305-LP142802	21-08-13	Installed	87038.303	36309.987	109.326	109.33	109.3262	109.3255	109.3251
Levelling Point	C305-LP142803	21-08-13	Installed	87031.490	36315.512	109.364	109.36	109.3618	109.3622	109.3617
Levelling Point	C305-LP142804	21-08-13	Installed	87027.634	36318.735	109.335	109.33	109.3334	109.3327	109.3323
Levelling Point	C305-LP142805	21-08-13	Installed	87022.015	36323.663	109.247	109.24	109.2404	109.2399	109.2397
Levelling Point	C305-LP142806	21-08-13	Installed	87020.173	36325.354	109.206	109.20	109.2007	109.2004	109.2004
Levelling Point	C305-LP142807	21-08-13	Installed	87018.274	36326.980	109.142	109.14	109.1364	109.1368	109.1366
Levelling Point	C305-LP142808	21-08-13	Installed	87016.465	36328.705	109.115	109.11	109.1098	109.1094	109.1096

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP142809	21-08-13	Installed	87014.630	36330.383	109.115	109.11	109.1096	109.1102	109.1093
Levelling Point	C305-LP142810	21-08-13	Installed	87012.795	36332.081	109.120	109.11	109.1140	109.1144	109.1142
Levelling Point	C305-LP142811	21-08-13	Installed	87010.937	36333.754	109.136	109.13	109.1307	109.1305	109.1309
Levelling Point	C305-LP142812	21-08-13	Installed	87009.150	36335.485	109.150	109.15	109.1444	109.1451	109.1455
Levelling Point	C305-LP142813	21-08-13	Installed	87007.389	36337.245	109.164	109.16	109.1594	109.1598	109.1599
Levelling Point	C305-LP142814	21-08-13	Installed	87005.506	36338.888	109.176	109.17	109.1711	109.1717	109.1711
Levelling Point	C305-LP142815	21-08-13	Installed	87003.559	36340.457	109.187	109.18	109.1831	109.1838	109.1833
Levelling Point	C305-LP142816	21-08-13	Installed	87000.054	36343.955	109.217	109.21	109.2130	109.2137	109.2135
Levelling Point	C305-LP142817	21-08-13	Installed	86996.594	36347.564	109.245	109.24	109.2420	109.2426	109.2417
Levelling Point	C305-LP142818	21-08-13	Installed	86992.302	36350.273	109.253	109.25	109.2495	109.2488	109.2496
Levelling Point	C305-LP142819	21-08-13	Installed	86988.480	36353.533	109.356	109.35	109.3520	109.3513	109.3521
Levelling Point	C305-LP142820	21-08-13	Installed	86984.982	36356.979	109.356	109.35	109.3511	109.3505	109.3514
Levelling Point	C305-LP142821	21-08-13	Installed	86983.158	36358.648	109.353	109.35	109.3477	109.3471	109.3480
Levelling Point	C305-LP142822	21-08-13	Installed	86981.307	36360.344	109.347	109.34	109.3417	109.3414	109.3417
Levelling Point	C305-LP142823	21-08-13	Installed	86979.475	36362.039	109.347	109.34	109.3421	109.3413	109.3414
Levelling Point	C305-LP142824	21-08-13	Installed	86977.619	36363.736	109.348	109.34	109.3428	109.3420	109.3418
Levelling Point	C305-LP142825	21-08-13	Installed	86975.775	36365.432	109.356	109.35	109.3514	109.3504	109.3512
Levelling Point	C305-LP142826	21-08-13	Installed	86973.945	36367.099	109.345	109.34	109.3408	109.3400	109.3404
Levelling Point	C305-LP142827	21-08-13	Installed	86972.061	36368.758	109.327	109.32	109.3238	109.3234	109.3236
Levelling Point	C305-LP142828	21-08-13	Installed	86970.232	36370.475	109.327	109.32	109.3232	109.3239	109.3240
Levelling Point	C305-LP142829	21-08-13	Installed	86968.418	36372.153	109.343	109.34	109.3410	109.3399	109.3406
Levelling Point	C305-LP142830	21-08-13	Installed	86966.560	36373.812	109.400	109.40	109.3974	109.3983	109.3983
Levelling Point	C305-LP142831	21-08-13	Installed	86962.898	36377.203	109.535	109.53	109.5337	109.5344	109.5336
							Average	22-08-13	22-08-13	22-08-13
Levelling Point	C305-LP142901	21-08-13	Installed	86948.680	36264.349	108.100	108.10	108.0998	108.1007	108.0998
Levelling Point	C305-LP142902	21-08-13	Installed	86944.098	36266.282	108.128	108.13	108.1285	108.1276	108.1279
Levelling Point	C305-LP142903	21-08-13	Installed	86939.753	36267.975	108.027	108.03	108.0266	108.0273	108.0277
Levelling Point	C305-LP142904	21-08-13	Installed	86937.168	36268.507	108.115	108.11	108.1155	108.1145	108.1147



**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP142905	21-08-13	Installed	86935.179	36270.039	108.099	108.10	108.0994	108.0986	108.0996
Levelling Point	C305-LP142906	21-08-13	Installed	86932.946	36271.017	108.012	108.01	108.0119	108.0112	108.0114
Levelling Point	C305-LP142907	21-08-13	Installed	86930.750	36272.145	108.004	108.00	108.0034	108.0043	108.0037
Levelling Point	C305-LP142908	21-08-13	Installed	86928.443	36273.183	107.990	107.99	107.9904	107.9896	107.9900
Levelling Point	C305-LP142909	21-08-13	Installed	86926.180	36274.229	107.964	107.96	107.9634	107.9642	107.9644
Levelling Point	C305-LP142910	21-08-13	Installed	86923.913	36275.337	107.988	107.99	107.9887	107.9875	107.9881
Levelling Point	C305-LP142911	21-08-13	Installed	86921.710	36276.427	107.969	107.97	107.9683	107.9691	107.9687
Levelling Point	C305-LP142912	21-08-13	Installed	86919.384	36277.688	107.936	107.94	107.9366	107.9359	107.9367
Levelling Point	C305-LP142913	21-08-13	Installed	86915.125	36279.992	107.889	107.89	107.8884	107.8886	107.8885
Levelling Point	C305-LP142914	21-08-13	Installed	86910.721	36282.360	107.815	107.81	107.8141	107.8147	107.8147
Levelling Point	C305-LP142915	21-08-13	Installed	86906.529	36285.085	107.786	107.79	107.7860	107.7854	107.7860
Levelling Point	C305-LP142916	21-08-13	Installed	86902.285	36287.820	107.713	107.71	107.7124	107.7130	107.7121
Levelling Point	C305-LP142917	21-08-13	Installed	86897.857	36290.141	107.671	107.67	107.6700	107.6710	107.6705
Levelling Point	C305-LP142918	21-08-13	Installed	86893.228	36292.032	107.440	107.44	107.4398	107.4403	107.4396
Levelling Point	C305-LP142919	21-08-13	Installed	86889.111	36294.869	107.548	107.55	107.5481	107.5487	107.5484
Levelling Point	C305-LP142920	21-08-13	Installed	86884.452	36296.937	107.501	107.50	107.5002	107.5012	107.5007
Levelling Point	C305-LP142921	21-08-13	Installed	86880.016	36299.412	107.471	107.47	107.4716	107.4706	107.4708
Levelling Point	C305-LP142922	21-08-13	Installed	86877.941	36300.631	107.490	107.49	107.4898	107.4903	107.4896
Levelling Point	C305-LP142923	21-08-13	Installed	86875.894	36302.118	107.554	107.55	107.5541	107.5549	107.5539
Levelling Point	C305-LP142924	21-08-13	Installed	86873.858	36303.503	107.586	107.59	107.5863	107.5854	107.5854
Levelling Point	C305-LP142925	21-08-13	Installed	86871.602	36304.674	107.605	107.61	107.6048	107.6051	107.6051
Levelling Point	C305-LP142926	21-08-13	Installed	86869.435	36305.824	107.622	107.62	107.6223	107.6217	107.6220
Levelling Point	C305-LP142927	21-08-13	Installed	86866.980	36307.134	107.633	107.63	107.6323	107.6332	107.6323
Levelling Point	C305-LP142928	21-08-13	Installed	86864.956	36308.242	107.627	107.63	107.6271	107.6275	107.6270
Levelling Point	C305-LP142929	21-08-13	Installed	86862.756	36309.356	107.637	107.64	107.6370	107.6377	107.6372
Levelling Point	C305-LP142930	21-08-13	Installed	86858.736	36311.512	107.639	107.64	107.6386	107.6393	107.6385
Levelling Point	C305-LP142931	21-08-13	Installed	86854.078	36314.618	107.632	107.63	107.6317	107.6325	107.6324
Levelling Point	C305-LP142932	21-08-13	Installed	86849.984	36317.488	107.616	107.62	107.6151	107.6159	107.6161

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP142933	21-08-13	Installed	86846.004	36320.515	107.590	107.59	107.5904	107.5895	107.5898
Levelling Point	C305-LP142940	21-08-13	Installed	86982.816	36258.240	108.161	108.16	108.1607	108.1611	108.1606
Levelling Point	C305-LP142941	21-08-13	Installed	86977.869	36258.966	108.157	108.16	108.1571	108.1575	108.1573
Levelling Point	C305-LP142942	21-08-13	Installed	86972.922	36259.693	108.145	108.14	108.1453	108.1443	108.1448
Levelling Point	C305-LP142943	21-08-13	Installed	86967.954	36260.257	108.109	108.11	108.1095	108.1086	108.1095
Levelling Point	C305-LP142950	21-08-13	Installed	86988.037	36261.374	108.198	108.20	108.1977	108.1972	108.1976
Levelling Point	C305-LP142951	21-08-13	Installed	86983.160	36262.474	108.166	108.17	108.1653	108.1663	108.1655
Levelling Point	C305-LP142952	21-08-13	Installed	86978.283	36263.578	108.114	108.11	108.1132	108.1139	108.1143
Levelling Point	C305-LP142953	21-08-13	Installed	86973.545	36265.172	108.030	108.03	108.0303	108.0292	108.0299
							Average	05-12-13	05-12-13	05-12-13
Levelling Point	C305-LP143101	04-12-13	Installed	86873.511	36248.545	107.167	107.17	107.1690	107.1683	107.1682
Levelling Point	C305-LP143102	04-12-13	Installed	86872.960	36253.620	107.184	107.19	107.1854	107.1850	107.1852
Levelling Point	C305-LP143103	04-12-13	Installed	86872.390	36258.590	107.184	107.19	107.1858	107.1852	107.1858
Levelling Point	C305-LP143104	04-12-13	Installed	86871.706	36263.541	107.185	107.19	107.1864	107.1870	107.1870
Levelling Point	C305-LP143105	04-12-13	Installed	86871.040	36268.497	107.187	107.19	107.1885	107.1879	107.1891
Levelling Point	C305-LP143106	04-12-13	Installed	86870.424	36273.442	107.194	107.20	107.1962	107.1956	107.1953
Levelling Point	C305-LP143107	04-12-13	Installed	86869.759	36278.398	107.210	107.21	107.2122	107.2117	107.2115
Levelling Point	C305-LP143108	04-12-13	Installed	86869.104	36283.355	107.226	107.23	107.2278	107.2270	107.2280
Levelling Point	C305-LP143109	04-12-13	Installed	86868.174	36288.268	107.276	107.28	107.2775	107.2779	107.2774
Levelling Point	C305-LP143110	04-12-13	Installed	86866.389	36292.938	107.305	107.31	107.3061	107.3068	107.3063
Levelling Point	C305-LP143111	04-12-13	Installed	86863.947	36297.301	107.350	107.35	107.3518	107.3509	107.3518
Levelling Point	C305-LP143112	04-12-13	Installed	86860.821	36301.204	107.431	107.43	107.4335	107.4325	107.4327
Levelling Point	C305-LP143113	04-12-13	Installed	86857.476	36304.920	107.461	107.46	107.4628	107.4621	107.4629
							Average	03-09-13	03-09-13	03-09-13
Levelling Point	C305-LP143201	01-09-13	Installed	86880.869	36203.267	107.382	107.38	107.3825	107.3820	107.3827
Levelling Point	C305-LP143202	01-09-13	Installed	86879.325	36208.155	107.366	107.37	107.3670	107.3658	107.3664
Levelling Point	C305-LP143203	01-09-13	Installed	86877.795	36212.898	107.373	107.37	107.3731	107.3723	107.3730
Levelling Point	C305-LP143204	01-09-13	Installed	86876.185	36217.316	107.377	107.38	107.3771	107.3777	107.3768

**IRS Installation Record Sheets – Levelling Points**

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				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP143205	01-09-13	Installed	86874.362	36222.301	107.412	107.41	107.4115	107.4126	107.4119
Levelling Point	C305-LP143206	01-09-13	Installed	86873.054	36227.194	107.529	107.53	107.5287	107.5299	107.5293
Levelling Point	C305-LP143207	01-09-13	Installed	86870.926	36231.701	107.509	107.51	107.5094	107.5084	107.5089
Levelling Point	C305-LP143208	01-09-13	Installed	86868.611	36236.192	107.524	107.52	107.5249	107.5239	107.5244
Levelling Point	C305-LP143209	01-09-13	Installed	86866.316	36240.605	107.553	107.55	107.5519	107.5529	107.5527
Levelling Point	C305-LP143210	01-09-13	Installed	86863.896	36244.993	107.529	107.53	107.5281	107.5290	107.5287
Levelling Point	C305-LP143211	01-09-13	Installed	86861.381	36249.281	107.519	107.52	107.5189	107.5196	107.5188
Levelling Point	C305-LP143212	01-09-13	Installed	86858.546	36253.381	107.498	107.50	107.4971	107.4980	107.4974
Levelling Point	C305-LP143213	01-09-13	Installed	86855.583	36257.434	107.545	107.54	107.5455	107.5443	107.5449
Levelling Point	C305-LP143214	01-09-13	Installed	86852.714	36261.508	107.567	107.57	107.5662	107.5669	107.5670
Levelling Point	C305-LP143215	01-09-13	Installed	86849.800	36265.576	107.562	107.56	107.5620	107.5612	107.5619
Levelling Point	C305-LP143216	01-09-13	Installed	86846.820	36269.597	107.549	107.55	107.5490	107.5484	107.5487
Levelling Point	C305-LP143217	01-09-13	Installed	86843.767	36273.556	107.559	107.56	107.5583	107.5591	107.5581
Levelling Point	C305-LP143218	01-09-13	Installed	86840.691	36277.510	107.576	107.58	107.5754	107.5766	107.5760
Levelling Point	C305-LP143219	01-09-13	Installed	86837.523	36281.341	107.594	107.59	107.5930	107.5939	107.5936
Levelling Point	C305-LP143220	01-09-13	Installed	86834.360	36285.218	107.588	107.59	107.5877	107.5872	107.5879
Levelling Point	C305-LP143221	01-09-13	Installed	86831.219	36289.086	107.599	107.60	107.5984	107.5986	107.5985
Levelling Point	C305-LP143222	01-09-13	Installed	86828.039	36292.959	107.585	107.58	107.5841	107.5851	107.5843
Levelling Point	C305-LP143223	01-09-13	Installed	86824.887	36296.850	107.610	107.61	107.6103	107.6096	107.6107
Levelling Point	C305-LP143224	01-09-13	Installed	86821.767	36300.735	107.591	107.59	107.5910	107.5903	107.5911
Levelling Point	C305-LP143225	01-09-13	Installed	86818.568	36304.592	107.588	107.59	107.5881	107.5887	107.5881
Levelling Point	C305-LP143226	01-09-13	Installed	86815.431	36308.473	107.645	107.64	107.6446	107.6452	107.6446
Levelling Point	C305-LP143227	01-09-13	Installed	86879.059	36218.429	107.232	107.232	107.2314	107.2325	107.2321
							Average	03-09-13	03-09-13	03-09-13
Levelling Point	C305-LP143301	27-08-13	Installed	86860.372	36194.872	108.554	108.55	108.5544	108.5538	108.5541
Levelling Point	C305-LP143302	27-08-13	Installed	86859.520	36199.823	108.586	108.59	108.5854	108.5862	108.5861
Levelling Point	C305-LP143303	27-08-13	Installed	86858.280	36204.774	108.560	108.56	108.5604	108.5598	108.5607
Levelling Point	C305-LP143304	27-08-13	Installed	86856.813	36209.562	108.572	108.57	108.5712	108.5719	108.5717

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP143305	27-08-13	Installed	86854.894	36214.148	108.579	108.58	108.5787	108.5782	108.5789
Levelling Point	C305-LP143306	27-08-13	Installed	86852.999	36218.732	108.573	108.57	108.5732	108.5738	108.5732
Levelling Point	C305-LP143307	27-08-13	Installed	86851.861	36221.246	108.553	108.55	108.5538	108.5529	108.5532
Levelling Point	C305-LP143308	27-08-13	Installed	86850.757	36223.461	108.553	108.55	108.5530	108.5521	108.5527
Levelling Point	C305-LP143309	27-08-13	Installed	86849.689	36225.519	108.575	108.58	108.5748	108.5757	108.5757
Levelling Point	C305-LP143310	27-08-13	Installed	86848.491	36227.858	108.594	108.59	108.5940	108.5946	108.5937
Levelling Point	C305-LP143311	27-08-13	Installed	86847.308	36230.053	108.591	108.59	108.5909	108.5900	108.5906
Levelling Point	C305-LP143312	27-08-13	Installed	86846.123	36232.146	108.604	108.60	108.6047	108.6041	108.6041
Levelling Point	C305-LP143313	27-08-13	Installed	86844.770	36234.404	108.612	108.61	108.6114	108.6117	108.6114
Levelling Point	C305-LP143314	27-08-13	Installed	86843.408	36236.549	108.609	108.61	108.6094	108.6087	108.6089
Levelling Point	C305-LP143315	27-08-13	Installed	86841.825	36239.082	108.597	108.60	108.5975	108.5968	108.5967
Levelling Point	C305-LP143316	27-08-13	Installed	86840.451	36241.232	108.582	108.58	108.5823	108.5811	108.5817
Levelling Point	C305-LP143317	27-08-13	Installed	86838.695	36243.443	108.575	108.58	108.5751	108.5745	108.5754
Levelling Point	C305-LP143318	27-08-13	Installed	86835.671	36247.341	108.537	108.54	108.5362	108.5367	108.5366
Levelling Point	C305-LP143319	27-08-13	Installed	86832.746	36251.171	108.517	108.52	108.5171	108.5165	108.5162
Levelling Point	C305-LP143320	27-08-13	Installed	86829.486	36255.215	108.549	108.55	108.5484	108.5494	108.5486
Levelling Point	C305-LP143321	27-08-13	Installed	86826.479	36259.172	108.555	108.56	108.5555	108.5552	108.5552
Levelling Point	C305-LP143322	27-08-13	Installed	86823.502	36262.881	108.586	108.59	108.5856	108.5863	108.5852
Levelling Point	C305-LP143323	27-08-13	Installed	86821.813	36265.038	108.251	108.61	108.6137	108.6130	108.6141
Levelling Point	C305-LP143324	27-08-13	Installed	86820.141	36267.200	108.494	108.49	108.4937	108.4943	108.4937
Levelling Point	C305-LP143325	27-08-13	Installed	86819.180	36268.495	108.420	108.42	108.4203	108.4196	108.4195
Levelling Point	C305-LP143326	27-08-13	Installed	86816.395	36269.388	108.327	108.33	108.3276	108.3273	108.3273
Levelling Point	C305-LP143327	27-08-13	Installed	86814.055	36270.697	108.247	108.25	108.2470	108.2468	108.2472
Levelling Point	C305-LP143328	27-08-13	Installed	86812.489	36272.652	108.261	108.26	108.2610	108.2601	108.2610
Levelling Point	C305-LP143329	27-08-13	Installed	86810.967	36274.503	108.251	108.25	108.2504	108.2511	108.2503
Levelling Point	C305-LP143330	27-08-13	Installed	86809.349	36276.588	108.249	108.25	108.2488	108.2495	108.2484
Levelling Point	C305-LP143331	27-08-13	Installed	86807.785	36278.425	108.268	108.27	108.2672	108.2683	108.2676
Levelling Point	C305-LP143332	27-08-13	Installed	86806.274	36280.316	108.273	108.27	108.2732	108.2728	108.2733

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP143333	27-08-13	Installed	86804.671	36282.327	108.267	108.27	108.2667	108.2672	108.2674
Levelling Point	C305-LP143334	27-08-13	Installed	86803.068	36284.507	108.249	108.25	108.2488	108.2500	108.2494
Levelling Point	C305-LP143335	27-08-13	Installed	86799.892	36288.457	108.206	108.21	108.2058	108.2068	108.2066
Levelling Point	C305-LP143336	27-08-13	Installed	86798.810	36293.490	108.112	108.11	108.1115	108.1124	108.1115
Levelling Point	C305-LP143337	27-08-13	Installed	86796.086	36297.872	108.159	108.16	108.1595	108.1589	108.1592
Levelling Point	C305-LP143338	27-08-13	Installed	86792.707	36301.897	108.175	108.17	108.1750	108.1745	108.1746
							Average	03-09-13	03-09-13	03-09-13
Levelling Point	C305-LP143401	27-08-13	Installed	86809.304	36178.300	109.078	109.08	109.0773	109.0780	109.0781
Levelling Point	C305-LP143402	27-08-13	Installed	86809.492	36183.284	109.031	109.03	109.0303	109.0309	109.0303
Levelling Point	C305-LP143403	27-08-13	Installed	86809.562	36188.290	109.000	109.00	109.0007	108.9999	109.0000
Levelling Point	C305-LP143404	27-08-13	Installed	86809.764	36193.297	108.990	108.99	108.9900	108.9893	108.9898
Levelling Point	C305-LP143405	27-08-13	Installed	86810.220	36198.276	108.806	108.81	108.8055	108.8059	108.8060
Levelling Point	C305-LP143406	27-08-13	Installed	86810.187	36200.793	108.890	108.89	108.8895	108.8901	108.8898
Levelling Point	C305-LP143407	27-08-13	Installed	86810.280	36203.294	108.861	108.86	108.8609	108.8614	108.8607
Levelling Point	C305-LP143408	27-08-13	Installed	86810.376	36205.787	108.849	108.85	108.8494	108.8487	108.8486
Levelling Point	C305-LP143409	27-08-13	Installed	86810.515	36208.279	108.821	108.82	108.8210	108.8204	108.8207
Levelling Point	C305-LP143410	27-08-13	Installed	86810.611	36210.777	108.813	108.81	108.8131	108.8137	108.8128
Levelling Point	C305-LP143411	27-08-13	Installed	86810.861	36213.266	108.658	108.66	108.6582	108.6588	108.6579
Levelling Point	C305-LP143412	27-08-13	Installed	86811.005	36215.762	108.640	108.64	108.6401	108.6395	108.6395
Levelling Point	C305-LP143413	27-08-13	Installed	86811.481	36218.320	108.608	108.61	108.6071	108.6079	108.6075
Levelling Point	C305-LP143414	27-08-13	Installed	86810.905	36220.753	108.700	108.70	108.7005	108.6995	108.6997
Levelling Point	C305-LP143415	27-08-13	Installed	86811.028	36225.751	108.598	108.60	108.5985	108.5978	108.5989
Levelling Point	C305-LP143416	27-08-13	Installed	86811.357	36230.852	108.584	108.58	108.5844	108.5840	108.5839
Levelling Point	C305-LP143417	27-08-13	Installed	86810.849	36235.654	108.533	108.53	108.5330	108.5332	108.5331
Levelling Point	C305-LP143418	27-08-13	Installed	86808.595	36240.280	108.471	108.47	108.4711	108.4704	108.4709
Levelling Point	C305-LP143419	27-08-13	Installed	86805.294	36243.882	108.432	108.43	108.4316	108.4321	108.4320
							Average	17-09-13	17-09-13	17-09-13
Levelling Point	C305-LP143501	27-08-13	Installed	86753.511	36262.114	108.318	108.32	108.3181	108.3178	108.3181



**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP143502	27-08-13	Installed	86751.895	36266.846	108.291	108.29	108.2919	108.2911	108.2912
Levelling Point	C305-LP143503	27-08-13	Installed	86752.593	36264.508	108.348	108.35	108.3473	108.3481	108.3477
							Average	17-09-13	17-09-13	17-09-13
Levelling Point	C305-LP143601	11-09-13	Installed	86693.889	36133.199	110.040	110.04	110.0399	110.0394	110.0395
Levelling Point	C305-LP143602	11-09-13	Installed	86694.240	36138.368	110.006	110.01	110.0064	110.0053	110.0060
Levelling Point	C305-LP143603	11-09-13	Installed	86694.911	36143.246	109.979	109.98	109.9781	109.9788	109.9786
Levelling Point	C305-LP143604	11-09-13	Installed	86694.568	36154.268	109.873	109.87	109.8729	109.8719	109.8727
Levelling Point	C305-LP143605	11-09-13	Installed	86694.441	36159.381	109.837	109.84	109.8370	109.8362	109.8363
Levelling Point	C305-LP143606	11-09-13	Installed	86694.881	36164.325	109.742	109.74	109.7409	109.7418	109.7418
Levelling Point	C305-LP143607	11-09-13	Installed	86695.052	36166.776	109.688	109.69	109.6878	109.6874	109.6876
Levelling Point	C305-LP143608	11-09-13	Installed	86695.315	36169.526	109.632	109.63	109.6324	109.6319	109.6329
Levelling Point	C305-LP143609	11-09-13	Installed	86695.496	36171.905	109.584	109.58	109.5841	109.5834	109.5830
Levelling Point	C305-LP143610	11-09-13	Installed	86695.580	36174.170	109.539	109.54	109.5388	109.5384	109.5383
Levelling Point	C305-LP143611	11-09-13	Installed	86695.789	36176.651	109.412	109.41	109.4116	109.4123	109.4124
Levelling Point	C305-LP143612	11-09-13	Installed	86695.926	36179.270	109.354	109.35	109.3534	109.3546	109.3540
Levelling Point	C305-LP143613	11-09-13	Installed	86696.304	36182.013	109.403	109.40	109.4023	109.4032	109.4032
Levelling Point	C305-LP143614	11-09-13	Installed	86696.946	36188.663	109.268	109.27	109.2678	109.2686	109.2685
Levelling Point	C305-LP143615	11-09-13	Installed	86697.517	36196.106	109.184	109.18	109.1835	109.1840	109.1842
Levelling Point	C305-LP143616	11-09-13	Installed	86698.040	36202.927	109.071	109.07	109.0707	109.0712	109.0705
Levelling Point	C305-LP143617	11-09-13	Installed	86700.221	36209.499	108.984	108.98	108.9847	108.9841	108.9844
Levelling Point	C305-LP143618	11-09-13	Installed	86700.615	36214.457	108.909	108.91	108.9091	108.9099	108.9092
Levelling Point	C305-LP143619	11-09-13	Installed	86701.008	36219.424	108.840	108.84	108.8401	108.8390	108.8397
Levelling Point	C305-LP143620	11-09-13	Installed	86701.464	36224.396	108.785	108.79	108.7854	108.7849	108.7853
Levelling Point	C305-LP143621	11-09-13	Installed	86701.735	36229.439	108.713	108.71	108.7126	108.7131	108.7130
Levelling Point	C305-LP143622	11-09-13	Installed	86702.057	36231.976	108.678	108.68	108.6783	108.6772	108.6779
Levelling Point	C305-LP143623	11-09-13	Installed	86702.179	36234.565	108.637	108.64	108.6373	108.6362	108.6369
Levelling Point	C305-LP143624	11-09-13	Installed	86702.471	36236.927	108.626	108.63	108.6258	108.6252	108.6264
Levelling Point	C305-LP143625	11-09-13	Installed	86702.584	36239.418	108.580	108.58	108.5793	108.5797	108.5795

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Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP143626	11-09-13	Installed	86702.757	36241.861	108.563	108.56	108.5623	108.5632	108.5629
Levelling Point	C305-LP143627	11-09-13	Installed	86702.999	36244.341	108.561	108.56	108.5611	108.5605	108.5614
Levelling Point	C305-LP143628	11-09-13	Installed	86703.188	36246.835	108.562	108.56	108.5615	108.5618	108.5615
Levelling Point	C305-LP143629	11-09-13	Installed	86703.391	36249.310	108.561	108.56	108.5613	108.5605	108.5615
Levelling Point	C305-LP143630	11-09-13	Installed	86703.073	36251.898	108.578	108.58	108.5778	108.5785	108.5777
Levelling Point	C305-LP143631	11-09-13	Installed	86702.086	36256.908	108.570	108.57	108.5704	108.5697	108.5699
Levelling Point	C305-LP143632	11-09-13	Installed	86702.469	36261.653	108.566	108.57	108.5662	108.5655	108.5663
Levelling Point	C305-LP143633	11-09-13	Installed	86702.824	36266.406	108.562	108.56	108.5622	108.5625	108.5625
Levelling Point	C305-LP143634	11-09-13	Installed	86703.300	36271.795	108.568	108.57	108.5678	108.5675	108.5678
							Average	17-09-13	17-09-13	17-09-13
Levelling Point	C305-LP143701	11-09-13	Installed	86587.918	36110.048	109.933	109.93	109.9333	109.9327	109.9330
Levelling Point	C305-LP143702	11-09-13	Installed	86588.284	36115.408	109.931	109.93	109.9312	109.9301	109.9305
Levelling Point	C305-LP143703	11-09-13	Installed	86588.671	36120.178	109.915	109.91	109.9152	109.9145	109.9150
Levelling Point	C305-LP143704	11-09-13	Installed	86589.141	36125.222	109.912	109.91	109.9124	109.9116	109.9117
Levelling Point	C305-LP143705	11-09-13	Installed	86589.680	36130.231	109.780	109.78	109.7795	109.7802	109.7794
Levelling Point	C305-LP143706	11-09-13	Installed	86590.031	36135.300	109.910	109.91	109.9099	109.9105	109.9096
Levelling Point	C305-LP143707	11-09-13	Installed	86590.555	36140.101	109.907	109.91	109.9066	109.9073	109.9071
Levelling Point	C305-LP143708	11-09-13	Installed	86591.072	36142.735	109.899	109.90	109.8991	109.8989	109.8990
Levelling Point	C305-LP143709	11-09-13	Installed	86592.346	36145.027	109.883	109.88	109.8822	109.8833	109.8829
Levelling Point	C305-LP143710	11-09-13	Installed	86593.975	36147.280	109.853	109.85	109.8538	109.8533	109.8534
Levelling Point	C305-LP143711	11-09-13	Installed	86594.308	36149.908	109.896	109.90	109.8962	109.8969	109.8961
Levelling Point	C305-LP143712	11-09-13	Installed	86593.926	36152.522	109.988	109.99	109.9875	109.9882	109.9871
Levelling Point	C305-LP143713	11-09-13	Installed	86598.696	36164.630	109.972	109.97	109.9719	109.9726	109.9721
Levelling Point	C305-LP143714	11-09-13	Installed	86603.494	36164.345	110.012	110.01	110.0123	110.0115	110.0122
Levelling Point	C305-LP143715	11-09-13	Installed	86608.886	36163.640	110.041	110.04	110.0403	110.0413	110.0405
Levelling Point	C305-LP143716	11-09-13	Installed	86613.672	36163.248	110.017	110.02	110.0160	110.0171	110.0167
Levelling Point	C305-LP143717	11-09-13	Installed	86618.817	36162.735	109.912	109.91	109.9130	109.9123	109.9122
Levelling Point	C305-LP143718	11-09-13	Installed	86623.173	36162.346	109.928	109.93	109.9284	109.9276	109.9277

## IRS Installation Record Sheets – Levelling Points

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Levelling Point	C305-LP143719	11-09-13	Installed	86620.216	36167.673	109.744	109.74	109.7440	109.7447	109.7445
Levelling Point	C305-LP143720	11-09-13	Installed	86620.644	36172.670	109.605	109.61	109.6054	109.6051	109.6057
Levelling Point	C305-LP143721	11-09-13	Installed	86620.995	36177.241	109.471	109.47	109.4712	109.4709	109.4715
Levelling Point	C305-LP143722	11-09-13	Installed	86621.402	36182.766	109.316	109.32	109.3161	109.3165	109.3163
Levelling Point	C305-LP143723	11-09-13	Installed	86621.090	36188.663	109.188	109.19	109.1880	109.1874	109.1880
Levelling Point	C305-LP143724	11-09-13	Installed	86622.582	36194.051	109.042	109.04	109.0424	109.0421	109.0424
Levelling Point	C305-LP143725	11-09-13	Installed	86622.444	36198.033	108.957	108.96	108.9563	108.9569	108.9566
Levelling Point	C305-LP143726	11-09-13	Installed	86622.805	36203.030	108.899	108.90	108.8994	108.8988	108.8991
Levelling Point	C305-LP143727	11-09-13	Installed	86623.184	36207.913	108.840	108.84	108.8401	108.8404	108.8401
Levelling Point	C305-LP143728	11-09-13	Installed	86623.742	36212.429	108.784	108.78	108.7830	108.7838	108.7840
Levelling Point	C305-LP143729	11-09-13	Installed	86624.085	36217.428	108.725	108.72	108.7251	108.7248	108.7248
Levelling Point	C305-LP143730	11-09-13	Installed	86624.237	36220.027	108.698	108.70	108.6991	108.6983	108.6981
Levelling Point	C305-LP143731	11-09-13	Installed	86624.513	36222.889	108.671	108.67	108.6710	108.6714	108.6712
Levelling Point	C305-LP143732	11-09-13	Installed	86624.673	36225.349	108.652	108.65	108.6526	108.6517	108.6523
Levelling Point	C305-LP143733	11-09-13	Installed	86624.970	36227.432	108.624	108.62	108.6236	108.6243	108.6241
Levelling Point	C305-LP143734	11-09-13	Installed	86625.052	36229.835	108.578	108.58	108.5790	108.5780	108.5785
Levelling Point	C305-LP143735	11-09-13	Installed	86625.240	36232.521	108.545	108.55	108.5450	108.5459	108.5450
Levelling Point	C305-LP143736	11-09-13	Installed	86625.384	36234.860	108.501	108.50	108.5014	108.5006	108.5004
Levelling Point	C305-LP143737	11-09-13	Installed	86625.610	36237.174	108.465	108.47	108.4653	108.4649	108.4654
Levelling Point	C305-LP143738	11-09-13	Installed	86626.014	36242.634	108.374	108.37	108.3746	108.3737	108.3743
Levelling Point	C305-LP143739	11-09-13	Installed	86626.391	36247.407	108.298	108.30	108.2989	108.2982	108.2978
Levelling Point	C305-LP143740	11-09-13	Installed	86626.723	36252.164	108.217	108.22	108.2165	108.2167	108.2166
Levelling Point	C305-LP143741	11-09-13	Installed	86627.183	36257.243	108.198	108.20	108.1975	108.1979	108.1974
							Average	19-09-13	19-09-13	19-09-13
Levelling Point	C305-LP143801	11-09-13	Installed	86536.649	36106.960	110.316	110.32	110.3160	110.3152	110.3159
Levelling Point	C305-LP143802	11-09-13	Installed	86536.887	36112.240	110.304	110.30	110.3032	110.3037	110.3039
Levelling Point	C305-LP143803	11-09-13	Installed	86537.241	36117.157	110.279	110.28	110.2791	110.2780	110.2787
Levelling Point	C305-LP143804	11-09-13	Installed	86537.654	36122.179	110.252	110.25	110.2527	110.2520	110.2525

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP143805	11-09-13	Installed	86538.055	36127.107	110.234	110.23	110.2336	110.2339	110.2339
Levelling Point	C305-LP143806	11-09-13	Installed	86538.530	36131.881	110.223	110.22	110.2231	110.2225	110.2231
Levelling Point	C305-LP143807	11-09-13	Installed	86538.723	36134.867	110.209	110.21	110.2096	110.2091	110.2089
Levelling Point	C305-LP143808	11-09-13	Installed	86538.935	36137.261	110.202	110.20	110.2013	110.2020	110.2024
Levelling Point	C305-LP143809	11-09-13	Installed	86539.123	36139.610	110.195	110.19	110.1948	110.1939	110.1948
Levelling Point	C305-LP143810	11-09-13	Installed	86539.267	36142.076	110.181	110.18	110.1807	110.1811	110.1812
Levelling Point	C305-LP143811	11-09-13	Installed	86539.499	36144.392	110.175	110.17	110.1744	110.1755	110.1748
Levelling Point	C305-LP143812	11-09-13	Installed	86539.712	36146.763	110.184	110.18	110.1838	110.1843	110.1836
Levelling Point	C305-LP143813	11-09-13	Installed	86539.906	36149.569	110.159	110.16	110.1595	110.1588	110.1584
Levelling Point	C305-LP143814	11-09-13	Installed	86540.226	36152.155	110.139	110.14	110.1394	110.1387	110.1383
Levelling Point	C305-LP143815	11-09-13	Installed	86540.245	36154.841	109.983	109.98	109.9837	109.9830	109.9829
Levelling Point	C305-LP143816	11-09-13	Installed	86540.436	36157.044	110.118	110.12	110.1181	110.1184	110.1181
Levelling Point	C305-LP143817	11-09-13	Installed	86541.410	36165.650	110.033	110.03	110.0333	110.0325	110.0335
Levelling Point	C305-LP143818	11-09-13	Installed	86541.953	36170.342	110.055	110.05	110.0550	110.0544	110.0547
Levelling Point	C305-LP143819	11-09-13	Installed	86542.677	36175.668	110.016	110.02	110.0163	110.0159	110.0164
Levelling Point	C305-LP143820	11-09-13	Installed	86543.510	36181.007	109.901	109.95	109.9451	109.9456	109.9458
Levelling Point	C305-LP143821	11-09-13	Installed	86544.233	36185.468	109.823	109.90	109.9010	109.8999	109.9006
Levelling Point	C305-LP143822	11-09-13	Installed	86545.111	36190.616	109.812	109.82	109.8226	109.8231	109.8233
Levelling Point	C305-LP143823	11-09-13	Installed	86546.167	36195.088	109.756	109.81	109.8109	109.8120	109.8116
Levelling Point	C305-LP143824	11-09-13	Installed	86547.306	36200.345	109.734	109.76	109.7555	109.7560	109.7556
Levelling Point	C305-LP143825	11-09-13	Installed	86547.765	36202.810	109.708	109.73	109.7344	109.7341	109.7344
Levelling Point	C305-LP143826	11-09-13	Installed	86548.295	36205.295	109.690	109.71	109.7072	109.7080	109.7079
Levelling Point	C305-LP143827	11-09-13	Installed	86548.832	36207.702	109.654	109.69	109.6900	109.6892	109.6902
Levelling Point	C305-LP143828	11-09-13	Installed	86549.415	36210.312	109.642	109.65	109.6538	109.6541	109.6541
Levelling Point	C305-LP143829	11-09-13	Installed	86549.881	36212.651	109.642	109.64	109.6429	109.6421	109.6422
Levelling Point	C305-LP143830	11-09-13	Installed	86550.437	36214.991	109.581	109.64	109.6428	109.6423	109.6421
Levelling Point	C305-LP143831	11-09-13	Installed	86550.917	36217.534	109.561	109.61	109.6099	109.6104	109.6103
Levelling Point	C305-LP143832	11-09-13	Installed	86551.404	36219.992	109.533	109.58	109.5808	109.5812	109.5813

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP143833	11-09-13	Installed	86552.034	36222.595	109.506	109.56	109.5617	109.5610	109.5609
Levelling Point	C305-LP143834	11-09-13	Installed	86552.459	36224.922	109.484	109.53	109.5327	109.5336	109.5327
Levelling Point	C305-LP143835	11-09-13	Installed	86552.875	36227.226	109.436	109.51	109.5058	109.5055	109.5061
Levelling Point	C305-LP143836	11-09-13	Installed	86553.286	36229.557	109.370	109.48	109.4845	109.4837	109.4838
Levelling Point	C305-LP143837	11-09-13	Installed	86554.052	36234.800	109.298	109.44	109.4365	109.4357	109.4364
Levelling Point	C305-LP143838	11-09-13	Installed	86554.523	36239.496	109.222	109.37	109.3690	109.3699	109.3699
Levelling Point	C305-LP143839	11-09-13	Installed	86554.946	36244.781	109.196	109.30	109.2978	109.2975	109.2975
Levelling Point	C305-LP143840	11-09-13	Installed	86555.277	36249.579	109.120	109.22	109.2218	109.2229	109.2222
							Average	26-09-13	26-09-13	26-09-13
Levelling Point	C305-LP143901	23-09-13	Installed	86445.409	36105.578	110.927	110.93	110.9279	110.9267	110.9273
Levelling Point	C305-LP143902	23-09-13	Installed	86449.010	36109.016	110.929	110.93	110.9298	110.9286	110.9292
Levelling Point	C305-LP143903	23-09-13	Installed	86452.383	36112.390	110.886	110.89	110.8859	110.8863	110.8858
Levelling Point	C305-LP143904	23-09-13	Installed	86455.899	36116.133	110.796	110.80	110.7962	110.7956	110.7965
Levelling Point	C305-LP143905	23-09-13	Installed	86459.042	36120.218	110.701	110.70	110.7018	110.7007	110.7014
Levelling Point	C305-LP143906	23-09-13	Installed	86461.565	36124.674	110.618	110.62	110.6188	110.6180	110.6184
Levelling Point	C305-LP143907	23-09-13	Installed	86464.169	36128.886	110.585	110.59	110.5854	110.5845	110.5854
Levelling Point	C305-LP143908	23-09-13	Installed	86465.600	36130.893	110.549	110.55	110.5486	110.5494	110.5493
Levelling Point	C305-LP143909	23-09-13	Installed	86466.756	36133.142	110.502	110.50	110.5019	110.5014	110.5012
Levelling Point	C305-LP143910	23-09-13	Installed	86468.081	36135.260	110.492	110.49	110.4925	110.4921	110.4923
Levelling Point	C305-LP143911	23-09-13	Installed	86469.364	36137.424	110.455	110.45	110.4550	110.4543	110.4554
Levelling Point	C305-LP143912	23-09-13	Installed	86470.531	36139.623	110.448	110.45	110.4483	110.4476	110.4487
Levelling Point	C305-LP143913	23-09-13	Installed	86471.755	36142.015	110.450	110.45	110.4505	110.4499	110.4499
Levelling Point	C305-LP143914	23-09-13	Installed	86472.753	36144.111	110.421	110.42	110.4208	110.4212	110.4210
Levelling Point	C305-LP143915	23-09-13	Installed	86473.949	36146.317	110.401	110.40	110.4004	110.4008	110.4006
Levelling Point	C305-LP143916	23-09-13	Installed	86474.985	36148.502	110.389	110.39	110.3887	110.3882	110.3886
Levelling Point	C305-LP143917	23-09-13	Installed	86476.106	36150.805	110.379	110.38	110.3792	110.3789	110.3792
Levelling Point	C305-LP143918	23-09-13	Installed	86477.233	36153.009	110.373	110.37	110.3733	110.3729	110.3734
Levelling Point	C305-LP143919	23-09-13	Installed	86478.320	36155.275	110.380	110.38	110.3802	110.3807	110.3803



**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP143920	23-09-13	Installed	86479.434	36157.505	110.371	110.37	110.3712	110.3708	110.3710
Levelling Point	C305-LP143921	23-09-13	Installed	86480.442	36159.771	110.379	110.38	110.3793	110.3799	110.3790
Levelling Point	C305-LP143922	23-09-13	Installed	86482.310	36164.405	110.370	110.37	110.3705	110.3700	110.3701
Levelling Point	C305-LP143923	23-09-13	Installed	86483.342	36169.457	110.383	110.38	110.3832	110.3824	110.3831
Levelling Point	C305-LP143924	23-09-13	Installed	86483.876	36174.428	110.356	110.36	110.3558	110.3565	110.3569
Levelling Point	C305-LP143925	23-09-13	Installed	86483.948	36179.428	110.245	110.24	110.2454	110.2448	110.2445
Levelling Point	C305-LP143926	23-09-13	Installed	86484.000	36184.000	110.179	110.18	110.1789	110.1782	110.1787
Levelling Point	C305-LP143927	23-09-13	Installed	86484.000	36189.000	110.161	110.16	110.1601	110.1612	110.1608
Levelling Point	C305-LP143928	23-09-13	Installed	86483.000	36194.000	110.169	110.17	110.1693	110.1690	110.1693
Levelling Point	C305-LP143929	23-09-13	Installed	86482.353	36197.147	110.253	110.25	110.2524	110.2531	110.2532
Levelling Point	C305-LP143930	23-09-13	Installed	86481.913	36199.680	110.126	110.13	110.1261	110.1270	110.1261
Levelling Point	C305-LP143931	23-09-13	Installed	86481.714	36202.149	110.139	110.14	110.1379	110.1386	110.1390
Levelling Point	C305-LP143932	23-09-13	Installed	86481.221	36204.623	110.045	110.04	110.0448	110.0444	110.0446
Levelling Point	C305-LP143933	23-09-13	Installed	86481.180	36207.054	110.001	110.00	110.0013	110.0018	110.0011
Levelling Point	C305-LP143934	23-09-13	Installed	86481.218	36209.602	109.952	109.95	109.9511	109.9522	109.9515
Levelling Point	C305-LP143935	23-09-13	Installed	86481.075	36212.079	109.929	109.93	109.9288	109.9294	109.9294
Levelling Point	C305-LP143936	23-09-13	Installed	86481.018	36214.578	109.897	109.90	109.8971	109.8974	109.8971
Levelling Point	C305-LP143937	23-09-13	Installed	86480.790	36217.069	109.842	109.84	109.8424	109.8422	109.8423
Levelling Point	C305-LP143938	23-09-13	Installed	86480.385	36219.535	109.810	109.81	109.8105	109.8095	109.8097
Levelling Point	C305-LP143939	23-09-13	Installed	86479.944	36221.997	109.768	109.77	109.7677	109.7687	109.7685
Levelling Point	C305-LP143940	23-09-13	Installed	86479.621	36224.476	109.737	109.74	109.7372	109.7366	109.7375
Levelling Point	C305-LP143941	23-09-13	Installed	86478.915	36229.426	109.733	109.73	109.7332	109.7326	109.7338
Levelling Point	C305-LP143942	23-09-13	Installed	86478.190	36234.373	109.650	109.65	109.6491	109.6501	109.6493
Levelling Point	C305-LP143943	23-09-13	Installed	86477.381	36239.307	109.593	109.59	109.5930	109.5919	109.5926
							Average	22-08-13	22-08-13	22-08-13
Levelling Point	C305-LP146101	19-08-13	Installed	87363.937	36604.039	108.601	108.60	108.6012	108.6005	108.6013
Levelling Point	C305-LP146102	19-08-13	Installed	87352.056	36613.064	108.641	108.64	108.6409	108.6415	108.6415
Levelling Point	C305-LP146103	19-08-13	Installed	87348.023	36616.019	108.668	108.67	108.6675	108.6682	108.6677

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP146104	19-08-13	Installed	87343.657	36618.481	108.772	108.77	108.7713	108.7724	108.7717
Levelling Point	C305-LP146105	19-08-13	Installed	87339.244	36620.833	108.825	108.83	108.8256	108.8245	108.8252
Levelling Point	C305-LP146106	19-08-13	Installed	87337.000	36621.904	108.852	108.85	108.8516	108.8523	108.8518
Levelling Point	C305-LP146107	19-08-13	Installed	87334.798	36622.975	108.887	108.89	108.8863	108.8873	108.8868
Levelling Point	C305-LP146108	19-08-13	Installed	87332.499	36624.137	108.919	108.92	108.9194	108.9185	108.9188
Levelling Point	C305-LP146109	19-08-13	Installed	87330.280	36625.046	108.956	108.96	108.9554	108.9562	108.9558
Levelling Point	C305-LP146110	19-08-13	Installed	87327.980	36626.128	108.996	109.00	108.9960	108.9964	108.9962
Levelling Point	C305-LP146111	19-08-13	Installed	87325.720	36627.065	109.032	109.03	109.0311	109.0323	109.0317
Levelling Point	C305-LP146112	19-08-13	Installed	87320.954	36628.577	109.076	109.08	109.0760	109.0767	109.0765
Levelling Point	C305-LP146113	19-08-13	Installed	87318.643	36629.478	109.099	109.10	109.0996	109.0986	109.0988
Levelling Point	C305-LP146114	19-08-13	Installed	87313.976	36631.122	109.146	109.15	109.1460	109.1455	109.1456
Levelling Point	C305-LP146115	19-08-13	Installed	87309.872	36632.748	109.158	109.16	109.1581	109.1576	109.1583
Levelling Point	C305-LP146116	19-08-13	Installed	87329.418	36634.203	109.020	109.02	109.0202	109.0210	109.0200
Levelling Point	C305-LP146117	19-08-13	Installed	87324.656	36635.730	109.070	109.07	109.0696	109.0692	109.0697
Levelling Point	C305-LP146118	19-08-13	Installed	87319.967	36637.465	109.106	109.11	109.1063	109.1067	109.1062
Levelling Point	C305-LP146119	19-08-13	Installed	87315.278	36639.200	109.141	109.14	109.1406	109.1400	109.1409
							Average	05-12-13	05-12-13	05-12-13
Levelling Point	C305-LP149401	24-09-13	Installed	86856.096	36302.153	106.957	106.96	106.9577	106.9584	106.9588
Levelling Point	C305-LP149402	24-09-13	Installed	86848.888	36299.297	107.558	107.56	107.5590	107.5597	107.5589
Levelling Point	C305-LP149403	24-09-13	Installed	86852.864	36300.973	107.488	107.49	107.4897	107.4888	107.4888
Levelling Point	C305-LP149404	24-09-13	Installed	86866.972	36300.227	106.937	106.94	106.9383	106.9389	106.9386
Levelling Point	C305-LP149405	24-09-13	Installed	86860.398	36297.329	107.373	107.37	107.3744	107.3750	107.3747
Levelling Point	C305-LP149406	24-09-13	Installed	86871.855	36296.028	107.474	107.48	107.4757	107.4761	107.4759
Levelling Point	C305-LP149407	24-09-13	Installed	86863.901	36292.646	106.829	106.83	106.8309	106.8300	106.8303
Levelling Point	C305-LP149408	24-09-13	Installed	86881.791	36251.431	106.819	106.82	106.8201	106.8208	106.8206
Levelling Point	C305-LP149409	24-09-13	Installed	86878.758	36249.861	107.124	107.13	107.1265	107.1254	107.1261
Levelling Point	C305-LP149410	24-09-13	Installed	86879.550	36242.920	107.119	107.12	107.1207	107.1215	107.1205
Levelling Point	C305-LP149411	24-09-13	Installed	86883.171	36245.126	106.723	106.72	106.7246	106.7236	106.7244

## IRS Installation Record Sheets – Levelling Points

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				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	C305-LP149412	24-09-13	Installed	86881.142	36237.635	107.116	107.12	107.1173	107.1171	107.1172
Levelling Point	C305-LP149413	24-09-13	Installed	86887.034	36240.823	107.235	107.24	107.2364	107.2357	107.2365
Levelling Point	C305-LP149414	24-09-13	Installed	86884.267	36239.307	106.639	106.64	106.6401	106.6410	106.6401
							Average	28-06-12	28-06-12	28-06-12
Levelling Point	C305-LP15055	25-06-12	Installed	87997.681	37869.566	104.145	104.15	104.1452	104.1459	104.1457
Levelling Point	C305-LP15056	25-06-12	Installed	87998.190	37866.155	104.169	104.17	104.1683	104.1690	104.1694
Levelling Point	C305-LP15057	25-06-12	Installed	87999.092	37862.868	104.047	104.05	104.0472	104.0462	104.0467
Levelling Point	C305-LP15058	25-06-12	Installed	87999.900	37860.471	104.127	104.13	104.1268	104.1276	104.1278
Levelling Point	C305-LP15059	25-06-12	Installed	88000.336	37858.075	104.031	104.03	104.0311	104.0317	104.0308
Levelling Point	C305-LP15060	26-06-12	Installed	88000.903	37855.938	104.026	104.03	104.0255	104.0259	104.0254
Levelling Point	C305-LP15061	26-06-12	Installed	88001.896	37853.697	103.996	104.00	103.9953	103.9962	103.9956
Levelling Point	C305-LP15062	26-06-12	Installed	88002.630	37852.237	104.008	104.01	104.0081	104.0085	104.0083
Levelling Point	C305-LP15063	26-06-12	Installed	88003.592	37850.711	103.988	103.99	103.9885	103.9880	103.9881
Levelling Point	C305-LP15064	26-06-12	Installed	88004.164	37849.241	104.108	104.11	104.1081	104.1075	104.1075
Levelling Point	C305-LP15065	27-06-12	Installed	88005.028	37847.642	104.120	104.12	104.1192	104.1200	104.1196
Levelling Point	C305-LP15066	27-06-12	Installed	88005.914	37845.801	104.145	104.14	104.1442	104.1449	104.1441
Levelling Point	C305-LP15067	27-06-12	Installed	88006.966	37843.816	104.182	104.18	104.1824	104.1819	104.1820
Levelling Point	C305-LP15068	27-06-12	Installed	88008.270	37841.748	104.181	104.18	104.1810	104.1817	104.1809
Levelling Point	C305-LP15069	27-06-12	Installed	88009.495	37839.852	104.060	104.06	104.0608	104.0599	104.0599
Levelling Point	C305-LP15070	28-06-12	Installed	88011.295	37837.853	104.127	104.13	104.1277	104.1270	104.1272
Levelling Point	C305-LP15071	28-06-12	Installed	88013.097	37836.017	104.047	104.05	104.0467	104.0469	104.0468
							Average	02-04-14	02-04-14	02-04-14
Levelling Point	*C305-LP150301	31-07-13	Installed	87976.048	37912.317	104.170	104.17	104.1708	104.1698	104.1700
Levelling Point	*C305-LP150302	31-07-13	Installed	87983.600	37902.336	104.195	104.19	104.1949	104.1942	104.1944
Levelling Point	*C305-LP150303	31-07-13	Installed	87990.815	37892.177	104.193	104.19	104.1922	104.1931	104.1925
Levelling Point	*C305-LP150304	31-07-13	Installed	87994.734	37880.353	104.173	104.17	104.1724	104.1733	104.1733
Levelling Point	*C305-LP150305	31-07-13	Installed	87997.510	37868.152	104.191	104.19	104.1918	104.1910	104.1908
Levelling Point	*C305-LP150306	31-07-13	Installed	87999.796	37858.297	104.170	104.17	104.1698	104.1702	104.1700

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Levelling Point	*C305-LP150307	31-07-13	Installed	88004.148	37848.617	104.199	104.20	104.1996	104.1990	104.1990
Levelling Point	*C305-LP150308	31-07-13	Installed	88008.290	37840.708	104.239	104.24	104.2398	104.2389	104.2392
Levelling Point	*C305-LP150309	31-07-13	Installed	88016.024	37832.135	104.132	104.13	104.1320	104.1313	104.1321
Levelling Point	*C305-LP150310	31-07-13	Installed	88019.636	37828.498	104.203	104.20	104.2029	104.2024	104.2022
Levelling Point	*C305-LP150311	31-07-13	Installed	88025.198	37823.850	104.210	104.21	104.2098	104.2091	104.2099
Levelling Point	*C305-LP150312	31-07-13	Installed	88034.396	37815.482	104.158	104.16	104.1589	104.1579	104.1584
Levelling Point	*C305-LP150313	31-07-13	Installed	88043.886	37807.055	104.142	104.14	104.1425	104.1422	104.1422
Levelling Point	*C305-LP150314	31-07-13	Installed	88053.545	37799.249	104.100	104.10	104.0999	104.0989	104.0997

*(\*) The Levelling points between C305-LP150301-C305-LP150314, have been instaled to measure at the same time the horizontal displacement. Tape extensometer instrument has been used to get those readings.*

*Note: All elevations or levels presented in this document are metres above tunnel datum (mATD).*

Learning Legacy

## GEOCISA UK

IRS Installation Record Sheets – Levelling Points						
Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading		
				Eastings X (m)	Northings Y (m)	COMMENTS
Levelling point	C305-LP15001	29/05/2013	INSTALLED	87984.145	37905.608	INSTALLED BY OTHERS
Levelling point	C305-LP15002	30/05/2013	INSTALLED	87982.167	37904.028	INSTALLED BY OTHERS
Levelling point	C305-LP15003	31/05/2013	INSTALLED	87983.129	37902.424	INSTALLED BY OTHERS
Levelling point	C305-LP15004	01/06/2013	INSTALLED	87984.278	37900.868	INSTALLED BY OTHERS
Levelling point	C305-LP15005	02/06/2013	INSTALLED	87985.453	37899.288	INSTALLED BY OTHERS
Levelling point	C305-LP15006	03/06/2013	INSTALLED	87986.613	37897.698	INSTALLED BY OTHERS
Levelling point	C305-LP15007	04/06/2013	INSTALLED	87987.791	37896.108	INSTALLED BY OTHERS
Levelling point	C305-LP15008	05/06/2013	INSTALLED	87988.961	37894.500	INSTALLED BY OTHERS
Levelling point	C305-LP15009	06/06/2013	INSTALLED	87990.107	37892.846	INSTALLED BY OTHERS
Levelling point	C305-LP15010	07/06/2013	INSTALLED	87990.903	37891.014	INSTALLED BY OTHERS
Levelling point	C305-LP15011	08/06/2013	INSTALLED	87991.530	37889.110	INSTALLED BY OTHERS
Levelling point	C305-LP15012	09/06/2013	INSTALLED	87992.160	37887.205	INSTALLED BY OTHERS
Levelling point	C305-LP15013	10/06/2013	INSTALLED	87992.837	37885.317	INSTALLED BY OTHERS
Levelling point	C305-LP15014	11/06/2013	INSTALLED	87993.488	37883.351	INSTALLED BY OTHERS
Levelling point	C305-LP15015	12/06/2013	INSTALLED	87994.115	37881.495	INSTALLED BY OTHERS
Levelling point	C305-LP15016	13/06/2013	INSTALLED	87994.658	37879.568	INSTALLED BY OTHERS
Levelling point	C305-LP15017	14/06/2013	INSTALLED	87995.131	37877.587	INSTALLED BY OTHERS
Levelling point	C305-LP15018	15/06/2013	INSTALLED	87995.608	37875.640	INSTALLED BY OTHERS
Levelling point	C305-LP15019	16/06/2013	INSTALLED	87996.006	37873.613	INSTALLED BY OTHERS
Levelling point	C305-LP15020	17/06/2013	INSTALLED	87996.507	37871.670	INSTALLED BY OTHERS
Levelling point	C305-LP15021	18/06/2013	INSTALLED	87996.986	37869.730	INSTALLED BY OTHERS
Levelling point	C305-LP15022	19/06/2013	INSTALLED	87997.400	37867.791	INSTALLED BY OTHERS
Levelling point	C305-LP15023	20/06/2013	INSTALLED	87997.845	37865.824	INSTALLED BY OTHERS
Levelling point	C305-LP15024	21/06/2013	INSTALLED	87998.346	37863.917	INSTALLED BY OTHERS
Levelling point	C305-LP15025	22/06/2013	INSTALLED	87998.801	37861.854	INSTALLED BY OTHERS
Levelling point	C305-LP15026	23/06/2013	INSTALLED	87999.264	37859.950	INSTALLED BY OTHERS
Levelling point	C305-LP15027	24/06/2013	INSTALLED	87999.715	37857.987	INSTALLED BY OTHERS
Levelling point	C305-LP15028	25/06/2013	INSTALLED	88000.236	37856.117	INSTALLED BY OTHERS
Levelling point	C305-LP15029	26/06/2013	INSTALLED	88000.978	37854.206	INSTALLED BY OTHERS
Levelling point	C305-LP15030	27/06/2013	INSTALLED	88001.898	37852.415	INSTALLED BY OTHERS
Levelling point	C305-LP15031	28/06/2013	INSTALLED	88002.871	37850.594	INSTALLED BY OTHERS
Levelling point	C305-LP15032	29/06/2013	INSTALLED	88003.856	37848.811	INSTALLED BY OTHERS
Levelling point	C305-LP15033	30/06/2013	INSTALLED	88004.806	37847.053	INSTALLED BY OTHERS
Levelling point	C305-LP15034	01/07/2013	INSTALLED	88005.648	37845.345	INSTALLED BY OTHERS
Levelling point	C305-LP15035	02/07/2013	INSTALLED	88006.642	37843.502	INSTALLED BY OTHERS
Levelling point	C305-LP15036	03/07/2013	INSTALLED	88007.545	37841.751	INSTALLED BY OTHERS
Levelling point	C305-LP15038	05/07/2013	INSTALLED	88009.730	37838.418	INSTALLED BY OTHERS
Levelling point	C305-LP15039	06/07/2013	INSTALLED	88011.104	37836.909	INSTALLED BY OTHERS
Levelling point	C305-LP15040	07/07/2013	INSTALLED	88012.515	37835.482	INSTALLED BY OTHERS
Levelling point	C305-LP15041	08/07/2013	INSTALLED	88013.815	37834.028	INSTALLED BY OTHERS
Levelling point	C305-LP15042	09/07/2013	INSTALLED	88015.239	37832.531	INSTALLED BY OTHERS
Levelling point	C305-LP15043	10/07/2013	INSTALLED	88016.645	37831.101	INSTALLED BY OTHERS
Levelling point	C305-LP15044	11/07/2013	INSTALLED	88018.047	37829.588	INSTALLED BY OTHERS
Levelling point	C305-LP15045	12/07/2013	INSTALLED	88019.298	37828.146	INSTALLED BY OTHERS
Levelling point	C305-LP15046	13/07/2013	INSTALLED	88020.859	37826.901	INSTALLED BY OTHERS
Levelling point	C305-LP15047	14/07/2013	INSTALLED	88022.461	37825.724	INSTALLED BY OTHERS
Levelling point	C305-LP15048	15/07/2013	INSTALLED	88023.912	37824.219	INSTALLED BY OTHERS
Levelling point	C305-LP15049	16/07/2013	INSTALLED	88025.439	37822.953	INSTALLED BY OTHERS
Levelling point	C305-LP15050	17/07/2013	INSTALLED	88026.888	37821.650	INSTALLED BY OTHERS
Levelling point	C305-LP15051	18/07/2013	INSTALLED	88028.404	37820.300	INSTALLED BY OTHERS
Levelling point	C305-LP15052	19/07/2013	INSTALLED	88029.832	37818.900	INSTALLED BY OTHERS
Levelling point	C305-LP15053	20/07/2013	INSTALLED	88031.363	37817.611	INSTALLED BY OTHERS
Levelling point	C305-LP15054	21/07/2013	INSTALLED	88032.869	37816.321	INSTALLED BY OTHERS



IRS Installation Record Sheets – Levelling Points						
Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading		
				Eastings X (m)	Northings Y (m)	COMMENTS
Levelling point	C305-LP15110	10/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15111	16/05/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15112	02/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15113	26/06/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15114	02/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15115	16/05/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15116	16/05/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15117	02/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15118	10/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15119	10/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15120	10/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15121	11/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15122	12/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15123	13/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15124	14/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15125	15/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15126	16/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15127	17/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15128	18/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15129	19/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15130	20/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15131	21/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15132	22/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15133	23/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15134	24/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15135	25/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15136	26/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15137	27/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15138	28/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK
Levelling point	C305-LP15139	29/10/2013	INSTALLED	87437.357	35198.401	SHEED PILES PAINT MARK

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Summary Installed Instrumentation - Tape extensometer anchors									
Sensor Type	Sensor Serial Number	Date Installation	Status	Monitoring ID	Location MONR		Commissioning readings	Commissioning readings	Commissioning readings
					Eastings X (m)	Northings Y (m)			
Tape extensometer anchor	C305-XT150301	01/07/2013	INSTALLED	C305-LP150301	87976.048	37912.317	11.800	11.810	11.830
Tape extensometer anchor	C305-XT150302	01/07/2013	INSTALLED	C305-LP150302	87983.6	37902.336			
Tape extensometer anchor	C305-XT150303	01/07/2013	INSTALLED	C305-LP150303	87990.815	37892.177	11.750	11.751	11.748
Tape extensometer anchor	C305-XT150304	01/07/2013	INSTALLED	C305-LP150304	87994.734	37880.353			
Tape extensometer anchor	C305-XT150305	01/07/2013	INSTALLED	C305-LP150305	87997.51	37868.152	9.425	9.418	9.410
Tape extensometer anchor	C305-XT150306	01/07/2013	INSTALLED	C305-LP150306	87999.796	37858.297			
Tape extensometer anchor	C305-XT150307	01/07/2013	INSTALLED	C305-LP150307	88004.148	37848.617	8.175	8.172	8.169
Tape extensometer anchor	C305-XT150308	01/07/2013	INSTALLED	C305-LP150308	88008.29	37840.708			
Tape extensometer anchor	C305-XT150309	01/07/2013	INSTALLED	C305-LP150309	88016.024	37832.135	4.425	4.430	4.420
Tape extensometer anchor	C305-XT150310	01/07/2013	INSTALLED	C305-LP150310	88019.636	37828.498			
Tape extensometer anchor	C305-XT150311	01/07/2013	INSTALLED	C305-LP150311	88025.198	37823.850	6.525	6.520	6.530
Tape extensometer anchor	C305-XT150312	01/07/2013	INSTALLED	C305-LP150312	88034.396	37815.482			
Tape extensometer anchor	C305-XT150313	01/07/2013	INSTALLED	C305-LP150313	88043.886	37807.055	11.950	11.960	11.970
Tape extensometer anchor	C305-XT150314	01/07/2013	INSTALLED	C305-LP150314	88053.545	37799.249			

Summary Installed Instrumentation - Tape extensometer anchors									
Sensor Type	Sensor Serial Number	Date Installation	Status	Monitoring ID	Location MONR		Commissioning readings (m)	Commissioning readings (m)	Commissioning readings (m)
					Eastings X (m)	Northings Y (m)			
Tape extensometer anchor	C305-XT150401	01/07/2013	INSTALLED	C305-LP150301	87976.048	37912.317	23.525	23.532	23.551
Tape extensometer anchor		01/07/2013	INSTALLED	C305-LP150302	87983.6	37902.336			
Tape extensometer anchor	C305-XT150402	01/07/2013	INSTALLED	C305-LP150303	87990.815	37892.177	23.525	23.521	23.528
Tape extensometer anchor		01/07/2013	INSTALLED	C305-LP150304	87994.734	37880.353			
Tape extensometer anchor	C305-XT150403	01/07/2013	INSTALLED	C305-LP150305	87997.51	37868.152	19.325	19.328	19.330
Tape extensometer anchor		01/07/2013	INSTALLED	C305-LP150306	87999.796	37858.297			
Tape extensometer anchor	C305-XT150404	01/07/2013	INSTALLED	C305-LP150307	88004.148	37848.617	19.000	19.002	18.989
Tape extensometer anchor		01/07/2013	INSTALLED	C305-LP150308	88008.29	37840.708			
Tape extensometer anchor	C305-XT150405	01/07/2013	INSTALLED	C305-LP150309	88016.024	37832.135	22.705	22.703	22.706
Tape extensometer anchor		01/07/2013	INSTALLED	C305-LP150310	88019.636	37828.498			
Tape extensometer anchor	C305-XT150406	01/07/2013	INSTALLED	C305-LP150311	88025.198	37823.850	23.675	23.683	23.690
Tape extensometer anchor		01/07/2013	INSTALLED	C305-LP150312	88034.396	37815.482			
Tape extensometer anchor	C305-XT150406	01/07/2013	INSTALLED	C305-LP150313	88043.886	37807.055	23.675	23.683	23.690
Tape extensometer anchor		01/07/2013	INSTALLED	C305-LP150314	88053.545	37799.249			

IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commisioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
								19-06-13		
Socket	C305-LB14201	02-06-13	Installed	87911.518	37765.238	110.495	110.495	110.495	110.494	110.495
Socket	C305-LB14202	02-06-13	Installed	87917.401	37758.843	110.263	110.263	110.263	110.264	110.263
Socket	C305-LB14203	02-06-13	Installed	87922.838	37763.345	110.255	110.255	110.256	110.255	110.255
Socket	C305-LB14204	02-06-13	Installed	87927.372	37766.558	110.254	110.254	110.254	110.253	110.254
Socket	C305-LB14205	02-06-13	Installed	87930.769	37769.569	110.253	110.253	110.253	110.252	110.253
Socket	C305-LB14206	02-06-13	Installed	87933.651	37772.331	110.254	110.254	110.255	110.254	110.254
Socket	C305-LB14211	02-06-13	Installed	87944.409	37752.975	110.115	110.115	110.115	110.116	110.115
Socket	C305-LB14214	02-06-13	Installed	87922.384	37734.776	110.522	110.522	110.521	110.522	110.522
Socket	C305-LB14216	02-06-13	Installed	87907.835	37722.727	110.817	110.817	110.817	110.817	110.816
Socket	C305-LB14221	02-06-13	Installed	87963.584	37768.527	109.682	109.682	109.682	109.681	109.682
Socket	C305-LB14222	02-06-13	Installed	87967.172	37765.245	109.705	109.705	109.704	109.705	109.705
Socket	C305-LB14223	02-06-13	Installed	87967.748	37764.720	109.708	109.708	109.708	109.707	109.708
Socket	C305-LB14224	02-06-13	Installed	87971.152	37761.607	109.717	109.717	109.717	109.718	109.717
Socket	C305-LB14225	02-06-13	Installed	87971.531	37761.263	109.718	109.718	109.718	109.717	109.718
Socket	C305-LB14226	02-06-13	Installed	87975.042	37758.040	109.648	109.648	109.648	109.648	109.648
Socket	C305-LB14227	02-06-13	Installed	87975.302	37757.802	109.649	109.649	109.649	109.649	109.649
Socket	C305-LB14228	02-06-13	Installed	87978.870	37754.541	109.592	109.592	109.592	109.591	109.591
Socket	C305-LB14235	02-06-13	Installed	87990.655	37743.719	109.245	109.245	109.244	109.245	109.244
Socket	C305-LB14236	02-06-13	Installed	87994.511	37740.199	109.237	109.237	109.238	109.237	109.237
								10-10-13		
Socket	C305-LB143001	08-10-13	Installed	87831.264	37470.089	112.312	112.312	112.313	112.312	112.312
Socket	C305-LB143002	08-10-13	Installed	87846.143	37473.208	112.303	112.303	112.303	112.303	112.304
Socket	C305-LB143003	08-10-13	Installed	87858.471	37479.921	112.065	112.065	112.065	112.064	112.065
Socket	C305-LB143004	08-10-13	Installed	87851.979	37490.473	112.017	112.017	112.017	112.016	112.017
Socket	C305-LB143005	08-10-13	Installed	87842.738	37503.375	112.074	112.074	112.075	112.074	112.074
Socket	C305-LB143103	05-09-13	Installed	87946.130	37690.357	110.790	110.788	110.790	110.786	110.787
Socket	C305-LB143104	04-09-13	Installed	87937.422	37683.127	110.766	110.766	110.766	110.766	110.767

IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Socket	C305-LB143105	05-09-13	Installed	87928.728	37675.933	111.100	111.100	111.100	111.099	111.100
Socket	C305-LB143106	04-09-13	Installed	87909.654	37660.126	111.262	111.262	111.262	111.262	111.261
Socket	C305-LB143107	21-10-13	Installed	87901.485	37652.045	111.466	111.466	111.466	111.466	111.465
Socket	C305-LB143108	05-09-13	Installed	87879.340	37633.948	111.426	111.426	111.426	111.426	111.426
Socket	C305-LB143201	05-09-13	Installed	87863.248	37602.431	111.562	111.562	111.562	111.562	111.561
								11-09-13		
Socket	C305-LB143301	11-09-13	Installed	87895.853	37605.137	111.928	111.928	111.928	111.927	111.928
Socket	C305-LB143302	11-09-13	Installed	87907.235	37605.228	111.835	111.835	111.835	111.835	111.835
Socket	C305-LB143303	11-09-13	Installed	87916.688	37593.469	111.911	111.911	111.911	111.911	111.912
Socket	C305-LB143304	11-09-13	Installed	87914.345	37568.869	112.046	112.046	112.047	112.046	112.047
Socket	C305-LB143305	11-09-13	Installed	87906.309	37561.917	112.038	112.038	112.038	112.037	112.038
Socket	C305-LB143306	11-09-13	Installed	87898.037	37554.728	112.094	112.094	112.094	112.093	112.094
Socket	C305-LB143307	11-09-13	Installed	87888.821	37547.043	112.067	112.067	112.067	112.067	112.067
Socket	C305-LB143309	11-09-13	Installed	87866.116	37581.255	111.937	111.937	111.936	111.937	111.936
Socket	C305-LB143310	11-09-13	Installed	87869.134	37578.149	111.929	111.929	111.929	111.930	111.929
Socket	C305-LB143311	11-09-13	Installed	87882.432	37561.592	111.931	111.931	111.930	111.931	111.931
Socket	C305-LB143312	11-09-13	Installed	87893.338	37568.766	111.924	111.924	111.924	111.924	111.924
Socket	C305-LB143313	11-09-13	Installed	87902.447	37575.920	111.931	111.931	111.931	111.931	111.932
Socket	C305-LB143314	11-09-13	Installed	87910.660	37585.293	111.904	111.904	111.905	111.904	111.905
Socket	C305-LB143315	11-09-13	Installed	87898.077	37601.180	111.923	111.923	111.923	111.923	111.924
								19-09-13		
Socket	C305-LB143401	13-09-13	Installed	87890.291	37536.322	112.285	112.285	112.285	112.286	112.285
Socket	C305-LB143402	13-09-13	Installed	87897.504	37541.674	112.289	112.289	112.289	112.289	112.289
Socket	C305-LB143403	13-09-13	Installed	87904.554	37546.941	112.166	112.166	112.166	112.167	112.166
Socket	C305-LB143404	13-09-13	Installed	87909.823	37542.361	111.967	111.967	111.967	111.967	111.967
Socket	C305-LB143405	13-09-13	Installed	87921.145	37528.440	111.976	111.976	111.976	111.977	111.977
Socket	C305-LB143406	13-09-13	Installed	87926.219	37518.116	112.082	112.082	112.083	112.082	112.082
Socket	C305-LB143407	13-09-13	Installed	87931.365	37509.483	112.072	112.072	112.072	112.071	112.072

IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Socket	C305-LB143408	13-09-13	Installed	87934.194	37504.639	112.022	112.022	112.022	112.023	112.022
Socket	C305-LB143409	13-09-13	Installed	87938.129	37497.879	111.917	111.917	111.917	111.917	111.917
Socket	C305-LB143410	13-09-13	Installed	87921.526	37497.258	111.817	111.817	111.818	111.817	111.817
Socket	C305-LB143411	13-09-13	Installed	87919.238	37501.602	112.058	112.058	112.058	112.058	112.058
Socket	C305-LB143412	13-09-13	Installed	87910.707	37507.751	112.028	112.028	112.028	112.028	112.028
Socket	C305-LB143413	13-09-13	Installed	87923.595	37492.074	111.815	111.815	111.814	111.815	111.815
Socket	C305-LB143415	13-09-13	Installed	87903.905	37483.409	111.951	111.951	111.951	111.951	111.951
Socket	C305-LB143416	13-09-13	Installed	87892.519	37480.126	111.872	111.872	111.871	111.872	111.872
								02-10-13		
Socket	C305-LB143601	02-10-13	Installed	87914.663	37455.449	111.988	111.988	111.988	111.988	111.988
Socket	C305-LB143602	02-10-13	Installed	87916.351	37455.818	111.992	111.992	111.991	111.992	111.991
Socket	C305-LB143603	02-10-13	Installed	87932.513	37459.330	111.989	111.989	111.989	111.989	111.988
Socket	C305-LB143604	02-10-13	Installed	87935.203	37459.916	111.989	111.989	111.988	111.989	111.989
Socket	C305-LB143605	02-10-13	Installed	87950.995	37463.357	111.983	111.983	111.984	111.983	111.984
Socket	C305-LB143606	02-10-13	Installed	87952.636	37463.717	111.982	111.982	111.982	111.981	111.981
Socket	C305-LB143607	02-10-13	Installed	87970.440	37462.727	111.836	111.836	111.836	111.836	111.835
Socket	C305-LB143608	02-10-13	Installed	87971.052	37457.144	111.836	111.836	111.836	111.836	111.836
Socket	C305-LB143609	02-10-13	Installed	87951.837	37452.833	112.058	112.058	112.058	112.057	112.058
Socket	C305-LB143610	02-10-13	Installed	87933.381	37448.768	112.126	112.126	112.126	112.126	112.126
Socket	C305-LB143611	02-10-13	Installed	87921.943	37446.240	112.135	112.135	112.134	112.135	112.135
Socket	C305-LB143612	02-10-13	Installed	87909.457	37443.454	112.137	112.137	112.136	112.138	112.137
Socket	C305-LB143613	02-10-13	Installed	87899.876	37440.498	112.079	112.079	112.079	112.079	112.079
Socket	C305-LB143614	02-10-13	Installed	87897.429	37451.540	111.997	111.997	111.997	111.997	111.996
Socket	C305-LB143701	02-10-13	Installed	87904.483	37419.807	111.387	111.387	111.387	111.387	111.387
Socket	C305-LB143702	02-10-13	Installed	87907.697	37426.167	111.993	111.993	111.993	111.994	111.993
Socket	C305-LB143703	02-10-13	Installed	87910.174	37424.130	111.687	111.687	111.687	111.687	111.687
Socket	C305-LB143704	02-10-13	Installed	87911.205	37419.312	111.461	111.461	111.461	111.461	111.460
Socket	C305-LB143705	02-10-13	Installed	87916.014	37424.607	111.711	111.711	111.712	111.711	111.711



IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Socket	C305-LB143706	02-10-13	Installed	87915.506	37427.830	111.861	111.861	111.861	111.861	111.861
Socket	C305-LB143707	02-10-13	Installed	87927.608	37430.511	111.919	111.919	111.920	111.919	111.919
Socket	C305-LB143708	02-10-13	Installed	87928.625	37427.328	111.772	111.772	111.771	111.772	111.772
Socket	C305-LB143709	02-10-13	Installed	87929.521	37423.275	111.476	111.476	111.476	111.476	111.476
Socket	C305-LB143710	02-10-13	Installed	87916.898	37420.480	111.477	111.477	111.477	111.477	111.478
								11-10-13		
Socket	C305-LB143801	02-10-13	Installed	87816.971	37382.080	111.188	111.188	111.187	111.188	111.188
Socket	C305-LB143802	02-10-13	Installed	87837.133	37353.021	111.214	111.214	111.214	111.213	111.214
Socket	C305-LB143803	02-10-13	Installed	87839.683	37349.390	111.217	111.217	111.218	111.217	111.217
Socket	C305-LB143804	02-10-13	Installed	87853.995	37328.808	111.218	111.218	111.218	111.218	111.218
Socket	C305-LB143805	02-10-13	Installed	87864.295	37314.106	111.201	111.201	111.201	111.202	111.202
Socket	C305-LB143901	26-09-13	Installed	87908.213	37241.456	110.900	110.900	110.899	110.900	110.899
Socket	C305-LB143902	26-09-13	Installed	87902.954	37254.052	111.634	111.634	111.634	111.633	111.634
Socket	C305-LB143903	26-09-13	Installed	87898.703	37264.264	111.631	111.631	111.632	111.631	111.631
Socket	C305-LB143904	26-09-13	Installed	87894.753	37273.763	111.629	111.629	111.629	111.629	111.628
Socket	C305-LB143905	26-09-13	Installed	87893.782	37278.589	111.991	111.991	111.991	111.991	111.991
Socket	C305-LB143906	26-09-13	Installed	87890.577	37286.170	111.564	111.564	111.565	111.563	111.564
Socket	C305-LB143907	26-09-13	Installed	87887.970	37292.318	111.961	111.961	111.960	111.961	111.960
Socket	C305-LB143908	26-09-13	Installed	87891.373	37298.356	111.643	111.643	111.642	111.643	111.642
Socket	C305-LB143909	26-09-13	Installed	87898.709	37302.403	111.727	111.727	111.727	111.727	111.727
Socket	C305-LB144101	26-09-13	Installed	87879.586	37229.591	107.061	107.061	107.060	107.061	107.061
Socket	C305-LB144102	26-09-13	Installed	87893.894	37226.107	107.063	107.063	107.062	107.063	107.063
Socket	C305-LB144103	26-09-13	Installed	87889.187	37206.437	106.787	106.787	106.787	106.788	106.787
Socket	C305-LB144104	30-09-13	Installed	87874.911	37210.429	106.537	106.537	106.537	106.537	106.537
								10-10-13		
Socket	C305-LB144207	26-09-13	Installed	87849.330	37238.322	107.601	107.601	107.601	107.601	107.601
Socket	C305-LB144210	26-09-13	Installed	87864.009	37201.810	107.607	107.607	107.606	107.607	107.607
Socket	C305-LB144212	26-09-13	Installed	87874.764	37175.361	107.673	107.673	107.673	107.674	107.673

IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Socket	C305-LB144214	26-09-13	Installed	87888.906	37140.267	107.675	107.675	107.675	107.675	107.675
Socket	C305-LB144216	26-09-13	Installed	87896.653	37121.046	107.830	107.830	107.829	107.830	107.829
								08-10-13		
Socket	C305-LB144301	26-09-13	Installed	87825.616	37188.878	113.076	113.076	113.075	113.076	113.076
Socket	C305-LB144302	26-09-13	Installed	87816.957	37202.256	113.823	113.823	113.823	113.822	113.823
Socket	C305-LB144303	26-09-13	Installed	87809.500	37216.508	113.909	113.909	113.908	113.909	113.909
Socket	C305-LB144304	26-09-13	Installed	87799.635	37242.163	114.556	114.556	114.556	114.556	114.556
Socket	C305-LB144305	26-09-13	Installed	87793.930	37253.102	114.552	114.552	114.552	114.552	114.552
								17-10-13		
Socket	C305-LB144401	26-09-13	Installed	87764.600	37238.136	114.030	114.030	114.030	114.031	114.030
Socket	C305-LB144402	26-09-13	Installed	87761.472	37245.380	114.198	114.198	114.197	114.198	114.198
Socket	C305-LB144403	26-09-13	Installed	87759.002	37251.912	114.181	114.181	114.181	114.180	114.181
Socket	C305-LB144501	26-09-13	Installed	87749.919	37213.672	113.894	113.894	113.894	113.895	113.894
Socket	C305-LB144502	26-09-13	Installed	87753.239	37215.064	113.762	113.762	113.762	113.761	113.762
								06-11-13		
Socket	C305-LB144503	26-09-13	Installed	87769.687	37221.923	114.012	114.012	114.011	114.012	114.012
Socket	C305-LB144506	26-09-13	Installed	87782.273	37194.473	112.196	112.196	112.195	112.196	112.196
								12-11-13		
Socket	C305-LB144508	26-09-13	Installed	87801.498	37178.801	114.079	114.079	114.079	114.078	114.079
Socket	C305-LB144509	26-09-13	Installed	87801.891	37173.961	113.978	113.978	113.978	113.979	113.979
								06-11-13		
Socket	C305-LB144510	26-09-13	Installed	87786.783	37181.083	112.131	112.131	112.131	112.131	112.131
Socket	C305-LB144511	26-09-13	Installed	87785.778	37186.069	112.127	112.127	112.126	112.127	112.127
Socket	C305-LB144512	26-09-13	Installed	87783.966	37190.415	112.126	112.126	112.126	112.127	112.126
								23-10-13		
Socket	C305-LB144516	26-09-13	Installed	87770.215	37160.996	112.027	112.027	112.027	112.027	112.027
								08-10-13		
Socket	C305-LB144518	04-10-13	Installed	87808.726	37157.149	113.314	113.314	113.314	113.314	113.314

IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Socket	C305-LB144519	04-10-13	Installed	87812.874	37150.176	113.385	113.385	113.386	113.385	113.385
Socket	C305-LB144520	04-10-13	Installed	87816.697	37143.076	113.380	113.380	113.380	113.380	113.379
Socket	C305-LB144521	04-10-13	Installed	87820.802	37128.667	112.866	112.866	112.865	112.866	112.866
Socket	C305-LB144522	04-10-13	Installed	87823.456	37118.452	112.336	112.336	112.337	112.336	112.337
Socket	C305-LB144523	04-10-13	Installed	87814.073	37114.618	112.177	112.177	112.177	112.177	112.177
								15-01-14		
Socket	C305-LB144524	21-10-13	Installed	87794.547	37105.662	112.174	112.174	112.174	112.175	112.175
Socket	C305-LB144525	21-10-13	Installed	87780.221	37117.810	111.740	111.740	111.740	111.740	111.740
								23-10-13		
Socket	C305-LB144526	21-10-13	Installed	87777.846	37119.305	111.632	111.632	111.632	111.632	111.632
Socket	C305-LB144527	21-10-13	Installed	87773.096	37123.448	111.718	111.718	111.718	111.718	111.719
Socket	C305-LB144528	21-10-13	Installed	87767.322	37128.485	111.792	111.792	111.792	111.792	111.792
Socket	C305-LB144529	21-10-13	Installed	87762.895	37131.649	111.995	111.995	111.995	111.995	111.995
Socket	C305-LB144530	26-09-13	Installed	87750.797	37149.919	112.132	112.132	112.131	112.132	112.132
Socket	C305-LB144531	26-09-13	Installed	87761.340	37157.216	112.118	112.118	112.117	112.118	112.118
								08-10-13		
Socket	C305-LB144532	04-10-13	Installed	87771.742	37161.645	111.893	111.893	111.893	111.892	111.893
Socket	C305-LB144533	04-10-13	Installed	87781.805	37163.561	111.819	111.819	111.819	111.818	111.819
								06-11-13		
Socket	C305-LB144534	26-09-13	Installed	87776.492	37177.168	112.032	112.032	112.032	112.032	112.032
								15-10-13		
Socket	C305-LB144535	26-09-13	Installed	87760.940	37170.682	112.244	112.244	112.245	112.244	112.244
								08-10-13		
Socket	C305-LB144536	04-10-13	Installed	87743.411	37163.371	112.257	112.257	112.256	112.257	112.256
								15-10-13		
Socket	C305-LB144537	26-09-13	Installed	87729.962	37157.774	112.259	112.259	112.259	112.258	112.258
Socket	C305-LB144538	26-09-13	Installed	87724.718	37156.604	112.188	112.188	112.188	112.189	112.188
Socket	C305-LB144539	26-09-13	Installed	87722.458	37162.023	112.259	112.259	112.259	112.259	112.259

IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Socket	C305-LB144601	17-03-14	Installed	87814.245	37092.400	111.834	111.834	111.834	111.834	111.834
								17-03-14		
Socket	C305-LB144602	17-03-14	Installed	87818.226	37097.460	111.834	111.834	111.834	111.834	111.835
Socket	C305-LB144603	17-03-14	Installed	87835.224	37097.696	111.625	111.625	111.625	111.626	111.625
Socket	C305-LB144604	17-03-14	Installed	87822.782	37085.775	111.490	111.490	111.490	111.491	111.490
								22-10-13		
Socket	C305-LB145001	21-10-13	Installed	87739.052	37008.762	111.120	111.120	111.121	111.120	111.120
Socket	C305-LB145002	21-10-13	Installed	87765.525	37014.164	110.879	110.879	110.878	110.879	110.879
Socket	C305-LB145003	21-10-13	Installed	87767.509	37002.639	110.718	110.718	110.719	110.718	110.719
Socket	C305-LB145004	21-10-13	Installed	87747.510	36990.233	110.582	110.582	110.582	110.582	110.582
								31-10-13		
Socket	C305-LB145105	21-10-13	Installed	87675.248	36960.243	110.067	110.067	110.066	110.067	110.067
Socket	C305-LB145106	21-10-13	Installed	87682.173	36968.202	110.361	110.361	110.361	110.362	110.361
Socket	C305-LB145107	21-10-13	Installed	87690.213	36977.425	110.246	110.246	110.246	110.246	110.246
Socket	C305-LB145108	21-10-13	Installed	87699.904	36988.624	110.240	110.240	110.240	110.240	110.240
Socket	C305-LB145109	21-10-13	Installed	87708.191	36998.126	110.267	110.267	110.267	110.267	110.267
								05-11-13		
Socket	C305-LB145110	21-10-13	Installed	87709.010	37012.510	110.838	110.838	110.838	110.838	110.838
Socket	C305-LB145111	21-10-13	Installed	87705.511	37015.673	110.803	110.803	110.803	110.803	110.803
								30-10-13		
Socket	C305-LB145301	21-10-13	Installed	87566.307	36806.370	110.852	110.852	110.852	110.852	110.852
Socket	C305-LB145302	21-10-13	Installed	87560.419	36817.314	110.866	110.866	110.867	110.866	110.866
Socket	C305-LB145303	21-10-13	Installed	87580.653	36827.489	110.828	110.828	110.828	110.827	110.828
								21-05-14		
Socket	C305-LB145304	21-10-13	Installed	87584.220	36820.783	110.868	110.868	110.868	110.868	110.867
								30-10-13		
Socket	C305-LB145305	21-10-13	Installed	87584.244	36829.539	110.768	110.768	110.768	110.769	110.768
Socket	C305-LB145306	21-10-13	Installed	87601.504	36843.962	110.774	110.774	110.774	110.774	110.774

IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Socket	C305-LB145307	21-10-13	Installed	87615.580	36855.756	110.756	110.756	110.755	110.756	110.756
								22-10-13		
Socket	C305-LB145501	21-10-13	Installed	87515.654	36800.841	110.995	110.995	110.995	110.996	110.996
Socket	C305-LB145503	21-10-13	Installed	87534.562	36781.699	111.214	111.214	111.213	111.214	111.214
Socket	C305-LB145504	21-10-13	Installed	87524.813	36782.627	110.942	110.942	110.942	110.943	110.942
								21-11-13		
Socket	C305-LB145703	11-11-13	Installed	87262.661	36664.610	110.808	110.808	110.808	110.808	110.808
								12-11-13		
Socket	C305-LB145801	11-11-13	Installed	87264.546	36610.701	110.715	110.715	110.715	110.715	110.715
Socket	C305-LB145802	11-11-13	Installed	87264.035	36620.370	110.858	110.858	110.858	110.858	110.858
Socket	C305-LB145803	11-11-13	Installed	87263.362	36632.658	110.862	110.862	110.862	110.862	110.862
Socket	C305-LB145804	11-11-13	Installed	87255.019	36632.631	110.720	110.720	110.720	110.721	110.720
Socket	C305-LB145901	11-11-13	Installed	87240.249	36583.536	110.936	110.936	110.936	110.935	110.936
Socket	C305-LB145902	11-11-13	Installed	87239.694	36594.419	110.860	110.860	110.860	110.860	110.860
Socket	C305-LB145903	11-11-13	Installed	87238.961	36606.775	110.845	110.845	110.845	110.845	110.845
Socket	C305-LB145904	11-11-13	Installed	87230.964	36606.351	110.781	110.781	110.782	110.781	110.781
Socket	C305-LB146001	11-11-13	Installed	87180.459	36527.824	111.002	111.002	111.001	111.002	111.001
Socket	C305-LB146002	11-11-13	Installed	87179.745	36544.894	110.939	110.939	110.939	110.940	110.939
Socket	C305-LB146003	11-11-13	Installed	87178.788	36561.023	110.961	110.961	110.960	110.961	110.961
Socket	C305-LB146004	11-11-13	Installed	87170.907	36560.667	110.964	110.964	110.964	110.963	110.964
Socket	C305-LB146007	11-11-13	Installed	87171.222	36520.666	110.904	110.904	110.903	110.904	110.904
Socket	C305-LB146008	11-11-13	Installed	87187.627	36512.086	110.992	110.992	110.992	110.991	110.992
Socket	C305-LB146101	12-11-13	Installed	87105.091	36517.568	111.240	111.240	111.241	111.240	111.240
Socket	C305-LB146102	12-11-13	Installed	87117.981	36518.075	111.245	111.245	111.245	111.244	111.245
Socket	C305-LB146103	12-11-13	Installed	87132.131	36518.893	111.161	111.161	111.162	111.161	111.161
Socket	C305-LB146104	12-11-13	Installed	87143.031	36519.528	111.161	111.161	111.162	111.161	111.161
Socket	C305-LB146107	12-11-13	Installed	87153.646	36508.841	111.065	111.065	111.065	111.066	111.065
Socket	C305-LB146108	12-11-13	Installed	87154.961	36499.535	111.217	111.217	111.217	111.217	111.217



IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Socket	C305-LB146109	13-11-13	Installed	87155.442	36490.007	111.140	111.140	111.140	111.140	111.140
Socket	C305-LB146110	12-11-13	Installed	87155.361	36479.727	111.226	111.226	111.225	111.227	111.226
Socket	C305-LB146111	12-11-13	Installed	87144.179	36469.484	111.294	111.294	111.294	111.294	111.294
Socket	C305-LB146112	12-11-13	Installed	87134.775	36468.970	111.233	111.233	111.233	111.232	111.233
Socket	C305-LB146113	12-11-13	Installed	87121.996	36468.273	111.228	111.228	111.229	111.228	111.228
Socket	C305-LB146114	12-11-13	Installed	87110.937	36467.669	111.204	111.204	111.205	111.204	111.204
Socket	C305-LB146115	12-11-13	Installed	87109.392	36466.858	111.157	111.157	111.157	111.157	111.157
Socket	C305-LB146116	12-11-13	Installed	87110.821	36449.827	111.141	111.141	111.141	111.141	111.141
Socket	C305-LB146117	12-11-13	Installed	87111.346	36437.616	111.142	111.142	111.142	111.143	111.142
Socket	C305-LB146118	12-11-13	Installed	87102.535	36430.917	111.139	111.139	111.139	111.139	111.139
Socket	C305-LB146120	12-11-13	Installed	87099.614	36469.944	111.063	111.063	111.063	111.064	111.063
Socket	C305-LB146121	12-11-13	Installed	87105.128	36476.321	111.060	111.060	111.060	111.060	111.060
Socket	C305-LB146126	12-11-13	Installed	87105.675	36507.806	111.076	111.076	111.075	111.076	111.076
								27-11-13		
Socket	C305-LB146402	13-11-13	Installed	86846.677	36210.691	109.871	109.871	109.871	109.871	109.872
Socket	C305-LB146403	12-11-13	Installed	86842.193	36221.053	109.799	109.799	109.800	109.799	109.799
Socket	C305-LB146404	12-11-13	Installed	86834.433	36235.285	109.799	109.799	109.800	109.799	109.799
								02-12-13		
Socket	C305-LB146405	12-11-13	Installed	86819.096	36257.689	109.786	109.786	109.786	109.786	109.786
								27-11-13		
Socket	C305-LB146406	12-11-13	Installed	86808.762	36269.731	109.604	109.604	109.604	109.603	109.604
Socket	C305-LB146408	13-11-13	Installed	86790.637	36292.568	109.683	109.683	109.683	109.684	109.683
Socket	C305-LB146501	13-11-13	Installed	86796.023	36236.225	109.859	109.859	109.858	109.859	109.859
Socket	C305-LB146502	13-11-13	Installed	86799.470	36226.721	109.901	109.901	109.900	109.901	109.901
Socket	C305-LB146503	13-11-13	Installed	86798.823	36209.963	110.089	110.089	110.088	110.089	110.089
Socket	C305-LB146504	13-11-13	Installed	86798.195	36193.927	110.215	110.215	110.216	110.215	110.214
Socket	C305-LB146505	13-11-13	Installed	86797.696	36180.647	110.374	110.374	110.375	110.373	110.374
Socket	C305-LB146602	13-11-13	Installed	86744.482	36248.513	109.537	109.537	109.536	109.537	109.537

IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Socket	C305-LB146603	13-11-13	Installed	86744.120	36239.580	109.812	109.812	109.812	109.812	109.813
Socket	C305-LB146604	13-11-13	Installed	86743.674	36228.597	109.969	109.969	109.969	109.969	109.969
Socket	C305-LB146605	13-11-13	Installed	86743.225	36217.535	110.186	110.186	110.187	110.186	110.186
Socket	C305-LB146606	13-11-13	Installed	86742.742	36204.307	110.495	110.495	110.496	110.495	110.495
Socket	C305-LB146607	13-11-13	Installed	86742.200	36192.195	110.851	110.851	110.851	110.851	110.851
Socket	C305-LB146608	13-11-13	Installed	86743.327	36180.111	110.998	110.998	110.998	110.999	110.999
Socket	C305-LB146609	27-11-13	Installed	86736.337	36173.059	111.083	111.083	111.082	111.083	111.083
Socket	C305-LB146610	13-11-13	Installed	86725.951	36165.360	111.095	111.095	111.096	111.095	111.095
Socket	C305-LB146611	13-11-13	Installed	86719.740	36155.715	111.027	111.027	111.026	111.027	111.027
Socket	C305-LB146612	27-11-13	Installed	86700.197	36157.563	111.097	111.097	111.097	111.096	111.096
Socket	C305-LB146613	27-11-13	Installed	86699.925	36166.474	111.098	111.098	111.099	111.098	111.098
Socket	C305-LB146614	13-11-13	Installed	86700.684	36180.297	110.692	110.692	110.693	110.692	110.693
Socket	C305-LB146615	27-11-13	Installed	86701.658	36194.272	110.532	110.532	110.532	110.532	110.532
Socket	C305-LB146616	27-11-13	Installed	86702.241	36202.489	110.485	110.485	110.486	110.485	110.485
Socket	C305-LB146617	27-11-13	Installed	86705.906	36215.532	110.327	110.327	110.328	110.327	110.327
Socket	C305-LB146618	13-11-13	Installed	86706.537	36224.447	110.104	110.104	110.104	110.104	110.104
Socket	C305-LB146619	13-11-13	Installed	86707.150	36233.239	109.948	109.948	109.947	109.948	109.948
Socket	C305-LB146620	13-11-13	Installed	86707.787	36242.380	109.878	109.878	109.879	109.878	109.879
								12-01-14		
Socket	C305-LB146621	12-12-13	Installed	86708.422	36251.349	109.880	109.880	109.880	109.881	109.880
								27-11-13		
Socket	C305-LB146622	27-11-13	Installed	86706.582	36256.029	109.953	109.953	109.953	109.953	109.953
Socket	C305-LB146623	27-11-13	Installed	86707.210	36265.026	109.864	109.864	109.864	109.864	109.864
Socket	C305-LB146624	27-11-13	Installed	86708.137	36278.229	109.881	109.881	109.882	109.881	109.881
								12-01-14		
Socket	C305-LB146625	12-12-13	Installed	86706.903	36289.654	109.589	109.589	109.589	109.588	109.589
								12-12-13		
Socket	C305-LB146705	12-12-13	Installed	86683.408	36198.806	110.604	110.604	110.605	110.604	110.604

IRS Installation Record Sheets – Sockets										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	Elevation Z1 (mATD)	Elevation Z2 (mATD)	Elevation Z3 (mATD)
Socket	C305-LB146706	12-12-13	Installed	86685.380	36225.344	110.083	110.083	110.083	110.084	110.083
Socket	C305-LB146707	12-12-13	Installed	86685.845	36231.598	109.783	109.783	109.783	109.783	109.782
Socket	C305-LB146708	12-12-13	Installed	86686.607	36241.875	109.857	109.857	109.856	109.857	109.857
Socket	C305-LB146709	12-12-13	Installed	86688.460	36275.724	109.585	109.585	109.585	109.584	109.585
								12-12-13		
Socket	C305-LB146801	12-12-13	Installed	86548.306	36127.135	111.425	111.425	111.425	111.424	111.425
Socket	C305-LB146804	12-12-13	Installed	86554.231	36179.377	111.383	111.383	111.384	111.383	111.384
Socket	C305-LB146805	12-12-13	Installed	86556.530	36191.195	111.328	111.328	111.328	111.328	111.328
Socket	C305-LB146806	12-12-13	Installed	86557.078	36205.384	110.768	110.768	110.768	110.768	110.768
Socket	C305-LB146807	12-12-13	Installed	86558.326	36220.734	110.778	110.778	110.777	110.778	110.778
Socket	C305-LB146808	12-12-13	Installed	86559.580	36235.938	110.640	110.640	110.640	110.639	110.640
								11-12-13		
Socket	C305-LB146901	06-12-13	Installed	86397.781	36256.092	110.704	110.704	110.703	110.704	110.704
Socket	C305-LB146902	06-12-13	Installed	86388.840	36256.719	110.600	110.600	110.600	110.600	110.600
Socket	C305-LB146903	06-12-13	Installed	86369.273	36258.256	110.693	110.693	110.692	110.693	110.693

*Note: All elevations or levels presented in this document are metres above tunnel datum (mATD).*

IRS Installation Record Sheets – 3D Prism										
Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
3D Prism	C305-RP143103	05-09-13	Installed	87946.130	37690.357	114.972	10-09-13	87946.1298	37690.3566	114.9723
								87946.1301	37690.3570	114.9729
								87946.1294	37690.3561	114.9719
								87946.1299	37690.3567	114.9721
3D Prism	C305-RP143104	04-09-13	Installed	87937.422	37683.127	115.143	10-09-13	87937.4217	37683.1271	115.1431
								87937.4216	37683.1265	115.1425
								87937.4219	37683.1273	115.1436
								87937.4216	37683.1275	115.1432
3D Prism	C305-RP143105	05-09-13	Installed	87928.728	37675.933	115.149	10-09-13	87928.7283	37675.9334	115.1487
								87928.7277	37675.9340	115.1485
								87928.7287	37675.9332	115.1489
								87928.7285	37675.9330	115.1487
3D Prism	C305-RP143106	04-09-13	Installed	87909.655	37660.126	113.828	10-09-13	87909.6549	37660.1259	113.8275
								87909.6550	37660.1254	113.8269
								87909.6543	37660.1263	113.8276
								87909.6554	37660.1260	113.8280
3D Prism	C305-RP143107	05-09-13	Installed	87898.448	37650.862	114.855	02-11-13	87898.4484	37650.8618	114.8550
								87898.4483	37650.8614	114.8549
								87898.4488	37650.8621	114.8551
								87898.4481	37650.8619	114.8550
3D Prism	C305-RP143108	05-09-13	Installed	87879.340	37633.949	115.716	10-09-13	87879.3397	37633.9485	115.7157
								87879.3403	37633.9490	115.7154
								87879.3394	37633.9482	115.7161
								87879.3394	37633.9483	115.7156
3D Prism	C305-RP143201	05-09-13	Installed	87863.248	37602.431	115.257	03-10-13	87863.2482	37602.4315	115.2573
								87863.2484	37602.4313	115.2567
								87863.2479	37602.4306	115.2575
								87863.2477	37602.4311	115.2568

**IRS Installation Record Sheets – 3D Prism**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
3D Prism	C305-RP144508	20-11-13	Installed	87798.861	37185.800	119.416	7-04-14	87798.8607	37185.8001	119.4155
								87798.8601	37185.8006	119.4156
								87798.8608	37185.8000	119.4152
								87798.8612	37185.7997	119.4157
3D Prism	C305-RP144513	20-11-13	Installed	87804.181	37168.190	120.832	7-4-14	87804.1813	37168.1904	120.8324
								87804.1817	37168.1901	120.8320
								87804.1808	37168.1905	120.8325
								87804.1814	37168.1906	120.8327
3D Prism	C305-RP144514	20-11-13	Installed	87799.446	37166.197	120.845	7-4-14	87799.4461	37166.1965	120.8454
								87799.4465	37166.1963	120.8449
								87799.4457	37166.1971	120.8456
								87799.4461	37166.1961	120.8457
3D Prism	C305-RP144518	04-10-13	Installed	87807.408	37156.887	114.491	23-11-13	87807.4078	37156.8871	114.4906
								87807.4080	37156.8867	114.4904
								87807.4077	37156.8876	114.4907
								87807.4077	37156.8870	114.4907
3D Prism	C305-RP144520	04-10-13	Installed	87820.203	37130.158	114.418	23-11-13	87820.2032	37130.1582	114.4176
								87820.2026	37130.1583	114.4170
								87820.2035	37130.1576	114.4179
								87820.2035	37130.1587	114.4179
3D Prism	C305-RP144522	04-10-13	Installed	87821.532	37118.136	113.803	23-11-13	87821.5320	37118.1360	113.8033
								87821.5319	37118.1366	113.8036
								87821.5321	37118.1358	113.8029
								87821.5320	37118.1356	113.8034
3D Prism	C305-RP144529	09-10-13	Installed	87763.293	37131.373	114.472	14-11-13	87763.2927	37131.3725	114.4723
								87763.2930	37131.3724	114.4719
								87763.2921	37131.3727	114.4729
								87763.2930	37131.3724	114.4721



**IRS Installation Record Sheets – 3D Prism**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
3D Prism	C305-RP144530	09-10-13	Installed	87749.747	37141.645	114.207	14-11-13	87749.7471	37141.6453	114.2068
								87749.7476	37141.6459	114.2070
								87749.7468	37141.6453	114.2064
								87749.7469	37141.6447	114.2070
3D Prism	C305-RP144537	09-10-13	Installed	87730.156	37157.787	114.842	14-11-13	87730.1563	37157.7870	114.8420
								87730.1566	37157.7876	114.8421
								87730.1558	37157.7869	114.8415
								87730.1565	37157.7865	114.8424
3D Prism	C305-RP144538	09-10-13	Installed	87725.249	37155.730	114.766	14-11-13	87725.2493	37155.7302	114.7657
								87725.2495	37155.7305	114.7662
								87725.2491	37155.7300	114.7654
								87725.2493	37155.7301	114.7655
3D Prism	C305-RP144601	24-10-13	Installed	87817.429	37096.027	119.505	7-04-14	87817.4293	37096.0273	119.5049
								87817.4295	37096.0277	119.5054
								87817.4290	37096.0269	119.5046
								87817.4294	37096.0273	119.5047
3D Prism	C305-RP144602	24-10-13	Installed	87821.990	37099.192	118.838	7-04-14	87821.9895	37099.1916	118.8375
								87821.9892	37099.1914	118.8369
								87821.9899	37099.1919	118.8381
								87821.9894	37099.1915	118.8375
3D Prism	C305-RP144603	24-10-13	Installed	87833.918	37102.158	117.011	7-04-14	87833.9178	37102.1575	117.0112
								87833.9178	37102.1576	117.0118
								87833.9174	37102.1574	117.0107
								87833.9182	37102.1575	117.0111
3D Prism	C305-RP145003	20-11-13	Installed	87767.953	37001.257	114.749	26-11-13	87767.9526	37001.2567	114.7493
								87767.9521	37001.2566	114.7498
								87767.9531	37001.2571	114.7490
								87767.9526	37001.2564	114.7491

**IRS Installation Record Sheets – 3D Prism**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
3D Prism	C305-RP145004	20-11-13	Installed	87753.216	36998.461	114.905	26-11-13	87753.2156	36998.4612	114.9049
								87753.2155	36998.4609	114.9043
								87753.2160	36998.4616	114.9050
								87753.2153	36998.4611	114.9054
3D Prism	C305-RP146101	19-11-13	Installed	87106.864	36518.373	115.118	05-12-13	87106.8637	36518.3725	115.1181
								87106.8639	36518.3731	115.1183
								87106.8631	36518.3722	115.1178
								87106.8641	36518.3722	115.1182
3D Prism	C305-RP146103	19-11-13	Installed	87129.122	36519.509	115.127	05-12-13	87129.1217	36519.5086	115.1266
								87129.1214	36519.5080	115.1272
								87129.1218	36519.5087	115.1261
								87129.1219	36519.5091	115.1265
3D Prism	C305-RP146105	19-11-13	Installed	87146.590	36520.893	115.000	05-12-13	87146.5904	36520.8926	114.9995
								87146.5910	36520.8929	114.9990
								87146.5901	36520.8922	114.9997
								87146.5901	36520.8927	114.9998
3D Prism	C305-RP146106	19-11-13	Installed	87153.928	36515.638	115.073	05-12-13	87153.9275	36515.6382	115.0728
								87153.9271	36515.6387	115.0727
								87153.9278	36515.6378	115.0729
								87153.9276	36515.6381	115.0728
3D Prism	C305-RP146107	19-11-13	Installed	87155.371	36509.308	115.250	05-12-13	87155.3714	36509.3075	115.2500
								87155.3709	36509.3070	115.2497
								87155.3720	36509.3081	115.2505
								87155.3713	36509.3074	115.2498
3D Prism	C305-RP146109	19-11-13	Installed	87155.262	36488.662	115.074	05-12-13	87155.2615	36488.6622	115.0738
								87155.2614	36488.6621	115.0740
								87155.2617	36488.6624	115.0735
								87155.2614	36488.6621	115.0739

**IRS Installation Record Sheets – 3D Prism**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
3D Prism	C305-RP146121	19-11-13	Installed	87106.339	36482.436	114.352	11-12-13	87106.3386	36482.4363	114.3516
								87106.3389	36482.4364	114.3512
								87106.3383	36482.4358	114.3520
								87106.3386	36482.4367	114.3516
3D Prism	C305-RP146126	19-11-13	Installed	87104.884	36508.760	114.290	11-12-13	87104.8844	36508.7602	114.2895
								87104.8839	36508.7596	114.2900
								87104.8845	36508.7603	114.2893
								87104.8848	36508.7607	114.2892
3D Prism	C305-RP146201	19-11-13	Installed	86881.098	36186.285	107.252	05-12-13	86881.0979	36186.2845	107.2518
								86881.0982	36186.2851	107.2521
								86881.0978	36186.2840	107.2517
								86881.0977	36186.2844	107.2516
3D Prism	C305-RP146202	19-11-13	Installed	86876.491	36207.568	107.283	05-12-13	86876.4906	36207.5683	107.2828
								86876.4904	36207.5685	107.2826
								86876.4911	36207.5678	107.2830
								86876.4903	36207.5686	107.2828
3D Prism	C305-RP146203	19-11-13	Installed	86870.193	36224.082	107.324	05-12-13	86870.1934	36224.0816	107.3243
								86870.1940	36224.0815	107.3238
								86870.1929	36224.0818	107.3248
								86870.1933	36224.0815	107.3243
3D Prism	C305-RP146204	19-11-13	Installed	86861.128	36241.572	107.274	05-12-13	86861.1278	36241.5719	107.2743
								86861.1280	36241.5714	107.2746
								86861.1273	36241.5725	107.2738
								86861.1281	36241.5718	107.2745
3D Prism	C305-RP146205	19-11-13	Installed	86854.161	36252.689	107.309	05-12-13	86854.1609	36252.6886	107.3087
								86854.1607	36252.6885	107.3084
								86854.1613	36252.6888	107.3092
								86854.1607	36252.6885	107.3085

**IRS Installation Record Sheets – 3D Prism**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
3D Prism	C305-RP146206	19-11-13	Installed	86838.278	36273.644	107.288	05-12-13	86838.2781	36273.6443	107.2882
								86838.2785	36273.6442	107.2884
								86838.2776	36273.6447	107.2880
								86838.2782	36273.6440	107.2882
3D Prism	C305-RP146207	19-11-13	Installed	86827.707	36286.598	107.262	05-12-13	86827.7072	36286.5983	107.2619
								86827.7077	36286.5977	107.2621
								86827.7071	36286.5987	107.2618
								86827.7068	36286.5985	107.2618
3D Prism	C305-RP146208	19-11-13	Installed	86816.367	36300.367	107.287	05-12-13	86816.3671	36300.3665	107.2874
								86816.3667	36300.3662	107.2871
								86816.3673	36300.3671	107.2876
								86816.3673	36300.3662	107.2875
3D Prism	C305-RP146209	19-11-13	Installed	86802.597	36317.096	107.305	05-12-13	86802.5970	36317.0959	107.3052
								86802.5967	36317.0955	107.3056
								86802.5974	36317.0963	107.3050
								86802.5969	36317.0959	107.3050
3D Prism	C305-RP146301	14-11-13	Installed	86861.841	36190.088	108.796	27-11-13	86861.8412	36190.0884	108.7961
								86861.8406	36190.0882	108.7965
								86861.8413	36190.0889	108.7960
								86861.8417	36190.0881	108.7958
3D Prism	C305-RP146302	14-11-13	Installed	86856.185	36212.981	108.796	27-11-13	86856.1850	36212.9813	108.7957
								86856.1853	36212.9814	108.7955
								86856.1844	36212.9807	108.7962
								86856.1853	36212.9818	108.7954
3D Prism	C305-RP146303	14-11-13	Installed	86843.147	36238.437	108.806	27-11-13	86843.1472	36238.4369	108.8057
								86843.1476	36238.4372	108.8062
								86843.1470	36238.4364	108.8056
								86843.1470	36238.4371	108.8053

**IRS Installation Record Sheets – 3D Prism**

Sensor Type	Sensor ID	Installation Date	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
3D Prism	C305-RP146304	14-11-13	Installed	86833.868	36251.008	108.805	27-11-13	86833.8683	36251.0082	108.8048
								86833.8684	36251.0078	108.8047
								86833.8680	36251.0088	108.8051
								86833.8685	36251.0080	108.8046
3D Prism	C305-RP146305	14-11-13	Installed	86826.041	36261.018	108.800	27-11-13	86826.0408	36261.0179	108.8002
								86826.0404	36261.0179	108.8007
								86826.0411	36261.0176	108.8000
								86826.0409	36261.0182	108.7999
3D Prism	C305-RP146306	14-11-13	Installed	86814.717	36270.899	108.495	27-11-13	86814.7171	36270.8992	108.4953
								86814.7170	36270.8998	108.4954
								86814.7174	36270.8987	108.4949
								86814.7169	36270.8991	108.4956
3D Prism	C305-RP146307	14-11-13	Installed	86807.234	36280.457	108.436	27-11-13	86807.2344	36280.4570	108.4356
								86807.2347	36280.4566	108.4356
								86807.2342	36280.4573	108.4352
								86807.2343	36280.4571	108.4360
3D Prism	C305-RP146308	14-11-13	Installed	86799.764	36292.344	108.459	27-11-13	86799.7637	36292.3439	108.4591
								86799.7636	36292.3438	108.4597
								86799.7641	36292.3442	108.4587
								86799.7634	36292.3437	108.4589
3D Prism	C305-RP146309	14-11-13	Installed	86789.519	36307.178	108.512	27-11-13	86789.5190	36307.1783	108.5122
								86789.5185	36307.1778	108.5128
								86789.5192	36307.1787	108.5116
								86789.5193	36307.1784	108.5122
3D Prism	C305-RP146806	21-11-13	Installed	86556.824	36202.140	115.311	12-12-13	86556.8242	36202.1397	115.3112
								86556.8238	36202.1403	115.3106
								86556.8244	36202.1396	115.3116
								86556.8244	36202.1392	115.3114



**IRS Installation Record Sheets – Retro Targets**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
Retro Target	C305-RR144101	22-09-13	Installed	87878.686	37230.340	113.259	03-10-13	87878.686	37230.340	113.259
								87878.686	37230.340	113.259
								87878.687	37230.340	113.260
								87878.686	37230.340	113.259
Retro Target	C305-RR144102	22-09-13	Installed	87893.837	37227.080	109.480	03-10-13	87893.837	37227.080	109.480
								87893.837	37227.080	109.479
								87893.837	37227.080	109.480
								87893.837	37227.080	109.480
Retro Target	C305-RR144104	22-09-13	Installed	87873.784	37209.638	113.280	03-10-13	87873.784	37209.638	113.280
								87873.784	37209.638	113.280
								87873.783	37209.639	113.280
								87873.784	37209.638	113.280
Retro Target	C305-RR146801	03-11-13	Installed	86548.139	36127.363	115.478	12-12-13	86548.139	36127.363	115.478
								86548.138	36127.362	115.478
								86548.139	36127.363	115.478
								86548.139	36127.363	115.478
Retro Target	C305-RR146802	04-11-13	Installed	86548.785	36135.009	115.465	12-12-13	86548.785	36135.009	115.465
								86548.785	36135.009	115.464
								86548.785	36135.010	115.465
								86548.785	36135.009	115.465
Retro Target	C305-RR146803	05-11-13	Installed	86549.883	36148.574	115.470	12-12-13	86549.883	36148.574	115.470
								86549.884	36148.574	115.470
								86549.883	36148.574	115.469
								86549.883	36148.574	115.470
Retro Target	C305-RR146804	06-11-13	Installed	86553.956	36179.843	115.335	12-12-13	86553.956	36179.843	115.335
								86553.956	36179.843	115.335
								86553.955	36179.843	115.335
								86553.956	36179.843	115.336

**IRS Installation Record Sheets – Retro Targets**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commissioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
Retro Target	C305-RR146805	07-11-13	Installed	86557.235	36198.004	115.342	12-12-13	86557.235	36198.004	115.342
								86557.236	36198.004	115.342
								86557.235	36198.004	115.343
								86557.235	36198.005	115.342
Retro Target	C305-RR146807	21-11-13	Installed	86558.118	36225.198	115.339	12-12-13	86558.118	36225.198	115.339
								86558.118	36225.198	115.340
								86558.119	36225.198	115.339
								86558.118	36225.197	115.339
Retro Target	C305-RR146808	21-11-13	Installed	86558.893	36235.333	115.339	12-12-13	86558.893	36235.333	115.339
								86558.892	36235.334	115.340
								86558.893	36235.333	115.338
								86558.893	36235.333	115.339
Retro Target	C305-RR151101	12-02-13	Installed	87996.252	37857.316	104.339	12-02-13	87996.252	37857.316	104.339
								87996.252	37857.316	104.339
								87996.253	37857.317	104.338
								87996.252	37857.316	104.339
Retro Target	C305-RR151102	12-02-13	Installed	87998.377	37851.754	104.181	12-02-13	87998.377	37851.754	104.181
								87998.377	37851.754	104.181
								87998.376	37851.753	104.182
								87998.376	37851.754	104.181
Retro Target	C305-RR151103	12-02-13	Installed	88000.264	37847.328	104.355	12-02-13	88000.264	37847.328	104.355
								88000.264	37847.328	104.355
								88000.265	37847.329	104.354
								88000.265	37847.329	104.355
Retro Target	C305-RR151104	12-02-13	Installed	88001.817	37844.040	104.270	12-02-13	88001.817	37844.040	104.270
								88001.817	37844.040	104.270
								88001.818	37844.040	104.270
								88001.817	37844.039	104.270

**IRS Installation Record Sheets – Retro Targets**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
Retro Target	C305-RR151106	12-02-13	Installed	88006.282	37834.130	104.252	12-02-13	88006.282	37834.130	104.252
								88006.282	37834.131	104.252
								88006.282	37834.130	104.253
								88006.282	37834.130	104.252
Retro Target	C305-RR151107	12-02-13	Installed	87988.807	37857.443	104.435	12-02-13	87988.807	37857.443	104.435
								87988.807	37857.443	104.435
								87988.806	37857.443	104.436
								87988.807	37857.443	104.435
Retro Target	C305-RR151108	12-02-13	Installed	87990.282	37854.147	104.462	12-02-13	87990.282	37854.147	104.462
								87990.281	37854.147	104.461
								87990.282	37854.147	104.462
								87990.282	37854.147	104.462
Retro Target	C305-RR151109	12-02-13	Installed	87991.675	37850.830	104.442	12-02-13	87991.675	37850.830	104.442
								87991.676	37850.831	104.442
								87991.675	37850.830	104.443
								87991.675	37850.830	104.442
Retro Target	C305-RR151110	12-02-13	Installed	87993.265	37847.581	104.448	12-02-13	87993.265	37847.581	104.448
								87993.265	37847.582	104.447
								87993.266	37847.581	104.448
								87993.265	37847.581	104.447
Retro Target	C305-RR151111	12-02-13	Installed	87994.848	37844.349	104.454	12-02-13	87994.848	37844.349	104.454
								87994.848	37844.348	104.453
								87994.847	37844.349	104.454
								87994.848	37844.348	104.454
Retro Target	C305-RR151112	12-02-13	Installed	87996.446	37841.124	104.470	12-02-13	87996.446	37841.124	104.470
								87996.446	37841.124	104.470
								87996.445	37841.123	104.470
								87996.446	37841.124	104.470

**IRS Installation Record Sheets – Retro Targets**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
Retro Target	C305-RR151113	12-02-13	Installed	87998.041	37837.884	104.465	12-02-13	87998.041	37837.884	104.465
								87998.042	37837.884	104.464
								87998.041	37837.883	104.465
								87998.041	37837.884	104.465
Retro Target	C305-RR151114	12-02-13	Installed	87999.684	37834.726	104.422	12-02-13	87999.684	37834.726	104.422
								87999.684	37834.726	104.423
								87999.685	37834.726	104.422
								87999.684	37834.726	104.422
Retro Target	C305-RR151115	12-02-13	Installed	88001.176	37831.461	104.437	12-02-13	88001.176	37831.461	104.437
								88001.176	37831.462	104.437
								88001.177	37831.461	104.437
								88001.176	37831.461	104.437
Retro Target	C305-RR151201	06-08-12	Installed	87978.373	37853.040	104.667	06-08-12	87978.373	37853.040	104.667
								87978.373	37853.040	104.667
								87978.373	37853.040	104.666
								87978.373	37853.040	104.667
Retro Target	C305-RR151202	06-08-12	Installed	87978.400	37853.042	103.865	06-08-12	87978.400	37853.042	103.865
								87978.401	37853.042	103.865
								87978.400	37853.043	103.865
								87978.400	37853.042	103.865
Retro Target	C305-RR151203	06-08-12	Installed	87980.492	37848.475	104.720	06-08-12	87980.492	37848.475	104.720
								87980.492	37848.475	104.720
								87980.491	37848.475	104.719
								87980.492	37848.475	104.720
Retro Target	C305-RR151204	06-08-12	Installed	87980.521	37848.474	103.804	06-08-12	87980.521	37848.474	103.804
								87980.521	37848.475	103.804
								87980.520	37848.474	103.804
								87980.521	37848.474	103.803

**IRS Installation Record Sheets – Retro Targets**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
Retro Target	C305-RR151205	06-08-12	Installed	87982.613	37843.937	104.788	06-08-12	87982.613	37843.937	104.788
								87982.614	37843.936	104.788
								87982.613	37843.937	104.788
								87982.613	37843.937	104.788
Retro Target	C305-RR151206	06-08-12	Installed	87982.663	37843.960	103.787	06-08-12	87982.663	37843.960	103.787
								87982.663	37843.960	103.786
								87982.662	37843.960	103.787
								87982.662	37843.960	103.787
Retro Target	C305-RR151207	06-08-12	Installed	87983.680	37841.679	104.796	06-08-12	87983.680	37841.679	104.796
								87983.680	37841.678	104.796
								87983.681	37841.679	104.797
								87983.680	37841.679	104.796
Retro Target	C305-RR151208	06-08-12	Installed	87983.805	37841.568	103.774	06-08-12	87983.805	37841.568	103.774
								87983.805	37841.568	103.775
								87983.806	37841.569	103.774
								87983.806	37841.569	103.774
Retro Target	C305-RR151209	06-08-12	Installed	87984.712	37839.447	104.834	06-08-12	87984.712	37839.447	104.834
								87984.712	37839.448	104.835
								87984.712	37839.447	104.834
								87984.712	37839.448	104.835
Retro Target	C305-RR151210	06-08-12	Installed	87984.779	37839.547	103.832	06-08-12	87984.779	37839.547	103.832
								87984.778	37839.547	103.833
								87984.779	37839.548	103.832
								87984.779	37839.547	103.832
Retro Target	C305-RR151211	06-08-12	Installed	87985.768	37837.277	104.820	06-08-12	87985.768	37837.277	104.820
								87985.768	37837.277	104.820
								87985.769	37837.277	104.820
								87985.768	37837.278	104.821



**IRS Installation Record Sheets – Retro Targets**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
Retro Target	C305-RR151212	06-08-12	Installed	87985.846	37837.345	103.720	06-08-12	87985.846	37837.345	103.720
								87985.846	37837.344	103.720
								87985.847	37837.345	103.720
								87985.846	37837.345	103.721
Retro Target	C305-RR151213	06-08-12	Installed	87986.885	37835.034	104.664	06-08-12	87986.885	37835.034	104.664
								87986.884	37835.033	104.663
								87986.885	37835.034	104.664
								87986.885	37835.034	104.664
Retro Target	C305-RR151214	06-08-12	Installed	87986.972	37835.046	103.790	06-08-12	87986.972	37835.046	103.790
								87986.972	37835.046	103.790
								87986.971	37835.047	103.789
								87986.972	37835.046	103.789
Retro Target	C305-RR151215	06-08-12	Installed	87988.217	37832.759	104.707	06-08-12	87988.217	37832.759	104.707
								87988.217	37832.760	104.707
								87988.217	37832.759	104.707
								87988.217	37832.759	104.707
Retro Target	C305-RR151216	06-08-12	Installed	87988.268	37832.776	103.738	06-08-12	87988.268	37832.776	103.738
								87988.267	37832.775	103.738
								87988.268	37832.776	103.738
								87988.267	37832.776	103.737
Retro Target	C305-RR151217	06-08-12	Installed	87989.527	37830.665	104.772	06-08-12	87989.527	37830.665	104.772
								87989.527	37830.665	104.772
								87989.528	37830.664	104.773
								87989.526	37830.665	104.772
Retro Target	C305-RR151218	06-08-12	Installed	87989.540	37830.690	103.803	06-08-12	87989.540	37830.690	103.803
								87989.540	37830.690	103.802
								87989.540	37830.691	103.803
								87989.540	37830.690	103.803

**IRS Installation Record Sheets – Retro Targets**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
Retro Target	C305-RR151219	06-08-12	Installed	87990.956	37828.698	104.674	06-08-12	87990.956	37828.698	104.674
								87990.957	37828.698	104.674
								87990.956	37828.699	104.674
								87990.956	37828.698	104.673
Retro Target	C305-RR151220	06-08-12	Installed	87991.000	37828.707	103.814	06-08-12	87991.000	37828.707	103.814
								87991.000	37828.706	103.814
								87991.000	37828.707	103.814
								87991.000	37828.706	103.814
Retro Target	C305-RR151221	06-08-12	Installed	87992.566	37826.808	104.708	06-08-12	87992.566	37826.808	104.708
								87992.566	37826.808	104.708
								87992.567	37826.808	104.708
								87992.567	37826.808	104.708
Retro Target	C305-RR151222	06-08-12	Installed	87992.540	37826.851	103.837	06-08-12	87992.540	37826.851	103.837
								87992.540	37826.851	103.838
								87992.539	37826.852	103.837
								87992.540	37826.852	103.837
Retro Target	C305-RR151223	06-08-12	Installed	87994.269	37824.771	104.754	06-08-12	87994.269	37824.771	104.754
								87994.269	37824.770	104.754
								87994.268	37824.771	104.754
								87994.269	37824.771	104.754
Retro Target	C305-RR151224	06-08-12	Installed	87994.332	37824.793	103.824	06-08-12	87994.332	37824.793	103.824
								87994.332	37824.794	103.824
								87994.332	37824.793	103.825
								87994.331	37824.794	103.825
Retro Target	C305-RR151225	06-08-12	Installed	87995.589	37823.296	104.777	06-08-12	87995.589	37823.296	104.777
								87995.589	37823.296	104.777
								87995.589	37823.297	104.777
								87995.589	37823.296	104.777

**IRS Installation Record Sheets – Retro Targets**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
Retro Target	C305-RR151226	06-08-12	Installed	87995.666	37823.265	103.802	06-08-12	87995.666	37823.265	103.802
								87995.665	37823.266	103.802
								87995.666	37823.265	103.803
								87995.665	37823.265	103.802
Retro Target	C305-RR151227	06-08-12	Installed	87997.094	37821.617	104.818	06-08-12	87997.094	37821.617	104.818
								87997.094	37821.618	104.818
								87997.094	37821.617	104.819
								87997.095	37821.617	104.819
Retro Target	C305-RR151228	06-08-12	Installed	87997.018	37821.717	103.763	06-08-12	87997.018	37821.717	103.763
								87997.018	37821.717	103.763
								87997.018	37821.716	103.763
								87997.018	37821.718	103.763
Retro Target	C305-RR151229	06-08-12	Installed	87998.593	37819.937	104.661	06-08-12	87998.593	37819.937	104.661
								87998.593	37819.938	104.662
								87998.593	37819.937	104.661
								87998.594	37819.937	104.661
Retro Target	C305-RR151230	06-08-12	Installed	87998.537	37819.992	103.814	06-08-12	87998.537	37819.992	103.814
								87998.536	37819.992	103.813
								87998.537	37819.993	103.814
								87998.536	37819.992	103.814
Retro Target	C305-RR151231	06-08-12	Installed	88000.092	37818.209	104.821	06-08-12	88000.0922	37818.2093	104.8214
								88000.0923	37818.2094	104.8209
								88000.0918	37818.2087	104.8216
								88000.0925	37818.2098	104.8217
Retro Target	C305-RR151232	06-08-12	Installed	88000.141	37818.171	103.863	06-08-12	88000.1412	37818.1711	103.8634
								88000.1414	37818.1708	103.8632
								88000.1408	37818.1717	103.8635
								88000.1414	37818.1708	103.8635

IRS Installation Record Sheets – Retro Targets										
Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)			
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Date	Eastings X (m)	Northings Y (m)	Elevation Z (mATD)
Retro Target	C305-RR151233	06-08-12	Installed	88002.187	37815.763	104.690	06-08-12	88002.1874	37815.7634	104.6895
								88002.1880	37815.7629	104.6892
								88002.1871	37815.7637	104.6898
								88002.1871	37815.7636	104.6895
Retro Target	C305-RR151234	06-08-12	Installed	88002.137	37815.926	103.799	06-08-12	88002.1372	37815.9256	103.7994
								88002.1376	37815.9259	103.7988
								88002.1371	37815.9254	103.7995
								88002.1369	37815.9255	103.7999

*Note: All elevations or levels presented in this document are metres above tunnel datum (mATD).*

Learning Legacy Document

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)				Observations
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	26-09-13	26-09-13	26-09-13	
Levelling Point	C305-LP148101	27-09-13	Installed	86405.777	36100.167	111.143	111.1426	111.1420	111.1430	111.1428	
Levelling Point	C305-LP148102	27-09-13	Installed	86406.174	36105.146	111.139	111.1387	111.1385	111.1391	111.1385	
Levelling Point	C305-LP148103	27-09-13	Installed	86406.571	36110.138	111.148	111.1477	111.1481	111.1471	111.1479	
Levelling Point	C305-LP148104	27-09-13	Installed	86407.028	36115.090	111.147	111.1469	111.1464	111.1473	111.1470	
Levelling Point	C305-LP148105	27-09-13	Installed	86407.364	36120.055	111.151	111.1509	111.1504	111.1510	111.1513	
Levelling Point	C305-LP148106	27-09-13	Installed	86407.822	36125.226	111.145	111.1451	111.1447	111.1453	111.1453	
Levelling Point	C305-LP148107	27-09-13	Installed	86408.220	36130.010	111.142	111.1415	111.1410	111.1418	111.1417	
Levelling Point	C305-LP148108	27-09-13	Installed	86408.596	36135.142	111.149	111.1489	111.1484	111.1492	111.1491	
Levelling Point	C305-LP148109	27-09-13	Installed	86408.924	36139.976	111.145	111.1447	111.1451	111.1441	111.1449	
Levelling Point	C305-LP148110	27-09-13	Installed	86409.286	36144.835	111.142	111.1419	111.1415	111.1423	111.1419	
Levelling Point	C305-LP148111	27-09-13	Installed	86409.689	36149.942	111.151	111.1506	111.1510	111.1503	111.1505	
Levelling Point	C305-LP148112	27-09-13	Installed	86410.072	36155.042	111.129	111.1285	111.1286	111.1284	111.1285	
Levelling Point	C305-LP148113	27-09-13	Installed	86410.449	36159.815	111.124	111.1242	111.1245	111.1239	111.1242	
Levelling Point	C305-LP148114	27-09-13	Installed	86410.939	36164.890	111.091	111.0910	111.0905	111.0913	111.0912	
Levelling Point	C305-LP148115	27-09-13	Installed	86411.277	36169.686	111.074	111.0737	111.0731	111.0741	111.0739	
Levelling Point	C305-LP148116	27-09-13	Installed	86411.721	36174.847	111.030	111.0295	111.0301	111.0293	111.0291	
Levelling Point	C305-LP148117	27-09-13	Installed	86412.223	36179.817	110.939	110.9391	110.9394	110.9388	110.9391	
Levelling Point	C305-LP148118	27-09-13	Installed	86412.797	36184.793	110.893	110.8930	110.8924	110.8932	110.8934	
Levelling Point	C305-LP148119	27-09-13	Installed	86413.426	36189.753	110.825	110.8253	110.8257	110.8248	110.8254	
Levelling Point	C305-LP148120	27-09-13	Installed	86414.083	36194.769	110.754	110.7540	110.7537	110.7543	110.7540	
Levelling Point	C305-LP148121	27-09-13	Installed	86414.549	36199.696	110.685	110.6850	110.6848	110.6853	110.6849	
Levelling Point	C305-LP148122	27-09-13	Installed	86415.090	36204.658	110.623	110.6228	110.6231	110.6225	110.6228	
Levelling Point	C305-LP148123	27-09-13	Installed	86415.691	36209.642	110.539	110.5394	110.5397	110.5393	110.5392	
Levelling Point	C305-LP148124	27-09-13	Installed	86416.253	36214.542	110.484	110.4844	110.4843	110.4846	110.4843	
Levelling Point	C305-LP148125	27-09-13	Installed	86416.622	36219.812	110.367	110.3668	110.3669	110.3668	110.3667	
Levelling Point	C305-LP148126	27-09-13	Installed	86417.380	36224.648	110.281	110.2808	110.2807	110.2814	110.2803	
Levelling Point	C305-LP148127	27-09-13	Installed	86417.987	36229.620	110.219	110.2194	110.2189	110.2199	110.2194	



**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)				Observations
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	26-09-13	26-09-13	26-09-13	
Levelling Point	C305-LP148128	27-09-13	Installed	86418.633	36234.594	110.136	110.1361	110.1357	110.1362	110.1364	
Levelling Point	C305-LP148129	27-09-13	Installed	86419.234	36239.575	110.062	110.0619	110.0625	110.0618	110.0614	
Levelling Point	C305-LP148130	27-09-13	Installed	86419.945	36244.535	109.983	109.9828	109.9829	109.9822	109.9833	
Levelling Point	C305-LP148131	27-09-13	Installed	86420.571	36249.494	109.888	109.8876	109.8877	109.8874	109.8877	
Levelling Point	C305-LP148132	27-09-13	Installed	86421.284	36254.570	109.779	109.7791	109.7797	109.7786	109.7790	
							<b>Average</b>	<b>26-09-13</b>	<b>26-09-13</b>	<b>26-09-13</b>	
Levelling Point	C305-LP148201	24-09-13	Installed	86392.692	36101.538	111.261	111.2610	111.2607	111.2613	111.2610	
Levelling Point	C305-LP148202	24-09-13	Installed	86394.382	36106.244	111.254	111.2543	111.2544	111.2540	111.2545	
Levelling Point	C305-LP148203	24-09-13	Installed	86395.850	36111.035	111.250	111.2501	111.2495	111.2505	111.2503	
Levelling Point	C305-LP148204	24-09-13	Installed	86396.908	36115.923	111.285	111.2848	111.2851	111.2842	111.2851	
Levelling Point	C305-LP148205	24-09-13	Installed	86397.530	36120.897	111.266	111.2658	111.2662	111.2652	111.2660	
Levelling Point	C305-LP148206	24-09-13	Installed	86397.864	36125.903	111.288	111.2877	111.2874	111.2882	111.2875	
Levelling Point	C305-LP148207	24-09-13	Installed	86398.013	36130.875	111.303	111.3030	111.3025	111.3035	111.3030	
Levelling Point	C305-LP148208	24-09-13	Installed	86398.112	36135.900	111.257	111.2574	111.2576	111.2568	111.2578	
Levelling Point	C305-LP148209	24-09-13	Installed	86398.230	36138.386	111.280	111.2798	111.2794	111.2799	111.2801	
Levelling Point	C305-LP148210	24-09-13	Installed	86398.408	36140.907	111.318	111.3182	111.3179	111.3185	111.3182	
Levelling Point	C305-LP148211	24-09-13	Installed	86398.332	36143.393	111.303	111.3028	111.3023	111.3034	111.3027	
Levelling Point	C305-LP148212	24-09-13	Installed	86398.420	36145.893	111.306	111.3058	111.3058	111.3056	111.3060	
Levelling Point	C305-LP148213	24-09-13	Installed	86398.412	36148.405	111.298	111.2981	111.2978	111.2987	111.2978	
Levelling Point	C305-LP148214	24-09-13	Installed	86398.485	36150.913	111.293	111.2929	111.2924	111.2930	111.2933	
Levelling Point	C305-LP148215	24-09-13	Installed	86398.553	36153.396	111.244	111.2444	111.2449	111.2440	111.2443	
Levelling Point	C305-LP148216	24-09-13	Installed	86398.648	36155.871	111.303	111.3032	111.3036	111.3028	111.3032	
Levelling Point	C305-LP148217	24-09-13	Installed	86398.705	36158.378	111.311	111.3112	111.3106	111.3115	111.3115	
Levelling Point	C305-LP148218	24-09-13	Installed	86398.858	36163.405	111.276	111.2764	111.2762	111.2769	111.2761	
Levelling Point	C305-LP148219	24-09-13	Installed	86398.940	36168.381	111.349	111.3492	111.3486	111.3495	111.3495	
							<b>Average</b>	<b>26-09-13</b>	<b>26-09-13</b>	<b>26-09-13</b>	
Levelling Point	C305-LP148301	24-09-13	Installed	86423.437	36172.382	111.062	111.0620	111.0621	111.0614	111.0625	

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)				Observations
				Easting X (m)	Northings Y (m)	Elevation Z (mATD)	Average	26-09-13	26-09-13	26-09-13	
Levelling Point	C305-LP148302	24-09-13	Installed	86417.256	36172.718	111.137	111.1366	111.1370	111.1360	111.1368	
Levelling Point	C305-LP148303	24-09-13	Installed	86406.165	36173.580	111.198	111.1975	111.1970	111.1981	111.1974	
Levelling Point	C305-LP148304	24-09-13	Installed	86396.811	36170.949	111.333	111.3333	111.3337	111.3327	111.3335	
Levelling Point	C305-LP148305	24-09-13	Installed	86391.760	36170.927	111.325	111.3250	111.3248	111.3254	111.3248	
Levelling Point	C305-LP148306	24-09-13	Installed	86381.716	36170.942	111.309	111.3087	111.3085	111.3093	111.3083	
Levelling Point	C305-LP148307	24-09-13	Installed	86376.649	36170.951	111.287	111.2873	111.2868	111.2879	111.2872	
Levelling Point	C305-LP148308	24-09-13	Installed	86386.872	36170.914	111.263	111.2630	111.2635	111.2624	111.2631	
							<b>Average</b>	<b>26-09-13</b>	<b>26-09-13</b>	<b>26-09-13</b>	
Levelling Point	C305-LP148401	24-09-13	Installed	86399.457	36185.434	111.196	111.1960	111.1964	111.1958	111.1958	
Levelling Point	C305-LP148402	24-09-13	Installed	86397.696	36190.090	111.173	111.1725	111.1729	111.1722	111.1724	
Levelling Point	C305-LP148403	24-09-13	Installed	86395.588	36194.710	111.111	111.1113	111.1107	111.1118	111.1114	
Levelling Point	C305-LP148404	24-09-13	Installed	86389.843	36202.871	111.083	111.0830	111.0829	111.0835	111.0826	
Levelling Point	C305-LP148405	24-09-13	Installed	86385.918	36206.022	111.059	111.0592	111.0591	111.0595	111.0590	
Levelling Point	C305-LP148406	24-09-13	Installed	86381.602	36208.541	110.946	110.9459	110.9461	110.9457	110.9459	
Levelling Point	C305-LP148407	24-09-13	Installed	86377.071	36210.848	110.910	110.9095	110.9089	110.9099	110.9097	
Levelling Point	C305-LP148408	24-09-13	Installed	86372.606	36213.014	110.854	110.8544	110.8548	110.8542	110.8542	
Levelling Point	C305-LP148409	24-09-13	Installed	86392.812	36198.925	110.768	110.7681	110.7679	110.7685	110.7679	
							<b>Average</b>	<b>26-09-13</b>	<b>26-09-13</b>	<b>26-09-13</b>	
Levelling Point	C305-LP148501	24-09-13	Installed	86366.017	36173.787	111.281	111.2814	111.2819	111.2813	111.2810	
Levelling Point	C305-LP148502	24-09-13	Installed	86366.101	36178.767	111.179	111.1790	111.1786	111.1793	111.1791	
Levelling Point	C305-LP148503	24-09-13	Installed	86366.304	36183.727	111.110	111.1098	111.1100	111.1093	111.1101	
Levelling Point	C305-LP148504	24-09-13	Installed	86366.367	36188.752	111.054	111.0543	111.0541	111.0546	111.0542	
Levelling Point	C305-LP148505	24-09-13	Installed	86366.391	36193.738	110.968	110.9681	110.9686	110.9676	110.9681	
Levelling Point	C305-LP148506	24-09-13	Installed	86366.450	36198.732	110.908	110.9076	110.9072	110.9078	110.9078	
Levelling Point	C305-LP148507	24-09-13	Installed	86366.484	36203.713	110.818	110.8184	110.8190	110.8183	110.8179	
Levelling Point	C305-LP148508	24-09-13	Installed	86366.557	36206.215	110.788	110.7878	110.7875	110.7880	110.7879	
Levelling Point	C305-LP148509	24-09-13	Installed	86366.590	36208.711	110.759	110.7591	110.7595	110.7586	110.7592	

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)				Observations
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	26-09-13	26-09-13	26-09-13	
Levelling Point	C305-LP148510	24-09-13	Installed	86366.768	36211.264	110.741	110.7408	110.7402	110.7414	110.7408	
Levelling Point	C305-LP148511	24-09-13	Installed	86364.736	36212.666	110.755	110.7547	110.7545	110.7552	110.7544	
Levelling Point	C305-LP148512	24-09-13	Installed	86362.687	36214.082	110.681	110.6811	110.6812	110.6810	110.6811	
Levelling Point	C305-LP148513	24-09-13	Installed	86360.491	36215.286	110.646	110.6464	110.6463	110.6468	110.6461	
Levelling Point	C305-LP148514	24-09-13	Installed	86358.355	36216.595	110.585	110.5851	110.5855	110.5847	110.5851	
Levelling Point	C305-LP148515	24-09-13	Installed	86356.328	36218.049	110.500	110.4996	110.4990	110.5001	110.4997	
Levelling Point	C305-LP148516	24-09-13	Installed	86354.434	36219.693	110.431	110.4307	110.4305	110.4311	110.4305	
Levelling Point	C305-LP148517	24-09-13	Installed	86352.638	36221.451	110.378	110.3782	110.3785	110.3776	110.3785	
Levelling Point	C305-LP148518	24-09-13	Installed	86351.031	36223.339	110.331	110.3309	110.3303	110.3315	110.3309	
Levelling Point	C305-LP148519	24-09-13	Installed	86349.462	36225.277	110.293	110.2932	110.2929	110.2938	110.2929	
Levelling Point	C305-LP148520	24-09-13	Installed	86346.662	36229.403	110.201	110.2009	110.2003	110.2012	110.2012	
Levelling Point	C305-LP148521	24-09-13	Installed	86343.910	36233.538	110.105	110.1050	110.1045	110.1052	110.1053	
Levelling Point	C305-LP148522	24-09-13	Installed	86340.758	36237.461	110.061	110.0611	110.0613	110.0609	110.0611	
Levelling Point	C305-LP148523	24-09-13	Installed	86340.653	36242.676	110.092	110.0920	110.0919	110.0921	110.0920	
Levelling Point	C305-LP148524	24-09-13	Installed	86335.818	36243.927	110.087	110.0874	110.0872	110.0879	110.0871	
							<b>Average</b>	<b>26-09-13</b>	<b>26-09-13</b>	<b>26-09-13</b>	
Levelling Point	C305-LP148601	24-09-13	Installed	86390.691	36078.536	111.344	111.3435	111.3438	111.3431	111.3436	Same as C305-LP068601
Levelling Point	C305-LP148602	24-09-13	Installed	86387.520	36082.403	111.275	111.2749	111.2751	111.2747	111.2749	Same as C305-LP068602
Levelling Point	C305-LP148603	24-09-13	Installed	86384.361	36086.290	111.221	111.2209	111.2207	111.2215	111.2205	Same as C305-LP068603
Levelling Point	C305-LP148604	24-09-13	Installed	86381.180	36090.166	111.160	111.1600	111.1596	111.1602	111.1602	Same as C305-LP068604
Levelling Point	C305-LP148605	24-09-13	Installed	86378.068	36094.051	111.048	111.0481	111.0483	111.0475	111.0485	Same as C305-LP068605
Levelling Point	C305-LP148606	24-09-13	Installed	86374.906	36097.917	111.085	111.0847	111.0841	111.0853	111.0847	Same as C305-LP068606
Levelling Point	C305-LP148607	24-09-13	Installed	86371.808	36101.711	111.130	111.1297	111.1300	111.1291	111.1300	Same as C305-LP068607
Levelling Point	C305-LP148608	24-09-13	Installed	86368.545	36105.794	111.091	111.0913	111.0907	111.0918	111.0914	Same as C305-LP068608
Levelling Point	C305-LP148609	24-09-13	Installed	86365.544	36109.504	111.079	111.0792	111.0791	111.0792	111.0793	Same as C305-LP068609
Levelling Point	C305-LP148610	24-09-13	Installed	86362.325	36113.450	111.060	111.0600	111.0597	111.0606	111.0597	Same as C305-LP068610
Levelling Point	C305-LP148611	24-09-13	Installed	86359.283	36117.235	111.043	111.0430	111.0435	111.0428	111.0427	Same as C305-LP068611

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)				Observations
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	26-09-13	26-09-13	26-09-13	
Levelling Point	C305-LP148612	24-09-13	Installed	86356.083	36121.202	111.012	111.0119	111.0120	111.0114	111.0123	Same as C305-LP068612
Levelling Point	C305-LP148613	24-09-13	Installed	86352.855	36125.150	110.986	110.9857	110.9853	110.9858	110.9860	Same as C305-LP068613
Levelling Point	C305-LP148614	24-09-13	Installed	86349.694	36128.991	110.937	110.9366	110.9360	110.9371	110.9367	Same as C305-LP068614
Levelling Point	C305-LP148615	24-09-13	Installed	86346.526	36132.880	110.918	110.9175	110.9169	110.9178	110.9178	Same as C305-LP068615
Levelling Point	C305-LP148616	24-09-13	Installed	86343.367	36136.732	110.895	110.8952	110.8958	110.8947	110.8951	Same as C305-LP068616
Levelling Point	C305-LP148617	24-09-13	Installed	86340.027	36140.814	110.840	110.8397	110.8401	110.8392	110.8398	Same as C305-LP068617
Levelling Point	C305-LP148618	24-09-13	Installed	86337.092	36144.466	110.819	110.8190	110.8184	110.8191	110.8195	Same as C305-LP068618
Levelling Point	C305-LP148619	24-09-13	Installed	86333.900	36148.407	110.774	110.7741	110.7744	110.7739	110.7740	Same as C305-LP068619
Levelling Point	C305-LP148620	24-09-13	Installed	86330.735	36152.299	110.736	110.7364	110.7358	110.7368	110.7366	Same as C305-LP068620
Levelling Point	C305-LP148621	24-09-13	Installed	86327.519	36156.252	110.618	110.6176	110.6182	110.6172	110.6174	Same as C305-LP068621
Levelling Point	C305-LP148622	24-09-13	Installed	86324.413	36160.047	110.480	110.4800	110.4795	110.4801	110.4804	Same as C305-LP068622
Levelling Point	C305-LP148623	24-09-13	Installed	86321.232	36163.931	110.281	110.2808	110.2803	110.2811	110.2810	Same as C305-LP068623
Levelling Point	C305-LP148624	24-09-13	Installed	86318.038	36167.936	110.099	110.0991	110.0987	110.0994	110.0992	Same as C305-LP068624
Levelling Point	C305-LP148625	24-09-13	Installed	86313.645	36173.385	109.844	109.8440	109.8439	109.8444	109.8437	Same as C305-LP068625
							<b>Average</b>	<b>26-09-13</b>	<b>26-09-13</b>	<b>26-09-13</b>	
Levelling Point	C305-LP148701	24-09-13	Installed	86334.798	36107.472	111.090	111.0897	111.0895	111.0899	111.0897	Same as C305-LP068701
Levelling Point	C305-LP148702	24-09-13	Installed	86333.430	36112.016	111.094	111.0942	111.0943	111.0939	111.0944	Same as C305-LP068702
Levelling Point	C305-LP148703	24-09-13	Installed	86332.830	36114.654	111.079	111.0794	111.0790	111.0800	111.0792	Same as C305-LP068703
Levelling Point	C305-LP148704	24-09-13	Installed	86332.658	36117.152	111.067	111.0668	111.0672	111.0667	111.0665	Same as C305-LP068704
Levelling Point	C305-LP148705	24-09-13	Installed	86332.669	36119.639	111.072	111.0719	111.0720	111.0713	111.0724	Same as C305-LP068705
Levelling Point	C305-LP148706	24-09-13	Installed	86332.827	36122.144	111.064	111.0637	111.0638	111.0636	111.0637	Same as C305-LP068706
Levelling Point	C305-LP148707	24-09-13	Installed	86333.113	36124.658	111.045	111.0450	111.0454	111.0445	111.0451	Same as C305-LP068707
Levelling Point	C305-LP148708	24-09-13	Installed	86333.413	36127.115	111.035	111.0348	111.0353	111.0342	111.0349	Same as C305-LP068708
Levelling Point	C305-LP148709	24-09-13	Installed	86334.016	36129.588	111.068	111.0676	111.0672	111.0680	111.0676	Same as C305-LP068709
Levelling Point	C305-LP148710	24-09-13	Installed	86334.747	36131.991	111.106	111.1064	111.1066	111.1061	111.1065	Same as C305-LP068710
Levelling Point	C305-LP148711	24-09-13	Installed	86335.709	36134.294	111.140	111.1403	111.1401	111.1406	111.1402	Same as C305-LP068711
Levelling Point	C305-LP148712	24-09-13	Installed	86337.792	36138.870	111.082	111.0816	111.0821	111.0812	111.0815	Same as C305-LP068712

## IRS Installation Record Sheets – Levelling Points

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)				Observations
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	26-09-13	26-09-13	26-09-13	
							Average	26-09-13	26-09-13	26-09-13	
Levelling Point	<b>C305-LP148801</b>	24-09-13	Installed	86287.419	36201.217	109.822	109.8221	109.8225	109.8215	109.8223	Same as C305-LP068801
Levelling Point	<b>C305-LP148802</b>	24-09-13	Installed	86284.870	36205.538	109.968	109.9679	109.9677	109.9683	109.9677	Same as C305-LP068802
Levelling Point	<b>C305-LP148803</b>	24-09-13	Installed	86282.035	36209.757	110.001	110.0009	110.0007	110.0014	110.0006	Same as C305-LP068803
Levelling Point	<b>C305-LP148804</b>	24-09-13	Installed	86279.620	36214.112	109.916	109.9157	109.9159	109.9154	109.9158	Same as C305-LP068804
Levelling Point	<b>C305-LP148805</b>	24-09-13	Installed	86277.213	36218.481	109.844	109.8441	109.8440	109.8443	109.8440	Same as C305-LP068805
Levelling Point	<b>C305-LP148806</b>	24-09-13	Installed	86274.670	36222.773	109.760	109.7599	109.7596	109.7602	109.7599	Same as C305-LP068806
Levelling Point	<b>C305-LP148807</b>	24-09-13	Installed	86273.334	36224.872	109.739	109.7392	109.7397	109.7386	109.7393	Same as C305-LP068807
Levelling Point	<b>C305-LP148808</b>	24-09-13	Installed	86272.054	36227.023	109.724	109.7240	109.7242	109.7237	109.7241	Same as C305-LP068808
Levelling Point	<b>C305-LP148809</b>	24-09-13	Installed	86270.840	36229.041	109.690	109.6896	109.6894	109.6900	109.6894	Same as C305-LP068809
Levelling Point	<b>C305-LP148810</b>	24-09-13	Installed	86269.532	36231.360	109.672	109.6718	109.6721	109.6716	109.6717	Same as C305-LP068810
Levelling Point	<b>C305-LP148811</b>	24-09-13	Installed	86268.304	36233.502	109.637	109.6368	109.6371	109.6364	109.6369	Same as C305-LP068811
Levelling Point	<b>C305-LP148812</b>	24-09-13	Installed	86267.055	36235.691	109.576	109.5761	109.5765	109.5756	109.5762	Same as C305-LP068812
Levelling Point	<b>C305-LP148813</b>	24-09-13	Installed	86265.764	36237.813	109.528	109.5282	109.5288	109.5278	109.5280	Same as C305-LP068813
Levelling Point	<b>C305-LP148814</b>	24-09-13	Installed	86264.509	36239.974	109.503	109.5034	109.5037	109.5033	109.5032	Same as C305-LP068814
Levelling Point	<b>C305-LP148815</b>	24-09-13	Installed	86263.322	36242.138	109.493	109.4930	109.4926	109.4932	109.4932	Same as C305-LP068815
Levelling Point	<b>C305-LP148816</b>	24-09-13	Installed	86261.980	36244.226	109.430	109.4296	109.4297	109.4292	109.4299	Same as C305-LP068816
Levelling Point	<b>C305-LP148817</b>	24-09-13	Installed	86260.300	36246.513	109.407	109.4074	109.4069	109.4075	109.4078	Same as C305-LP068817
Levelling Point	<b>C305-LP148818</b>	24-09-13	Installed	86260.226	36249.176	109.351	109.3510	109.3516	109.3507	109.3507	Same as C305-LP068818
Levelling Point	<b>C305-LP148819</b>	24-09-13	Installed	86259.917	36256.054	109.219	109.2190	109.2185	109.2192	109.2193	Same as C305-LP068819
Levelling Point	<b>C305-LP148820</b>	24-09-13	Installed	86259.979	36261.043	109.217	109.2174	109.2173	109.2176	109.2173	Same as C305-LP068820
Levelling Point	<b>C305-LP148821</b>	24-09-13	Installed	86259.811	36266.040	109.128	109.1279	109.1284	109.1278	109.1275	Same as C305-LP068821
Levelling Point	<b>C305-LP148822</b>	24-09-13	Installed	86259.683	36271.030	109.049	109.0493	109.0489	109.0496	109.0494	Same as C305-LP068822
Levelling Point	<b>C305-LP148823</b>	24-09-13	Installed	86259.591	36276.030	108.974	108.9738	108.9732	108.9741	108.9741	Same as C305-LP068823
Levelling Point	<b>C305-LP148824</b>	24-09-13	Installed	86259.282	36281.020	108.950	108.9497	108.9494	108.9499	108.9498	Same as C305-LP068824
							<b>Average</b>	<b>26-09-13</b>	<b>26-09-13</b>	<b>26-09-13</b>	
Socket	<b>C305-LB068001</b>	24-09-13	Installed	86300.509	36198.805	110.822	110.8222	110.8219	110.8227	110.8220	



**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commisioning Readings (m)				Observations
				Eastings X (m)	Northings Y (m)	Elevation Z (mATD)	Average	26-09-13	26-09-13	26-09-13	
Socket	C305-LB068002	24-09-13	Installed	86307.256	36199.677	110.913	110.9126	110.9120	110.9131	110.9127	
Socket	C305-LB068003	24-09-13	Installed	86308.129	36201.094	110.960	110.9600	110.9604	110.9596	110.9600	
Socket	C305-LB068004	24-09-13	Installed	86308.145	36206.042	110.832	110.8319	110.8323	110.8316	110.8318	
Socket	C305-LB068005	24-09-13	Installed	86311.998	36206.095	110.800	110.8004	110.8006	110.8003	110.8003	
Socket	C305-LB068006	24-09-13	Installed	86311.920	36208.656	110.723	110.7226	110.7221	110.7230	110.7227	
Socket	C305-LB068007	24-09-13	Installed	86316.758	36206.375	110.730	110.7297	110.7302	110.7296	110.7293	
Socket	C305-LB068008	24-09-13	Installed	86320.595	36206.779	110.772	110.7723	110.7726	110.7721	110.7722	
Socket	C305-LB068009	24-09-13	Installed	86325.154	36207.064	110.788	110.7875	110.7881	110.7871	110.7873	
Socket	C305-LB068010	24-09-13	Installed	86329.511	36207.255	110.810	110.8101	110.8100	110.8106	110.8097	
Socket	C305-LB068011	24-09-13	Installed	86332.170	36210.585	110.705	110.7047	110.7042	110.7052	110.7047	
Socket	C305-LB068012	24-09-13	Installed	86336.516	36211.145	110.812	110.8121	110.8120	110.8125	110.8118	
Socket	C305-LB068013	24-09-13	Installed	86338.655	36213.932	110.761	110.7610	110.7614	110.7607	110.7609	
Socket	C305-LB068014	24-09-13	Installed	86343.235	36213.898	110.767	110.7666	110.7660	110.7668	110.7670	
Socket	C305-LB068015	24-09-13	Installed	86345.945	36209.979	110.768	110.7682	110.7687	110.7678	110.7681	
Socket	C305-LB068016	24-09-13	Installed	86343.510	36205.474	110.777	110.7770	110.7771	110.7768	110.7771	
Socket	C305-LB068017	24-09-13	Installed	86344.720	36201.344	110.864	110.8642	110.8641	110.8645	110.8640	
Socket	C305-LB068018	24-09-13	Installed	86345.316	36193.200	110.905	110.9048	110.9046	110.9052	110.9046	
Socket	C305-LB068019	24-09-13	Installed	86339.068	36192.482	111.037	111.0368	111.0365	111.0370	111.0369	
Socket	C305-LB068020	24-09-13	Installed	86316.576	36209.106	110.960	110.9598	110.9603	110.9595	110.9596	
Socket	C305-LB068021	24-09-13	Installed	86338.133	36187.474	110.911	110.9105	110.9100	110.9110	110.9105	
Socket	C305-LB068022	24-09-13	Installed	86333.858	36187.284	110.917	110.9170	110.9171	110.9164	110.9175	
Socket	C305-LB068023	24-09-13	Installed	86329.726	36185.697	110.983	110.9831	110.9825	110.9837	110.9831	
Socket	C305-LB068024	24-09-13	Installed	86327.069	36185.566	110.993	110.9930	110.9929	110.9934	110.9927	
Socket	C305-LB068025	24-09-13	Installed	86321.974	36186.319	110.976	110.9756	110.9761	110.9751	110.9756	
Socket	C305-LB068026	24-09-13	Installed	86318.209	36186.173	111.084	111.0837	111.0833	111.0838	111.0840	
Socket	C305-LB068027	24-09-13	Installed	86318.553	36182.318	110.971	110.9713	110.9707	110.9715	110.9717	
Socket	C305-LB068028	24-09-13	Installed	86313.812	36181.762	110.971	110.9706	110.9702	110.9709	110.9707	

**IRS Installation Record Sheets – Levelling Points**

Sensor Type	Sensor ID	Date Installation	Status	Sensor Location - GPS Reading			Commissioning Readings (m)				Observations
				Easting X (m)	Northings Y (m)	Elevation Z (mATD)	Average	26-09-13	26-09-13	26-09-13	
Socket	<b>C305-LB068029</b>	24-09-13	Installed	86313.911	36185.426	111.049	111.0493	111.0489	111.0497	111.0493	
Socket	<b>C305-LB068030</b>	24-09-13	Installed	86308.502	36185.472	110.973	110.9728	110.9725	110.9731	110.9728	
Socket	<b>C305-LB068031</b>	24-09-13	Installed	86308.558	36189.465	110.976	110.9763	110.9760	110.9765	110.9764	
Socket	<b>C305-LB068032</b>	24-09-13	Installed	86307.317	36191.353	111.037	111.0366	111.0367	111.0363	111.0368	
Socket	<b>C305-LB068033</b>	24-09-13	Installed	86302.743	36190.195	110.961	110.9614	110.9619	110.9613	110.9610	

*Note: Some of the levelling points gathered on the table above are included in two different areas (06 and 14). This is the reason they have two different codes, being equivalents.  
All elevations shown are metres above tunnel datum (mATD)*

IRS Installation Record Sheets – Rod Extensometer										
Sensor Type	Date Installation	Sensor ID	SENSOR Location - GPS reading (m)			Commissioning Readings Head level (m)				
			Eastings X	Northings Y	Elevation Z (mAED)	Commissioning Readings Rod Extensometer (mm)				
						23/09/2013	23/09/2013	23/09/2013	AVERAGE	
Rod Extensometer	23/07/2013	HEAD LEVEL	87854.87	37403.216	110.308	110.0216	110.0223	110.0215	110.0218	
		C305-XR142010.27.00				35.9840	36.0040	36.0120	36.0000	
		C305-XR142010.22.50				41.1840	41.2040	41.2120	41.2000	
		C305-XR142010.18.00				53.1700	53.1300	53.1500	53.1500	
		C305-XR142010.13.50				47.1940	47.1700	47.2060	47.1900	
		C305-XR142010.09.00				41.4840	41.4600	41.4960	41.4800	
		C305-XR142010.04.50				38.1120	38.1280	38.1200	38.1200	
						23/09/2013	23/09/2013	23/09/2013	AVERAGE	
Rod Extensometer	05/08/2013	HEAD LEVEL	87911.032	37408.93	109.751	109.4629	109.4633	109.4628	109.4630	
		C305-XR142020.27.00				37.7340	37.7060	37.7500	37.7300	
		C305-XR142020.22.50				40.3840	40.3560	40.4000	40.3800	
		C305-XR142020.18.00				40.8280	40.8520	40.8400	40.8400	
		C305-XR142020.13.50				40.0860	40.1060	40.0780	40.0900	
		C305-XR142020.09.00				40.6340	40.6140	40.6420	40.6300	
		C305-XR142020.04.50				36.2260	36.1940	36.2100	36.2100	
						23/09/2013	23/09/2013	23/09/2013	AVERAGE	
Rod Extensometer	07/08/2013	HEAD LEVEL	87917.301	37410.407	109.653	109.3238	109.3242	109.3243	109.3241	
		C305-XR142030.22.50				43.1060	43.1540	43.1300	43.1300	
		C305-XR142030.18.75				43.5000	43.5360	43.5240	43.5200	
		C305-XR142030.15.00				45.3040	45.2680	45.2680	45.2800	
		C305-XR142030.11.25				43.4880	43.4760	43.4760	43.4800	
		C305-XR142030.07.50				52.2740	52.3140	52.2820	52.2900	
		C305-XR142030.03.75				43.6420	43.6140	43.6340	43.6300	
						09/07/2013	09/07/2013	09/07/2013	AVERAGE	
Rod Extensometer	04/07/2013	HEAD LEVEL	87801.328	37104.343	110.304	110.2346	110.2339	110.2338	110.2341	
		C305-XR143120.22.00				45.6200	45.6640	45.6360	45.6400	
		C305-XR143120.18.50				41.5500	41.5740	41.5860	41.5700	
		C305-XR143120.15.00				38.4440	38.4720	38.4640	38.4600	
		C305-XR143120.11.00				40.3780	40.4140	40.3780	40.3900	
		C305-XR143120.07.00				38.1360	38.1560	38.1280	38.1400	
		C305-XR143120.03.50				38.0920	38.0760	38.0720	38.0800	
						15/10/2013	15/10/2013	15/10/2013	AVERAGE	
Rod Extensometer	19/02/2013	HEAD LEVEL	87719.262	37017.581	110.238	110.2367	110.2355	110.2361	110.236	
		C305-XR143040.28.00				43.1120	43.0800	43.1080	43.100	
		C305-XR143040.23.00				48.2960	48.3160	48.2880	48.300	
		C305-XR143040.18.00				36.9300	36.9580	36.9620	36.950	
		C305-XR143040.13.50				38.0160	37.9880	37.9960	38.000	
		C305-XR143040.09.00				47.2280	47.2000	47.2320	47.220	
		C305-XR143040.04.50				45.5180	45.4940	45.5180	45.510	
						28/10/2013	28/10/2013	28/10/2013	AVERAGE	
Rod Extensometer	14/02/2013	HEAD LEVEL	87719.807	37007.61	109.687	109.5609	109.5599	109.5604	109.5604	
		C305-XR143050.22.00				43.1100	43.0820	43.0780	43.0900	
		C305-XR143050.18.00				51.6200	51.6480	51.6520	51.6400	
		C305-XR143050.14.00				50.7180	50.6940	50.7180	50.7100	
		C305-XR143050.10.50				40.7220	40.7500	40.7180	40.7300	
		C305-XR143050.07.00				48.7940	48.8140	48.8220	48.8100	
		C305-XR143050.03.50				40.6780	40.6580	40.6740	40.6700	
						15/10/2013	15/10/2013	15/10/2013	AVERAGE	
Rod Extensometer	06/03/2013	HEAD LEVEL	87697.4	36957.618	108.642	108.6317	108.6323	108.6323	108.6321	
		C305-XR143060.26.50				65.3280	65.3520	65.3400	65.3400	
		C305-XR143060.22.00				58.6440	58.6200	58.6560	58.6400	
		C305-XR143060.18.00				49.1740	49.1380	49.1380	49.1500	
		C305-XR143060.13.50				36.3600	36.3160	36.3440	36.3400	
		C305-XR143060.09.00				57.3740	57.3980	57.3980	57.3900	
		C305-XR143060.04.50				51.6360	51.6080	51.6160	51.6200	
						24/10/2013	24/10/2013	24/10/2013	AVERAGE	
Rod Extensometer	29/05/2013	HEAD LEVEL	87638.222	36988.106	109.363	108.3559	108.3554	108.3555	108.3556	
		C305-XR143020.21.50				60.4360	60.4120	60.4120	60.4200	
		C305-XR143020.18.00				52.5560	52.5680	52.5560	52.5600	
		C305-XR143020.14.50				54.1280	54.1160	54.1160	54.1200	
		C305-XR143020.11.00				45.6660	45.6340	45.6500	45.6500	
		C305-XR143020.07.00				46.9860	46.9500	46.9740	46.9700	
		C305-XR143020.03.50				47.3240	47.3520	47.3440	47.3400	
						24/10/2013	24/10/2013	24/10/2013	AVERAGE	
Rod Extensometer	12/06/2013	HEAD LEVEL	87648.209	36990.085	109.388	108.3560	108.3550	108.3558	108.3556	
		C305-XR143030.26.00				50.0460	50.0820	50.0820	50.0700	
		C305-XR143030.21.50				44.3800	44.3400	44.3600	44.3600	
		C305-XR143030.17.00				43.3320	43.2960	43.3320	43.3200	
		C305-XR143030.12.50				41.5920	41.5760	41.5720	41.5800	
		C305-XR143030.08.50				45.2100	45.1740	45.1860	45.1900	
		C305-XR143030.04.00				42.3080	42.2920	42.3000	42.3000	
						29/10/2013	29/10/2013	29/10/2013	AVERAGE	
Rod Extensometer	17/06/2013	HEAD LEVEL	87548.597	36912.231	109.321	109.2935	109.2940	109.2933	109.2936	
		C305-XR143010.25.50				47.7380	47.7660	47.7460	47.7500	
		C305-XR143010.21.00				41.5860	41.5660	41.5580	41.5700	
		C305-XR143010.16.50				59.5960	59.6240	59.6400	59.6200	
		C305-XR143010.12.50				53.8640	53.8240	53.8320	53.8400	
		C305-XR143010.08.50				59.3700	59.4020	59.3980	59.3900	
		C305-XR143010.04.00				59.4560	59.5040	59.4800	59.4800	
						23/09/2013	23/09/2013	23/09/2013	AVERAGE	
Rod Extensometer	17/09/2013	HEAD LEVEL	87415.669	36771.958	109.396	108.8754	108.8759	108.8758	108.8757	
		C305-XR144010.25.50				42.4760	42.5000	42.4640	42.4800	
		C305-XR144010.21.25				42.3460	42.3220	42.3220	42.3300	
		C305-XR144010.17.00				37.2780	37.2540	37.2780	37.2700	
		C305-XR144010.12.75				41.9140	41.9060	41.9100	41.9100	
		C305-XR144010.08.50				42.2080	42.2360	42.2160	42.2200	

IRS Installation Record Sheets – Rod Extensometer										
Sensor Type	Date Installation	Sensor ID	SENSOR Location - GPS reading (m)			Commissioning Readings Head level (m)				
			Eastings X	Northings Y	Elevation Z (mA TD)	Commissioning Readings Rod Extensometer (mm)				
						24/09/2013	24/09/2013	24/09/2013	AVERAGE	
Rod Extensometer	19/09/2013	HEAD LEVEL	87297.523	36648.58	109.260	108.8579	108.8572	108.8568	108.8573	
	19/09/2013	C305-XR144020.20.50				50.8040	50.8440	50.8120	50.8200	
	19/09/2013	C305-XR144020.17.25				49.6700	49.6940	49.7060	49.6900	
	19/09/2013	C305-XR144020.14.00				44.2780	44.2660	44.2660	44.2700	
	19/09/2013	C305-XR144020.10.75				49.0700	49.1060	49.0940	49.0900	
	19/09/2013	C305-XR144020.07.50				55.6220	55.6460	55.6220	55.6300	
	19/09/2013	C305-XR144020.03.25				51.6340	51.6060	51.5900	51.6100	
						21/11/2013	21/11/2013	21/11/2013	AVERAGE	
Rod Extensometer	07/11/2013	HEAD LEVEL	87157.676	36518.348	109.758	109.2296	109.2289	109.2285	109.2290	
	07/11/2013	C305-XR145010.22.75				37.7140	37.6980	37.7180	37.7100	
	07/11/2013	C305-XR145010.19.00				38.3340	38.2900	38.3060	38.3100	
	07/11/2013	C305-XR145010.15.20				56.0580	56.0420	56.0500	56.0500	
	07/11/2013	C305-XR145010.11.40				42.6140	42.6060	42.6100	42.6100	
	07/11/2013	C305-XR145010.07.60				40.0980	40.1180	40.1140	40.1100	
	07/11/2013	C305-XR145010.03.80				40.5540	40.5100	40.5260	40.5300	
						21/11/2013	21/11/2013	21/11/2013	AVERAGE	
Rod Extensometer	05/11/2013	HEAD LEVEL	87165.348	36511.028	109.795	109.5384	109.5379	109.5377	109.5380	
	05/11/2013	C305-XR145020.16.75				42.3860	42.4100	42.3740	42.3900	
	05/11/2013	C305-XR145020.14.00				40.6740	40.6340	40.6420	40.6500	
	05/11/2013	C305-XR145020.11.20				37.9440	37.9320	37.9440	37.9400	
	05/11/2013	C305-XR145020.08.40				39.2280	39.2480	39.2440	39.2400	
	05/11/2013	C305-XR145020.05.60				37.7560	37.7760	37.7480	37.7600	
	05/11/2013	C305-XR145020.02.80				34.2440	34.2280	34.2480	34.2400	
						21/11/2013	21/11/2013	21/11/2013	AVERAGE	
Rod Extensometer	04/11/2013	HEAD LEVEL	87171.321	36505.97	109.849	109.3944	109.3938	109.3935	109.3939	
	04/11/2013	C305-XR145030.22.75				37.6680	37.6960	37.6760	37.6800	
	04/11/2013	C305-XR145030.19.00				30.6740	30.6260	30.6500	30.6500	
	04/11/2013	C305-XR145030.15.20				37.2600	37.2280	37.2320	37.2400	
	04/11/2013	C305-XR145030.11.40				45.2520	45.2320	45.2360	45.2400	
	04/11/2013	C305-XR145030.07.60				46.5740	46.5380	46.5380	46.5500	
	04/11/2013	C305-XR145030.03.80				42.2500	42.2260	42.2140	42.2300	
						11/11/2013	11/11/2013	11/11/2013	AVERAGE	
Rod Extensometer	03/09/2013	HEAD LEVEL	86856.2	36302.318	107.025	106.9584	106.9583	106.9582	106.9583	
	03/09/2013	C305-XR146010.20.50				40.5660	40.5420	40.5420	40.5500	
	03/09/2013	C305-XR146010.17.50				39.9060	39.9140	39.9100	39.9100	
	03/09/2013	C305-XR146010.14.00				43.6660	43.6860	43.6580	43.6700	
	03/09/2013	C305-XR146010.10.50				39.9940	40.0140	40.0220	40.0100	
	03/09/2013	C305-XR146010.07.00				41.3840	41.3680	41.3880	41.3800	
	03/09/2013	C305-XR146010.03.50				40.3040	40.3400	40.3160	40.3200	
						11/11/2013	11/11/2013	11/11/2013	AVERAGE	
Rod Extensometer	04/09/2013	HEAD LEVEL	86866.908	36300.386	107.078	106.9390	106.9382	106.9386	106.9386	
	04/09/2013	C305-XR146020.14.50				36.2420	36.2140	36.2340	36.2300	
	04/09/2013	C305-XR146020.12.00				38.8800	38.8520	38.8480	38.8600	
	04/09/2013	C305-XR146020.09.60				37.4700	37.5060	37.4940	37.4900	
	04/09/2013	C305-XR146020.07.20				40.1240	40.1520	40.1440	40.1400	
	04/09/2013	C305-XR146020.04.80				43.2660	43.2340	43.2500	43.2500	
	04/09/2013	C305-XR146020.02.40				43.7360	43.7840	43.7600	43.7600	
						11/11/2013	11/11/2013	11/11/2013	AVERAGE	
Rod Extensometer	20/09/2013	HEAD LEVEL	86863.746	36292.355	107.507	106.8305	106.8311	106.8302	106.8306	
	20/09/2013	C305-XR146030.20.50				41.3420	41.3140	41.3340	41.3300	
	20/09/2013	C305-XR146030.17.50				40.3520	40.3720	40.3560	40.3600	
	20/09/2013	C305-XR146030.14.00				38.7900	38.7500	38.7700	38.7700	
	20/09/2013	C305-XR146030.10.50				44.1320	44.1520	44.1360	44.1400	
	20/09/2013	C305-XR146030.07.00				41.7840	41.8200	41.7960	41.8000	
	20/09/2013	C305-XR146030.03.50				41.5460	41.5780	41.5860	41.5700	
						11/11/2013	11/11/2013	11/11/2013	AVERAGE	
Rod Extensometer	10/09/2013	HEAD LEVEL	86881.937	36251.463	106.942	106.8209	106.8217	106.8210	106.8212	
	10/09/2013	C305-XR146040.27.00				44.0040	44.0320	44.0240	44.0200	
	10/09/2013	C305-XR146040.22.50				38.5820	38.5940	38.5940	38.5900	
	10/09/2013	C305-XR146040.18.00				41.5980	41.5660	41.6060	41.5900	
	10/09/2013	C305-XR146040.13.50				45.3220	45.2900	45.3180	45.3100	
	10/09/2013	C305-XR146040.09.00				46.4560	46.4840	46.4400	46.4600	
	10/09/2013	C305-XR146040.04.50				44.9680	44.9560	44.9560	44.9600	
						18/11/2013	18/11/2013	18/11/2013	AVERAGE	
Rod Extensometer	04/09/2013	HEAD LEVEL	86883.214	36244.986	106.822	106.7243	106.7251	106.7241	106.7245	
	04/09/2013	C305-XR146050.21.00				38.5140	38.4980	38.5180	38.5100	
	04/09/2013	C305-XR146050.17.50				40.6980	40.7260	40.7060	40.7100	
	04/09/2013	C305-XR146050.14.00				38.7480	38.7760	38.7560	38.7600	
	04/09/2013	C305-XR146050.10.50				36.5900	36.6340	36.6060	36.6100	
	04/09/2013	C305-XR146050.07.00				40.3740	40.4100	40.3860	40.3900	
	04/09/2013	C305-XR146050.03.50				40.3260	40.3540	40.3100	40.3300	
						12/11/2013	12/11/2013	12/11/2013	AVERAGE	
Rod Extensometer	06/09/2013	HEAD LEVEL	86884.31	36239.166	106.768	106.6406	106.6401	106.6402	106.6403	
	06/09/2013	C305-XR146060.27.00				28.3000	28.3360	28.3240	28.3200	
	06/09/2013	C305-XR146060.22.50				41.7500	41.7180	41.7220	41.7300	
	06/09/2013	C305-XR146060.18.00				43.0380	43.0580	43.0540	43.0500	
	06/09/2013	C305-XR146060.13.50				34.7320	34.7520	34.7360	34.7400	
	06/09/2013	C305-XR146060.09.00				40.3680	40.3520	40.3600	40.3600	
	06/09/2013	C305-XR146060.04.50				37.4560	37.4360	37.4280	37.4400	

Head level is the level survey point (levelling point) fixed to the top of the reference head.  
 Note: The difference between the Elevation Z reading and Commissioning reading results from the use of a GPS staff and a manual level respectively.  
 All elevations or levels presented in this document are metres above tunnel datum (mA TD).

IRS Installation Record Sheets – Shallow Datum

Sensor Type	Sensor ID	Depth (m bgl)	Date Installation	Status	SENSOR Location - GPS reading (m)			Commissioning Readings (m)			
					Eastings X	Northings Y	Elevation Z (mATD)	AVERAGE	02/11/2013	02/11/2013	02/11/2013
Shallow Datum	C305-SD14010	15.8 m	28/08/2013	Installed	87548.969	36802.275	109.67	109.5326	109.5332	109.532	109.5326
								AVERAGE	08/11/2013	08/11/2013	08/11/2013
Shallow Datum	C305-SD14020	3.4 m	08/11/2013	Installed	87500.178	36782.55	109.896	109.6371	109.6375	109.6365	109.6373
								AVERAGE	21/11/2013	21/11/2013	21/11/2013
Shallow Datum	C305-SD14070	3.89 m	05/11/2013	Installed	87250.426	36530.134	109.429	109.3051	109.3056	109.3049	109.3048
Shallow Datum	C305-SD14080	5.38 m	06/11/2013	Installed	87264.073	36517.782	109.155	109.0941	109.0861	109.1101	109.0861
								AVERAGE	11/11/2013	11/11/2013	11/11/2013
Shallow Datum	C305-SD14090	3.7 m	06/09/2013	Installed	86932.263	36260.954	107.994	107.9807	107.9802	107.9812	107.9807
Shallow Datum	C305-SD14110	3.7 m	05/09/2013	Installed	86904.904	36280.494	108.042	107.9915	108.0035	107.9835	107.9875
								AVERAGE	02/12/2013	02/12/2013	02/12/2013
Shallow Datum	C305-SD14130	3.7 m	09/09/2013	Installed	86882.1	36286.81	107.406	107.3182	107.3222	107.3102	107.3222
								AVERAGE	27/11/2013	27/11/2013	27/11/2013
Shallow Datum	C305-SD14150	5.74 m	21/10/2013	Installed	86838.701	36236.481	108.569	108.4113	108.4073	108.4273	108.3993
								AVERAGE	12/11/2013	12/11/2013	12/11/2013
Shallow Datum	C305-SD14190	5.74 m	19/09/2013	Installed	86804.569	36246.302	108.452	108.2147	108.2145	108.2153	108.2143
								AVERAGE	02/12/2013	02/12/2013	02/12/2013
Shallow Datum	C305-SD14200	6.7 m	21/11/2013	Installed	86811.063	36207.244	108.893	108.6988	108.6982	108.6994	108.6988
								AVERAGE	18/11/2013	18/11/2013	18/11/2013
Shallow Datum	C305-SD14160	5.74 m	13/09/2013	Installed	86743.065	36267.012	109.99	108.3899	108.4059	108.3739	108.3899
Shallow Datum	C305-SD14170	5.74 m	23/09/2013	Installed	86744.165	36264.177	109.625	108.3192	108.3352	108.3112	108.3112
Shallow Datum	C305-SD14180	5.74 m	18/09/2013	Installed	86758.339	36233.865	109.933	108.3095	108.3055	108.3215	108.3015
								AVERAGE	03/12/2013	03/12/2013	03/12/2013
Shallow Datum	C305-SD14220	6.7 m	13/08/2013	Installed	86696.229	36205.098	108.728	108.6816	108.681	108.6817	108.6821
								AVERAGE	09/12/2013	09/12/2013	09/12/2013
Shallow Datum	C305-SD14230	6.7 m	08/11/2013	Installed	86592.394	36203.116	109.093	108.9031	17/04/1900	17/04/1900	17/04/1900
								AVERAGE	29/11/2013	29/11/2013	29/11/2013
Shallow Datum	C305-SD14250	15.2 m	27/09/2013	Installed	86534.234	36209.894	109.734	109.6617	109.6417	109.6657	109.6777
								AVERAGE	29/11/2013	29/11/2013	29/11/2013
Shallow Datum	C305-SD14260	15.23 m	25/09/2013	Installed	86444.562	36230.978	109.947	109.698	109.722	109.674	109.698
								AVERAGE	29/11/2013	29/11/2013	29/11/2013
Shallow Datum	C305-SD14270	5.78 m	26/09/2013	Installed	86434.193	36231.815	109.061	109.8293	109.8296	109.8287	109.8296
Shallow Datum	C305-SD14280	3.98 m	30/09/2013	Installed	86419.25	36216.177	114.139	110.1443	110.1203	110.1483	110.1643

Note: The difference between the Elevation Z reading and Commissioning reading results from the use of a GPS staff and a manual level respectively.  
 All elevations or levels presented in this document are metres above tunnel datum (mATD).



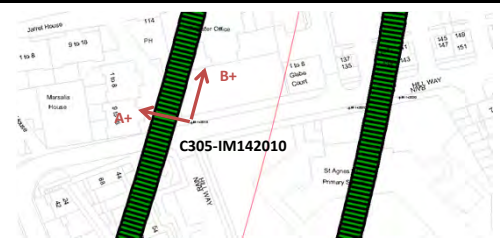
IRS Installation Record Sheets – Vibrating Wire Piezometer

Sensor Type	Sensor ID	Depth (m bgl)	Date Installation	Status	SENSOR Location - GPS reading (m)			Commissioning Readings (m)			
					Eastings X	Northings Y	Elevation Z (mATD)	AVERAGE	23/09/2013	23/09/2013	23/09/2013
Vibrating Wire Piezometer	C305-PV142010	27.4 m	26/07/2013	Installed	87863.405	37405.141	110.381	92.76	92.7606	92.7594	92.76
								AVERAGE	23/09/2013	23/09/2013	23/09/2013
Vibrating Wire Piezometer	C305-PV142020	22.5 m	09/08/2013	Installed	87919.579	37410.992	109.842	94.28	94.264	94.304	94.272
								AVERAGE	23/09/2013	23/09/2013	23/09/2013
Vibrating Wire Piezometer	C305-PV142030	27.0 m	14/08/2013	Installed	87928.794	37412.941	109.998	82.78	82.768	82.796	82.776
								AVERAGE	13/06/2013	13/06/2013	13/06/2013
Vibrating Wire Piezometer	C305-PV143030	22.0 m	12/02/2013	Installed	87722.392	37011.687	110.121	100.50	100.496	100.52	100.484
								AVERAGE	27/03/2013	27/03/2013	27/03/2013
Vibrating Wire Piezometer	C305-PV143040	26.5 m	12/03/2013	Installed	87701.856	36953.425	108.964	95.76	95.7596	95.7603	95.7601
								AVERAGE	12/11/2013	12/11/2013	12/11/2013
Vibrating Wire Piezometer	C305-PV143020	21.6 m	31/05/2013	Installed	87636.822	36985.479	109.633	103.52	103.512	103.524	103.524
								AVERAGE	12/11/2013	12/11/2013	12/11/2013
Vibrating Wire Piezometer	C305-PV143010	26.0 m	28/06/2015	Installed	87544.687	36921.234	110.151	101.99	101.966	102.002	102.002
								AVERAGE	12/11/2013	12/11/2013	12/11/2013
Vibrating Wire Piezometer	C305-PV145010	22.75 m	07/11/2013	Installed	87159.366	36515.652	109.836	101.99	101.97	101.994	102.006
								AVERAGE	12/11/2013	12/11/2013	12/11/2013
Vibrating Wire Piezometer	C305-PV145020	16.75 m	30/10/2013	Installed	87163.733	36512.743	109.792	103.52	103.516	103.536	103.508
								AVERAGE	13/11/2013	13/11/2013	13/11/2013
Vibrating Wire Piezometer	C305-PV146010	20.5 m	06/09/2013	Installed	86849.113	36299.17	107.61	105.67	105.69	105.646	105.674
								AVERAGE	13/11/2013	13/11/2013	13/11/2013
Vibrating Wire Piezometer	C305-PV146020	14.50 m	29/08/2013	Installed	86860.156	36297.467	107.436	102.28	102.268	102.296	102.276
								AVERAGE	12/11/2013	12/11/2013	12/11/2013
Vibrating Wire Piezometer	C305-PV146030	21.0 m	28/08/2013	Installed	86879.705	36242.817	107.175	102.07	102.074	102.046	102.09
								AVERAGE	12/11/2013	12/11/2013	12/11/2013
Vibrating Wire Piezometer	C305-PV146040	27.0 m	03/09/2013	Installed	86881.348	36237.613	107.179	80.96	80.956	80.984	80.94
								AVERAGE	24/09/2013	24/09/2013	24/09/2013
Vibrating Wire Piezometer	C305-PV147010	34.0 m	20/09/2013	Installed	86694.869	36187.967	108.811	96.14	95.32	94.59	94.12
								AVERAGE	24/09/2013	24/09/2013	24/09/2013
Vibrating Wire Piezometer	C305-PV147011	38.6 m	20/09/2013	Installed	86694.869	36187.967	108.811	92.57	92.6	92.38	92.04
								AVERAGE	24/09/2013	24/09/2013	24/09/2013
Vibrating Wire Piezometer	C305-PV147012	52 m	20/09/2013	Installed	86694.869	36187.967	108.811	86.13	90.7	91.18	91
								AVERAGE	17/04/2014	17/04/2014	17/04/2014
Vibrating Wire Piezometer	C305-PV147020	32.5 m	10/04/2014	Installed	86695.488	36191.647	108.952	88.47	88.53	88.55	88.46
								AVERAGE	17/04/2014	17/04/2014	17/04/2014
Vibrating Wire Piezometer	C305-PV147021	49.5 m	10/04/2014	Installed	86695.488	36191.647	108.952	75.35	75.38	75.35	75.32

Note: The difference between the Elevation Z reading and Commissioning reading results from the use of a GPS staff and a manual level respectively.  
All elevations or levels presented in this document are metres above tunnel datum (mATD).

**C305-IM142010**

Serial number probe: 1035333

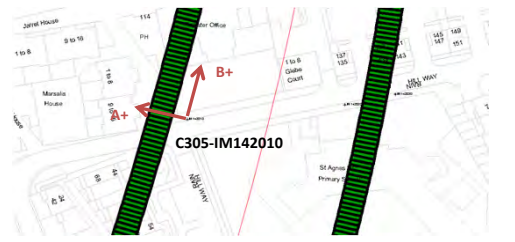


16-9-13 9:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-170	21	-833	902	-2.390	-21.691	743.943	-583.493
1	120	-287	-562	649	5.085	-15.141	746.333	-561.801
1.5	601	-756	-439	518	16.960	-11.966	741.248	-546.660
2	629	-785	-609	689	17.673	-16.229	724.288	-534.694
2.5	208	-391	-723	803	7.485	-19.079	706.615	-518.465
3	-247	91	-839	928	-4.228	-22.091	699.130	-499.386
3.5	-530	367	-812	913	-11.215	-21.566	703.358	-477.295
4	-858	690	-728	805	-19.353	-19.166	714.573	-455.729
4.5	-1207	1049	-749	868	-28.203	-20.216	733.925	-436.563
5	-1181	1013	-775	860	-27.428	-20.441	762.128	-416.346
5.5	-737	575	-511	597	-16.403	-13.854	789.555	-395.905
6	-270	99	-392	474	-4.615	-10.829	805.958	-382.051
6.5	174	-339	-424	497	6.410	-11.516	810.573	-371.223
7	454	-629	-579	678	13.535	-15.716	804.163	-359.706
7.5	548	-718	-721	814	15.823	-19.191	790.628	-343.990
8	396	-549	-764	840	11.810	-20.054	774.805	-324.799
8.5	435	-609	-560	650	13.048	-15.129	762.995	-304.745
9	593	-747	-318	415	16.748	-9.166	749.948	-289.616
9.5	780	-928	-48	140	21.348	-2.354	733.200	-280.450
10	912	-1085	149	-60	24.960	2.609	711.853	-278.096
10.5	990	-1138	263	-201	26.598	5.796	686.893	-280.705
11	929	-1091	188	-120	25.248	3.846	660.295	-286.501
11.5	754	-918	90	7	20.898	1.034	635.048	-290.348
12	637	-802	10	89	17.985	-0.991	614.150	-291.381
12.5	481	-642	-125	205	14.035	-4.129	596.165	-290.390
13	294	-459	-203	295	9.410	-6.229	582.130	-286.261
13.5	279	-445	-159	250	9.048	-5.116	572.720	-280.033
14	202	-364	-196	292	7.073	-6.104	563.673	-274.916
14.5	-6	-165	-523	594	1.985	-13.966	556.600	-268.813
15	-65	-103	-630	714	0.473	-16.804	554.615	-254.846
15.5	-88	-88	-745	826	-0.003	-19.641	554.143	-238.043
16	-68	-124	-836	908	0.698	-21.804	554.145	-218.401
16.5	43	-202	-758	851	3.060	-20.116	553.448	-196.598
17	241	-397	-570	666	7.973	-15.454	550.388	-176.481
17.5	339	-514	-529	614	10.660	-14.291	542.415	-161.028
18	451	-623	-475	558	13.423	-12.916	531.755	-146.736
18.5	576	-721	-386	464	16.210	-10.629	518.333	-133.820
19	668	-830	-306	381	18.723	-8.591	502.123	-123.191
19.5	794	-963	-307	395	21.960	-8.779	483.400	-114.600
20	939	-1104	-424	513	25.535	-11.716	461.440	-105.821
20.5	825	-991	-470	568	22.698	-12.979	435.905	-94.105
21	461	-630	-624	712	13.635	-16.704	413.208	-81.126
21.5	140	-304	-757	862	5.548	-20.241	399.573	-64.423
22	-83	-114	-877	999	0.385	-23.454	394.025	-44.181
22.5	-212	55	-921	1018	-3.340	-24.241	393.640	-20.728
23	-205	39	-809	887	-3.053	-21.204	396.980	3.514
23.5	-99	-96	-538	625	-0.040	-14.541	400.033	24.718
24	121	-274	-190	262	4.935	-5.654	400.073	39.259
24.5	375	-547	468	-380	11.523	10.596	395.138	44.913
25	726	-886	1268	-1188	20.148	30.696	383.615	34.316
25.5	541	-698	1365	-1240	15.485	32.559	363.468	3.620
26	322	-480	891	-805	10.023	21.196	347.983	-28.939
26.5	299	-469	703	-627	9.598	16.621	337.960	-50.135
27	401	-567	604	-504	12.098	13.846	328.363	-66.756
27.5	570	-720	539	-427	16.123	12.071	316.265	-80.603
28	852	-1028	532	-441	23.498	12.159	300.143	-92.674
28.5	1116	-1295	560	-458	30.135	12.721	276.645	-104.833
29	1345	-1500	209	-97	35.560	3.821	246.510	-117.554
29.5	1431	-1600	-264	374	37.885	-7.979	210.950	-121.375
30	1238	-1410	-492	598	33.098	-13.629	173.065	-113.396
30.5	1007	-1163	-554	681	27.123	-15.441	139.968	-99.768
31	820	-982	-647	767	22.523	-17.679	112.845	-84.326
31.5	769	-935	-778	887	21.298	-20.816	90.323	-66.648
32	621	-793	-965	1076	17.673	-25.516	69.025	-45.831
32.5	431	-595	-716	862	12.823	-19.729	51.353	-20.315
33	514	-678	-498	585	14.898	-13.541	38.530	-0.586
33.5	421	-598	-32	115	12.735	-1.841	23.633	12.955
34	353	-519	633	-551	10.898	14.796	10.898	14.796
<b>Reference Point (34.5m)</b>							0.000	0.000

**C305-IM142010**

Serial number probe: D11244

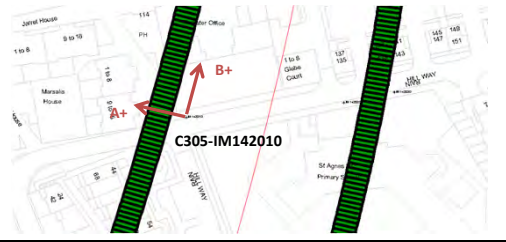


17-9-13 11:40

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-132	53	-807	927	-2.313	-21.675	747.488	-582.288
1	159	-248	-536	670	5.088	-15.075	749.800	-560.613
1.5	639	-724	-412	541	17.038	-11.913	744.713	-545.538
2	666	-752	-584	707	17.725	-16.138	727.675	-533.625
2.5	251	-352	-703	830	7.538	-19.163	709.950	-517.488
3	-205	123	-814	946	-4.100	-22.000	702.413	-498.325
3.5	-496	403	-785	939	-11.238	-21.550	706.513	-476.325
4	-821	728	-706	830	-19.363	-19.200	717.750	-454.775
4.5	-1164	1087	-729	890	-28.138	-20.238	737.113	-435.575
5	-1146	1053	-756	884	-27.488	-20.500	765.250	-415.338
5.5	-695	607	-491	618	-16.275	-13.863	792.738	-394.838
6	-228	135	-367	494	-4.538	-10.763	809.013	-380.975
6.5	212	-306	-401	523	6.475	-11.550	813.550	-370.213
7	498	-590	-551	696	13.600	-15.588	807.075	-358.663
7.5	592	-683	-698	841	15.938	-19.238	793.475	-343.075
8	435	-515	-736	867	11.875	-20.038	777.538	-323.838
8.5	479	-572	-540	671	13.138	-15.138	765.663	-303.800
9	635	-716	-296	440	16.888	-9.200	752.525	-288.663
9.5	814	-896	-23	167	21.375	-2.375	735.638	-279.463
10	956	-1053	172	-35	25.113	2.588	714.263	-277.088
10.5	1024	-1103	290	-176	26.588	5.825	689.150	-279.675
11	967	-1060	214	-99	25.338	3.913	662.563	-285.500
11.5	795	-886	112	27	21.013	1.063	637.225	-289.413
12	681	-762	31	110	18.038	-0.988	616.213	-290.475
12.5	517	-609	-99	223	14.075	-4.025	598.175	-289.488
13	332	-419	-176	317	9.388	-6.163	584.100	-285.463
13.5	323	-405	-135	271	9.100	-5.075	574.713	-279.300
14	239	-326	-168	311	7.063	-5.988	565.613	-274.225
14.5	34	-131	-502	619	2.063	-14.013	558.550	-268.238
15	-24	-71	-610	733	0.588	-16.788	556.488	-254.225
15.5	-54	-55	-723	853	0.013	-19.700	555.900	-237.438
16	-33	-87	-816	934	0.675	-21.875	555.888	-217.738
16.5	80	-169	-734	875	3.113	-20.113	555.213	-195.863
17	279	-362	-544	691	8.013	-15.438	552.100	-175.750
17.5	380	-476	-508	641	10.700	-14.363	544.088	-160.313
18	489	-585	-446	577	13.425	-12.788	533.388	-145.950
18.5	610	-690	-358	483	16.250	-10.513	519.963	-133.163
19	705	-794	-277	408	18.738	-8.563	503.713	-122.650
19.5	830	-924	-286	418	21.925	-8.800	484.975	-114.088
20	980	-1068	-400	538	25.600	-11.725	463.050	-105.288
20.5	863	-956	-447	590	22.738	-12.963	437.450	-93.563
21	500	-592	-597	739	13.650	-16.700	414.713	-80.600
21.5	184	-272	-738	880	5.700	-20.225	401.063	-63.900
22	-39	-79	-858	1023	0.500	-23.513	395.363	-43.675
22.5	-177	93	-901	1036	-3.375	-24.213	394.863	-20.163
23	-171	73	-785	915	-3.050	-21.250	398.238	4.050
23.5	-60	-56	-511	643	-0.050	-14.425	401.288	25.300
24	160	-243	-168	285	5.038	-5.663	401.338	39.725
24.5	413	-510	491	-361	11.538	10.650	396.300	45.388
25	762	-856	1294	-1161	20.225	30.688	384.763	34.738
25.5	575	-666	1392	-1215	15.513	32.588	364.538	4.050
26	362	-450	914	-780	10.150	21.175	349.025	-28.538
26.5	334	-433	730	-599	9.588	16.613	338.875	-49.713
27	445	-535	623	-476	12.250	13.738	329.288	-66.325
27.5	608	-690	565	-409	16.225	12.175	317.038	-80.063
28	892	-994	561	-420	23.575	12.263	300.813	-92.238
28.5	1157	-1256	582	-439	30.163	12.763	277.238	-104.500
29	1380	-1463	237	-77	35.538	3.925	247.075	-117.263
29.5	1467	-1562	-238	395	37.863	-7.913	211.538	-121.188
30	1280	-1380	-471	617	33.250	-13.600	173.675	-113.275
30.5	1049	-1130	-529	708	27.238	-15.463	140.425	-99.675
31	862	-948	-619	790	22.625	-17.613	113.188	-84.213
31.5	805	-895	-754	907	21.250	-20.763	90.563	-66.600
32	660	-757	-937	1100	17.713	-25.463	69.313	-45.838
32.5	472	-561	-696	885	12.913	-19.763	51.600	-20.375
33	557	-640	-479	608	14.963	-13.588	38.688	-0.612
33.5	462	-560	-12	134	12.775	-1.825	23.725	12.975
34	390	-486	654	-530	10.950	14.800	10.950	14.800
<b>Reference Point (34.5m)</b>							0.000	0.000

**C305-IM142010**

Serial number probe: 1035333



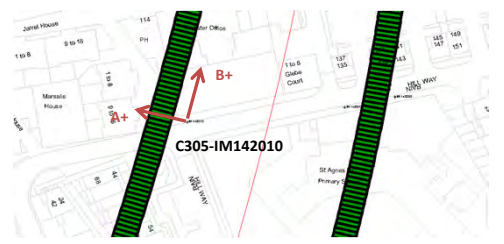
16-9-13 10:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-177	24	-832	890	-2.515	-21.529	732.943	-579.280
1	107	-284	-578	640	4.885	-15.229	735.458	-557.751
1.5	587	-744	-437	500	16.635	-11.716	730.573	-542.523
2	610	-782	-605	680	17.398	-16.066	713.938	-530.806
2.5	206	-390	-749	791	7.448	-19.254	696.540	-514.740
3	-242	87	-832	923	-4.115	-21.941	689.093	-495.486
3.5	-530	362	-825	900	-11.153	-21.566	693.208	-473.545
4	-857	681	-721	782	-19.228	-18.791	704.360	-451.979
4.5	-1192	1027	-748	820	-27.740	-19.604	723.588	-433.188
5	-1182	1013	-789	847	-27.440	-20.454	751.328	-413.584
5.5	-730	572	-521	581	-16.278	-13.779	778.768	-393.130
6	-268	100	-399	475	-4.603	-10.929	795.045	-379.351
6.5	161	-328	-408	514	6.110	-11.529	799.648	-368.423
7	441	-621	-586	650	13.273	-15.454	793.538	-356.894
7.5	537	-714	-727	812	15.635	-19.241	780.265	-341.440
8	395	-552	-777	846	11.835	-20.291	764.630	-322.199
8.5	431	-598	-590	654	12.860	-15.554	752.795	-301.908
9	581	-748	-308	405	16.610	-8.916	739.935	-286.354
9.5	765	-915	-60	159	20.998	-2.741	723.325	-277.438
10	898	-1081	124	-51	24.735	2.184	702.328	-274.696
10.5	972	-1115	252	-149	26.085	5.009	677.593	-276.880
11	915	-1088	163	-110	25.035	3.409	651.508	-281.889
11.5	752	-922	74	2	20.923	0.896	626.473	-285.298
12	630	-783	-21	78	17.660	-1.241	605.550	-286.194
12.5	468	-634	-116	184	13.773	-3.754	587.890	-284.953
13	289	-457	-203	267	9.323	-5.879	574.118	-281.199
13.5	278	-438	-168	235	8.948	-5.041	564.795	-275.320
14	203	-357	-212	274	6.998	-6.079	555.848	-270.279
14.5	-16	-167	-503	587	1.885	-13.629	548.850	-264.200
15	-70	-103	-630	708	0.410	-16.729	546.965	-250.571
15.5	-93	-93	-745	909	-0.003	-19.429	546.555	-233.843
16	-75	-132	-839	898	0.710	-21.716	546.558	-214.414
16.5	32	-206	-763	839	2.973	-20.029	545.848	-192.698
17	237	-388	-564	634	7.810	-14.979	542.875	-172.669
17.5	335	-492	-529	603	10.335	-14.154	535.065	-157.690
18	445	-612	-463	571	13.210	-12.929	524.730	-143.536
18.5	559	-719	-371	436	15.973	-10.091	511.520	-130.608
19	656	-822	-313	372	18.473	-8.566	495.548	-120.516
19.5	771	-941	-305	384	21.398	-8.616	477.075	-111.950
20	929	-1085	-417	496	25.173	-11.416	455.678	-103.334
20.5	816	-986	-476	560	22.523	-12.954	430.505	-91.918
21	460	-631	-622	709	13.635	-16.641	407.983	-78.964
21.5	150	-295	-754	851	5.560	-20.066	394.348	-62.323
22	-87	-117	-891	958	0.373	-23.116	388.788	-42.256
22.5	-218	60	-933	1003	-3.478	-24.204	388.415	-19.140
23	-208	51	-816	878	-3.240	-21.179	391.893	5.064
23.5	-97	-85	-546	598	-0.153	-14.304	395.133	26.243
24	126	-269	-196	267	4.935	-5.791	395.285	40.546
24.5	364	-535	442	-376	11.235	10.221	390.350	46.338
25	713	-884	1236	-1166	19.960	30.021	379.115	36.116
25.5	526	-693	1330	-1246	15.235	32.196	359.155	6.095
26	319	-477	872	-811	9.948	21.034	343.920	-26.101
26.5	285	-459	693	-623	9.298	16.446	333.973	-47.135
27	402	-575	592	-516	12.210	13.846	324.675	-63.581
27.5	560	-719	521	-435	15.985	11.946	312.465	-77.428
28	841	-1015	525	-447	23.198	12.146	296.480	-89.374
28.5	1097	-1276	538	-486	29.660	12.796	273.283	-101.520
29	1320	-1486	201	-118	35.073	3.984	243.623	-114.316
29.5	1417	-1575	-256	343	37.398	-7.491	208.550	-118.300
30	1227	-1411	-490	555	32.973	-13.066	171.153	-110.809
30.5	1004	-1152	-540	644	26.948	-14.804	138.180	-97.743
31	815	-979	-638	710	22.423	-16.854	111.233	-82.939
31.5	750	-916	-782	850	20.823	-20.404	88.810	-66.085
32	616	-778	-958	1019	17.423	-24.716	67.988	-45.681
32.5	425	-599	-767	838	12.798	-20.066	50.565	-20.965
33	506	-666	-511	575	14.648	-13.579	37.768	-0.899
33.5	415	-583	-46	115	12.473	-2.016	23.120	12.680
34	342	-510	621	-555	10.648	14.696	10.648	14.696
<b>Reference Point (34.5m)</b>							0.000	0.000

**C305-IM142010**

Serial number probe:

DI1244



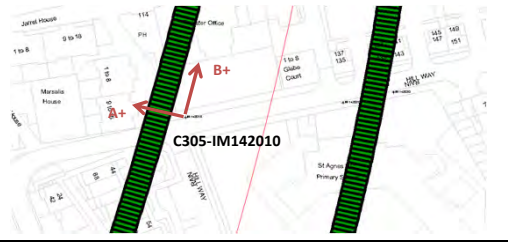
18-9-13 11:26

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-133	53	-812	919	-2.325	-21.638	741.725	-577.950
1	151	-248	-551	656	4.988	-15.088	744.050	-556.313
1.5	627	-724	-417	527	16.888	-11.800	739.063	-541.225
2	652	-752	-587	704	17.550	-16.138	722.175	-529.425
2.5	248	-352	-726	818	7.500	-19.300	704.625	-513.288
3	-202	123	-806	944	-4.063	-21.875	697.125	-493.988
3.5	-494	403	-805	918	-11.213	-21.538	701.188	-472.113
4	-811	728	-697	803	-19.238	-18.750	712.400	-450.575
4.5	-1149	1087	-727	849	-27.950	-19.700	731.638	-431.825
5	-1141	1053	-765	870	-27.425	-20.438	759.588	-412.125
5.5	-690	607	-496	607	-16.213	-13.788	787.013	-391.688
6	-232	135	-370	499	-4.588	-10.863	803.225	-377.900
6.5	205	-306	-391	537	6.388	-11.600	807.813	-367.038
7	486	-590	-563	666	13.450	-15.363	801.425	-355.438
7.5	583	-683	-703	835	15.825	-19.225	787.975	-340.075
8	427	-515	-753	864	11.775	-20.213	772.150	-320.850
8.5	468	-572	-568	678	13.000	-15.575	760.375	-300.638
9	626	-716	-283	431	16.775	-8.925	747.375	-285.063
9.5	803	-896	-33	176	21.238	-2.613	730.600	-276.138
10	943	-1053	148	-23	24.950	2.138	709.363	-273.525
10.5	1005	-1103	273	-132	26.350	5.063	684.413	-275.663
11	955	-1060	194	-94	25.188	3.600	658.063	-280.725
11.5	784	-886	99	32	20.875	0.838	632.875	-284.325
12	671	-762	9	103	17.913	-1.175	612.000	-285.163
12.5	512	-609	-98	203	14.013	-3.763	594.088	-283.988
13	322	-419	-174	289	9.263	-5.788	580.075	-280.225
13.5	313	-405	-144	259	8.975	-5.038	570.813	-274.438
14	236	-326	-182	299	7.025	-6.013	561.838	-269.400
14.5	30	-131	-484	605	2.013	-13.613	554.813	-263.388
15	-29	-71	-603	730	0.525	-16.663	552.800	-249.775
15.5	-57	-55	-728	828	-0.025	-19.450	552.275	-233.113
16	-34	-87	-813	925	0.863	-21.725	552.300	-213.663
16.5	75	-169	-746	864	3.050	-20.125	551.638	-191.938
17	275	-362	-539	653	7.963	-14.900	548.588	-171.813
17.5	373	-476	-512	626	10.613	-14.225	540.625	-156.913
18	483	-585	-440	592	13.350	-12.900	530.013	-142.688
18.5	600	-690	-353	460	16.125	-10.163	516.663	-129.788
19	691	-794	-289	388	18.563	-8.463	500.538	-119.625
19.5	815	-924	-280	401	21.738	-8.513	481.975	-111.163
20	970	-1068	-398	515	25.475	-11.413	460.238	-102.650
20.5	850	-956	-446	584	22.575	-12.875	434.763	-91.238
21	501	-592	-596	732	13.663	-16.600	412.188	-78.363
21.5	182	-272	-737	869	5.675	-20.075	398.525	-61.763
22	-41	-79	-863	977	0.475	-23.000	392.850	-41.688
22.5	-175	93	-905	1022	-3.350	-24.088	392.375	-18.688
23	-173	73	-788	904	-3.075	-21.150	395.725	5.400
23.5	-60	-56	-517	628	-0.050	-14.313	398.800	26.550
24	158	-243	-166	284	5.013	-5.625	398.850	40.863
24.5	408	-510	467	-346	11.475	10.163	393.838	46.488
25	756	-856	1264	-1150	20.150	30.175	382.363	36.325
25.5	562	-666	1347	-1222	15.350	32.113	362.213	6.150
26	354	-450	900	-782	10.050	21.025	346.863	-25.963
26.5	329	-433	721	-605	9.525	16.575	336.813	-46.988
27	439	-535	609	-493	12.175	13.775	327.288	-63.563
27.5	598	-690	546	-415	16.100	12.013	315.113	-77.338
28	882	-994	543	-430	23.450	12.163	299.013	-89.350
28.5	1142	-1256	568	-460	29.975	12.850	275.563	-101.513
29	1362	-1463	230	-93	35.313	4.038	245.588	-114.363
29.5	1451	-1562	-239	368	37.663	-7.588	210.275	-118.400
30	1267	-1380	-461	585	33.088	-13.075	172.613	-110.813
30.5	1037	-1130	-519	661	27.088	-14.750	139.525	-97.738
31	853	-948	-616	730	22.513	-16.825	112.438	-82.988
31.5	796	-895	-755	870	21.138	-20.313	89.925	-66.163
32	652	-757	-939	1040	17.613	-24.738	68.788	-45.850
32.5	461	-561	-750	868	12.775	-20.225	51.175	-21.113
33	550	-640	-488	602	14.875	-13.625	38.400	-0.887
33.5	456	-560	-21	136	12.700	-1.963	23.525	12.738
34	380	-486	651	-525	10.825	14.700	10.825	14.700
<b>Reference Point (34.5m)</b>							0.000	0.000



**C305-IM142010**

Serial number probe: 1035333



16-9-13 11:00

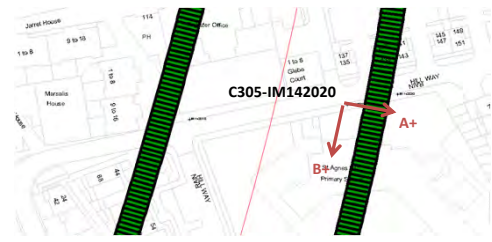
Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-168	16	-836	910	-2.303	-21.829	744.992	-584.168
1	117	-282	-564	647	4.985	-15.141	747.295	-562.339
1.5	601	-765	-440	524	17.073	-12.054	742.310	-547.198
2	616	-793	-618	696	17.610	-16.429	725.237	-535.144
2.5	210	-388	-737	805	7.473	-19.279	707.627	-518.715
3	-247	85	-856	917	-4.153	-22.166	700.155	-499.436
3.5	-536	371	-838	930	-11.340	-22.104	704.308	-477.270
4	-853	690	-726	799	-19.290	-19.066	715.648	-455.166
4.5	-1203	1045	-757	863	-28.103	-20.254	734.938	-436.100
5	-1187	1010	-789	858	-27.465	-20.591	763.040	-415.846
5.5	-733	563	-508	597	-16.203	-13.816	790.505	-395.255
6	-272	93	-411	462	-4.565	-10.916	806.708	-381.439
6.5	170	-348	-437	508	6.473	-11.816	811.273	-370.523
7	460	-623	-580	654	13.535	-15.429	804.800	-358.706
7.5	555	-715	-716	813	15.873	-19.116	791.265	-343.278
8	396	-549	-774	848	11.810	-20.279	775.393	-324.161
8.5	428	-604	-597	660	12.898	-15.716	763.583	-303.883
9	597	-758	-345	407	16.935	-9.404	750.685	-288.166
9.5	766	-934	-77	146	21.248	-2.791	733.750	-278.763
10	910	-1095	117	-41	25.060	1.971	712.503	-275.971
10.5	984	-1134	250	-168	26.473	5.221	687.443	-277.943
11	927	-1101	185	-112	25.348	3.709	660.970	-283.164
11.5	749	-927	80	11	20.948	0.859	635.623	-286.873
12	638	-806	-11	94	18.048	-1.316	614.675	-287.731
12.5	487	-648	-119	191	14.185	-3.879	596.628	-286.415
13	287	-455	-187	287	9.273	-5.929	582.443	-282.536
13.5	275	-440	-163	249	8.935	-5.154	573.170	-276.608
14	206	-370	-196	294	7.198	-6.129	564.235	-271.454
14.5	-6	-169	-520	594	2.035	-13.929	557.038	-265.325
15	-73	-107	-632	706	0.423	-16.729	555.003	-251.396
15.5	-88	-89	-753	832	0.010	-19.816	554.580	-234.668
16	-78	-130	-827	925	0.648	-21.904	554.570	-214.851
16.5	29	-207	-775	867	2.948	-20.529	553.923	-192.948
17	240	-395	-582	648	7.935	-15.379	550.975	-172.419
17.5	340	-515	-536	612	10.685	-14.354	543.040	-157.040
18	444	-629	-472	547	13.410	-12.741	532.355	-142.686
18.5	565	-729	-376	452	16.173	-10.354	518.945	-129.945
19	660	-833	-311	369	18.660	-8.504	502.773	-119.591
19.5	783	-958	-308	366	21.760	-8.429	484.113	-111.088
20	942	-1107	-429	511	25.610	-11.754	462.353	-102.659
20.5	822	-994	-482	556	22.698	-12.979	436.743	-90.905
21	471	-636	-613	714	13.835	-16.591	414.045	-77.926
21.5	147	-304	-755	857	5.635	-20.154	400.210	-61.335
22	-84	-115	-883	965	0.385	-23.104	394.575	-41.181
22.5	-215	58	-922	1009	-3.415	-24.141	394.190	-18.078
23	-208	34	-818	889	-3.028	-21.341	397.605	6.064
23.5	-99	-93	-542	622	-0.078	-14.554	400.633	27.405
24	125	-274	-198	271	4.985	-5.866	400.710	41.959
24.5	368	-542	460	-370	11.373	10.371	395.725	47.825
25	733	-894	1270	-1175	20.335	30.559	384.353	37.454
25.5	535	-705	1345	-1248	15.498	32.409	364.018	6.895
26	317	-481	891	-812	9.973	21.284	348.520	-25.514
26.5	300	-469	715	-628	9.610	16.784	338.548	-46.798
27	399	-580	596	-512	12.235	13.846	328.938	-63.581
27.5	571	-725	543	-437	16.198	12.246	316.703	-77.428
28	856	-1024	565	-457	23.498	12.771	300.505	-89.674
28.5	1112	-1289	558	-485	30.010	13.034	277.008	-102.445
29	1335	-1503	216	-110	35.473	4.071	246.998	-115.479
29.5	1435	-1597	-263	355	37.898	-7.729	211.525	-119.550
30	1250	-1420	-473	573	33.373	-13.079	173.628	-111.821
30.5	1015	-1171	-552	651	27.323	-15.041	140.255	-98.743
31	822	-988	-636	722	22.623	-16.979	112.933	-83.701
31.5	759	-933	-772	874	21.148	-20.579	90.310	-66.723
32	618	-802	-978	1043	17.748	-25.266	69.163	-46.144
32.5	428	-595	-746	875	12.785	-20.266	51.415	-20.878
33	519	-668	-512	585	14.835	-13.716	38.630	-0.611
33.5	432	-596	-34	120	12.848	-1.929	23.795	13.105
34	348	-528	655	-548	10.948	15.034	10.948	15.034
<b>Reference Point (34.5m)</b>							0.000	0.000





**C305-IM142020**

Serial number probe: D11244



12-9-13 13:47

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-844	736	-1285	1417	-19.750	-33.775	2135.850	1937.075
1	-871	754	-640	817	-20.313	-18.213	2155.600	1970.850
1.5	-822	715	-131	284	-19.213	-5.188	2175.913	1989.063
2	-583	480	-72	212	-13.288	-3.550	2195.125	1994.250
2.5	-232	120	38	121	-4.400	-1.038	2208.413	1997.800
3	160	-274	251	-119	5.425	4.625	2212.813	1998.838
3.5	555	-658	604	-455	15.163	13.238	2207.388	1994.213
4	1061	-1169	1045	-926	27.875	24.638	2192.225	1980.975
4.5	1610	-1718	1444	-1289	41.600	34.163	2164.350	1956.338
5	1522	-1640	1412	-1298	39.525	33.875	2122.750	1922.175
5.5	1216	-1314	1237	-1109	31.625	29.325	2083.225	1888.300
6	918	-1025	1123	-971	24.288	26.175	2051.600	1858.975
6.5	669	-789	1061	-902	18.225	24.538	2027.313	1832.800
7	471	-577	1017	-875	13.100	23.650	2009.088	1808.263
7.5	562	-673	1059	-932	15.438	24.888	1995.988	1784.613
8	657	-767	1259	-1127	17.800	29.825	1980.550	1759.725
8.5	543	-662	1147	-1016	15.063	27.038	1962.750	1729.900
9	443	-547	886	-756	12.375	20.525	1947.688	1702.863
9.5	346	-459	647	-523	10.063	14.625	1935.313	1682.338
10	264	-370	469	-322	7.925	9.888	1925.250	1667.713
10.5	430	-531	549	-394	12.013	11.788	1917.325	1657.825
11	671	-784	881	-737	18.188	20.225	1905.313	1646.038
11.5	731	-843	1035	-900	19.675	24.188	1887.125	1625.813
12	703	-801	1161	-1027	18.800	27.350	1867.450	1601.625
12.5	624	-738	1293	-1153	17.025	30.575	1848.650	1574.275
13	489	-612	1415	-1279	13.763	33.675	1831.625	1543.700
13.5	509	-609	1389	-1251	13.975	33.000	1817.863	1510.025
14	498	-608	1261	-1112	13.825	29.663	1803.888	1477.025
14.5	511	-631	1109	-977	14.275	26.075	1790.063	1447.363
15	593	-704	992	-866	16.213	23.225	1775.788	1421.288
15.5	617	-730	857	-715	16.838	19.650	1759.575	1398.063
16	546	-649	684	-538	14.938	15.275	1742.738	1378.413
16.5	455	-565	540	-396	12.750	11.700	1727.800	1363.138
17	650	-778	582	-432	17.850	12.675	1715.050	1351.438
17.5	1018	-1107	637	-483	26.563	14.000	1697.200	1338.763
18	1326	-1445	867	-732	34.638	19.988	1670.638	1324.763
18.5	1583	-1676	1088	-941	40.738	25.363	1636.000	1304.775
19	1700	-1806	1272	-1139	43.825	30.138	1595.263	1279.413
19.5	1459	-1567	1146	-1009	37.825	26.938	1551.438	1249.275
20	1341	-1441	1076	-912	34.775	24.850	1513.613	1222.338
20.5	1572	-1679	1305	-1168	40.638	30.913	1478.838	1197.488
21	1708	-1821	1538	-1383	44.113	36.513	1438.200	1166.575
21.5	1863	-1976	1815	-1654	47.988	43.363	1394.088	1130.063
22	2058	-2170	2096	-1950	52.850	50.575	1346.100	1086.700
22.5	1863	-1955	2091	-1932	47.725	50.288	1293.250	1036.125
23	1760	-1876	2152	-2001	45.450	51.913	1245.525	985.838
23.5	2021	-2109	2171	-2018	51.625	52.363	1200.075	933.925
24	2236	-2349	2091	-1930	57.313	50.263	1148.450	881.563
24.5	2509	-2607	1950	-1804	63.950	46.925	1091.138	831.300
25	2756	-2876	1806	-1651	70.400	43.213	1027.188	784.375
25.5	2845	-2954	1728	-1570	72.488	41.225	956.788	741.163
26	2611	-2710	1561	-1412	66.513	37.163	884.300	699.938
26.5	2466	-2579	1415	-1278	63.063	33.663	817.788	662.775
27	2301	-2405	1251	-1106	58.825	29.463	754.725	629.113
27.5	2178	-2289	1084	-931	55.838	25.188	695.900	599.650
28	2107	-2203	1002	-856	53.875	23.225	640.063	574.463
28.5	1831	-1934	820	-674	47.063	18.675	586.188	551.238
29	1637	-1760	783	-618	42.463	17.513	539.125	532.563
29.5	1582	-1671	864	-738	40.663	20.025	496.663	515.050
30	1509	-1619	1121	-985	39.100	26.325	456.000	495.025
30.5	1518	-1609	1476	-1348	39.088	35.300	416.900	468.700
31	1525	-1628	1861	-1717	39.413	44.725	377.813	433.400
31.5	1640	-1748	2040	-1880	42.350	49.000	338.400	388.675
32	1932	-2030	2328	-2190	49.525	56.475	296.050	339.675
32.5	2029	-2129	2484	-2361	51.975	60.563	246.525	283.200
33	2418	-2504	2950	-2805	61.525	71.938	194.550	222.638
33.5	2555	-2662	3172	-3022	65.213	77.425	133.025	150.700
34	2656	-2769	3005	-2857	67.813	73.275	67.813	73.275
<b>Reference Point (34.5m)</b>							0.000	0.000

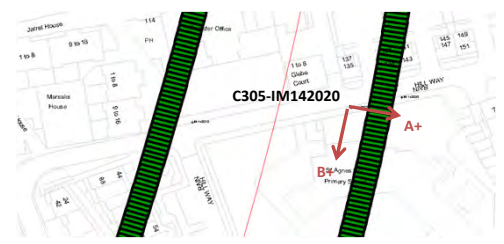




**C305-IM142020**

Serial number probe:

DI1244

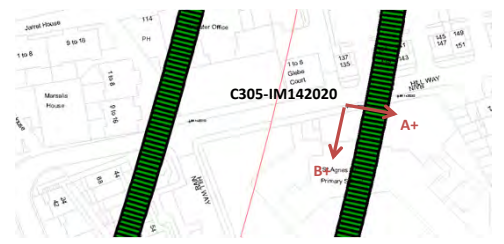


12-9-13 14:31

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-844	735	-1297	1403	-19.738	-33.750	2128.663	1925.538
1	-872	754	-649	814	-20.325	-18.288	2148.400	1959.288
1.5	-820	716	-131	287	-19.200	-5.225	2168.725	1977.575
2	-581	480	-63	199	-13.263	-3.275	2187.925	1982.800
2.5	-233	120	34	113	-4.413	-0.988	2201.188	1986.075
3	158	-273	245	-120	5.388	4.563	2205.600	1987.063
3.5	551	-655	600	-467	15.075	13.338	2200.213	1982.500
4	1056	-1171	1046	-918	27.838	24.550	2185.138	1969.163
4.5	1606	-1712	1448	-1286	41.475	34.175	2157.300	1944.613
5	1508	-1636	1418	-1289	39.300	33.838	2115.825	1910.438
5.5	1214	-1313	1230	-1110	31.588	29.250	2076.525	1876.600
6	909	-1017	1106	-976	24.075	26.025	2044.938	1847.350
6.5	667	-786	1046	-924	18.163	24.625	2020.863	1821.325
7	466	-579	1000	-877	13.063	23.463	2002.700	1796.700
7.5	561	-668	1046	-924	15.363	24.625	1989.638	1773.238
8	654	-763	1255	-1131	17.713	29.825	1974.275	1748.613
8.5	538	-658	1135	-1013	14.950	26.850	1956.563	1718.788
9	440	-547	879	-761	12.338	20.500	1941.613	1691.938
9.5	346	-460	640	-517	10.075	14.463	1929.275	1671.438
10	258	-368	461	-329	7.825	9.875	1919.200	1656.975
10.5	429	-530	541	-391	11.988	11.650	1911.375	1647.100
11	667	-785	875	-739	18.150	20.175	1899.388	1635.450
11.5	730	-840	1016	-901	19.625	23.963	1881.238	1615.275
12	701	-807	1152	-1020	18.850	27.150	1861.613	1591.313
12.5	617	-735	1292	-1159	16.900	30.638	1842.763	1564.163
13	491	-607	1397	-1273	13.725	33.375	1825.863	1533.525
13.5	505	-600	1387	-1243	13.813	32.875	1812.138	1500.150
14	489	-607	1258	-1126	13.700	29.800	1798.325	1467.275
14.5	510	-627	1093	-978	14.213	25.888	1784.625	1437.475
15	585	-705	995	-860	16.125	23.188	1770.413	1411.588
15.5	612	-726	854	-726	16.725	19.750	1754.288	1388.400
16	546	-648	676	-529	14.925	15.063	1737.563	1368.650
16.5	455	-565	509	-402	12.750	11.388	1722.638	1353.588
17	651	-779	559	-421	17.875	12.250	1709.888	1342.200
17.5	1005	-1109	601	-491	26.425	13.650	1692.013	1329.950
18	1320	-1439	859	-727	34.488	19.825	1665.588	1316.300
18.5	1572	-1670	1066	-946	40.525	25.150	1631.100	1296.475
19	1692	-1805	1258	-1127	43.713	29.813	1590.575	1271.325
19.5	1456	-1560	1142	-1007	37.700	26.863	1546.863	1241.513
20	1335	-1440	1053	-930	34.688	24.788	1509.163	1214.650
20.5	1565	-1686	1285	-1152	40.638	30.463	1474.475	1189.863
21	1713	-1817	1507	-1381	44.125	36.100	1433.838	1159.400
21.5	1865	-1967	1788	-1657	47.900	43.063	1389.713	1123.300
22	2054	-2169	2083	-1942	52.788	50.313	1341.813	1080.238
22.5	1854	-1960	2078	-1932	47.675	50.125	1289.025	1029.925
23	1758	-1880	2125	-1984	45.475	51.363	1241.350	979.800
23.5	2000	-2102	2172	-2012	51.275	52.300	1195.875	928.438
24	2227	-2356	2059	-1921	57.288	49.750	1144.600	876.138
24.5	2496	-2598	1927	-1795	63.675	46.525	1087.313	826.388
25	2748	-2860	1792	-1654	70.100	43.075	1023.638	779.863
25.5	2831	-2951	1712	-1560	72.275	40.900	953.538	736.788
26	2597	-2705	1554	-1414	66.275	37.100	881.263	695.888
26.5	2458	-2571	1400	-1274	62.863	33.425	814.988	658.788
27	2297	-2401	1229	-1100	58.725	29.113	752.125	625.363
27.5	2168	-2285	1058	-920	55.663	24.725	693.400	596.250
28	2089	-2197	996	-859	53.575	23.188	637.738	571.525
28.5	1818	-1933	807	-667	46.888	18.425	584.163	548.338
29	1630	-1755	764	-615	42.313	17.238	537.275	529.913
29.5	1576	-1666	857	-732	40.525	19.863	494.963	512.675
30	1497	-1613	1110	-986	38.875	26.200	454.438	492.813
30.5	1506	-1604	1476	-1347	38.875	35.288	415.563	466.613
31	1518	-1620	1842	-1717	39.225	44.488	376.688	431.325
31.5	1641	-1740	2012	-1877	42.263	48.613	337.463	386.838
32	1920	-2024	2320	-2187	49.300	56.338	295.200	338.225
32.5	2026	-2120	2461	-2361	51.825	60.275	245.900	281.888
33	2407	-2497	2935	-2801	61.300	71.700	194.075	221.613
33.5	2555	-2654	3145	-3021	65.113	77.075	132.775	149.913
34	2659	-2754	2974	-2853	67.663	72.838	67.663	72.838
<b>Reference Point (34.5m)</b>							0.000	0.000

**C305-IM142020**

Serial number probe: 1035333

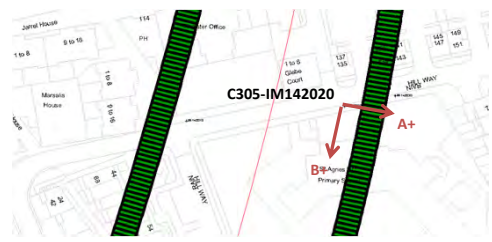


11-9-13 11:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-885	699	-1320	1393	-19.803	-33.916	2126.793	1923.270
1	-914	722	-673	797	-20.453	-18.379	2146.595	1957.186
1.5	-864	684	-147	272	-19.353	-5.241	2167.048	1975.565
2	-631	447	-87	188	-13.478	-3.441	2186.400	1980.806
2.5	-276	90	13	90	-4.578	-0.966	2199.878	1984.248
3	117	-304	228	-137	5.260	4.559	2204.455	1985.214
3.5	503	-694	550	-479	14.960	12.859	2199.195	1980.655
4	1021	-1201	1014	-943	27.773	24.459	2184.235	1967.796
4.5	1568	-1752	1401	-1305	41.498	33.821	2156.463	1943.338
5	1476	-1675	1388	-1306	39.385	33.671	2114.965	1909.516
5.5	1175	-1348	1216	-1134	31.535	29.371	2075.580	1875.845
6	878	-1057	1104	-998	24.185	26.271	2044.045	1846.474
6.5	626	-830	1022	-947	18.198	24.609	2019.860	1820.203
7	426	-610	979	-896	12.948	23.434	2001.663	1795.594
7.5	514	-711	1033	-950	15.310	24.784	1988.715	1772.160
8	620	-797	1223	-1151	17.710	29.671	1973.405	1747.376
8.5	501	-688	1116	-1026	14.860	26.771	1955.695	1717.705
9	400	-578	863	-781	12.223	20.546	1940.835	1690.934
9.5	302	-491	625	-547	9.910	14.646	1928.613	1670.388
10	219	-408	431	-346	7.835	9.709	1918.703	1655.741
10.5	395	-565	511	-415	11.998	11.571	1910.868	1646.033
11	633	-823	853	-760	18.198	20.159	1898.870	1634.461
11.5	689	-883	996	-920	19.648	23.946	1880.673	1614.303
12	655	-838	1122	-1054	18.660	27.196	1861.025	1590.356
12.5	584	-774	1271	-1163	16.973	30.421	1842.365	1563.160
13	451	-643	1383	-1288	13.673	33.384	1825.393	1532.739
13.5	460	-640	1367	-1281	13.748	33.096	1811.720	1499.355
14	455	-631	1227	-1139	13.573	29.571	1797.973	1466.259
14.5	469	-656	1072	-976	14.060	25.596	1784.400	1436.688
15	555	-748	969	-856	16.285	22.809	1770.340	1411.091
15.5	582	-763	824	-727	16.810	19.384	1754.055	1388.283
16	508	-678	655	-550	14.823	15.059	1737.245	1368.899
16.5	418	-596	499	-423	12.673	11.521	1722.423	1353.840
17	607	-814	524	-442	17.760	12.071	1709.750	1342.319
17.5	959	-1134	571	-497	26.160	13.346	1691.990	1330.248
18	1289	-1471	823	-751	34.498	19.671	1665.830	1316.901
18.5	1544	-1706	1066	-964	40.623	25.371	1631.333	1297.230
19	1655	-1840	1232	-1148	43.685	29.746	1590.710	1271.859
19.5	1419	-1602	1138	-1037	37.760	27.184	1547.025	1242.113
20	1306	-1477	1014	-943	34.785	24.459	1509.265	1214.929
20.5	1533	-1718	1259	-1183	40.635	30.521	1474.480	1190.470
21	1677	-1848	1470	-1405	44.060	35.934	1433.845	1159.949
21.5	1823	-1997	1783	-1683	47.748	43.321	1389.785	1124.015
22	2020	-2203	2051	-1970	52.785	50.259	1342.038	1080.694
22.5	1825	-1994	2065	-1946	47.735	50.134	1289.253	1030.435
23	1734	-1907	2091	-2025	45.510	51.446	1241.518	980.301
23.5	1973	-2144	2138	-2049	51.460	52.334	1196.008	928.855
24	2197	-2404	2038	-1934	57.510	49.646	1144.548	876.521
24.5	2458	-2641	1906	-1822	63.735	46.596	1087.038	826.875
25	2719	-2909	1767	-1665	70.348	42.896	1023.303	780.279
25.5	2795	-2986	1694	-1591	72.260	41.059	952.955	737.383
26	2560	-2728	1551	-1424	66.098	37.184	880.695	696.324
26.5	2430	-2612	1374	-1288	63.023	33.271	814.598	659.140
27	2262	-2436	1201	-1125	58.723	29.071	751.575	625.869
27.5	2133	-2314	1035	-951	55.585	24.821	692.853	596.798
28	2057	-2225	957	-881	53.523	22.971	637.268	571.976
28.5	1785	-1968	780	-694	46.910	18.421	583.745	549.005
29	1600	-1792	739	-644	42.398	17.284	536.835	530.584
29.5	1532	-1701	840	-762	40.410	20.021	494.438	513.300
30	1458	-1656	1108	-1003	38.923	26.384	454.028	493.279
30.5	1471	-1645	1444	-1369	38.948	35.159	415.105	466.895
31	1485	-1653	1817	-1741	39.223	44.471	376.158	431.736
31.5	1600	-1775	2002	-1905	42.185	48.834	336.935	387.265
32	1876	-2062	2297	-2205	49.223	56.271	294.750	338.431
32.5	1985	-2152	2442	-2373	51.710	60.184	245.528	282.160
33	2381	-2525	2908	-2825	61.323	71.659	193.818	221.976
33.5	2510	-2686	3140	-3039	64.948	77.234	132.495	150.318
34	2609	-2795	2973	-2874	67.548	73.084	67.548	73.084
<b>Reference Point (34.5m)</b>							0.000	0.000

**C305-IM142020**

Serial number probe: D11244

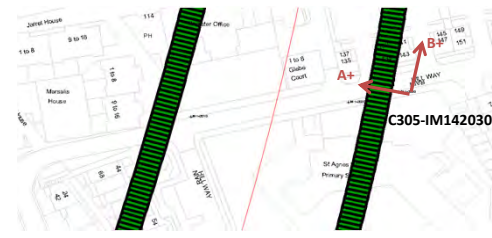


12-9-13 15:11

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-849	737	-1294	1419	-19.825	-33.913	2130.300	1924.438
1	-879	752	-652	819	-20.388	-18.388	2150.125	1958.350
1.5	-829	713	-118	289	-19.275	-5.088	2170.513	1976.738
2	-589	479	-69	210	-13.350	-3.488	2189.788	1981.825
2.5	-239	122	42	117	-4.513	-0.938	2203.138	1985.313
3	155	-274	253	-117	5.363	4.625	2207.650	1986.250
3.5	547	-657	578	-457	15.050	12.938	2202.288	1981.625
4	1056	-1165	1040	-921	27.763	24.513	2187.238	1968.688
4.5	1605	-1715	1429	-1280	41.500	33.863	2159.475	1944.175
5	1514	-1637	1415	-1280	39.388	33.688	2117.975	1910.313
5.5	1211	-1318	1235	-1110	31.613	29.313	2078.588	1876.625
6	913	-1022	1124	-975	24.188	26.238	2046.975	1847.313
6.5	667	-790	1044	-918	18.213	24.525	2022.788	1821.075
7	470	-581	998	-875	13.138	23.413	2004.575	1796.550
7.5	558	-670	1056	-922	15.350	24.725	1991.438	1773.138
8	656	-764	1245	-1127	17.750	29.650	1976.088	1748.413
8.5	542	-658	1142	-1008	15.000	26.875	1958.338	1718.763
9	435	-548	887	-755	12.288	20.525	1943.338	1691.888
9.5	343	-460	643	-521	10.038	14.550	1931.050	1671.363
10	255	-372	459	-323	7.838	9.775	1921.013	1656.813
10.5	429	-530	537	-393	11.988	11.625	1913.175	1647.038
11	669	-785	875	-741	18.175	20.200	1901.188	1635.413
11.5	728	-842	1022	-897	19.625	23.988	1883.013	1615.213
12	698	-802	1151	-1025	18.750	27.200	1863.388	1591.225
12.5	619	-740	1293	-1139	16.988	30.400	1844.638	1564.025
13	488	-613	1402	-1267	13.763	33.363	1827.650	1533.625
13.5	503	-610	1388	-1254	13.913	33.025	1813.888	1500.263
14	495	-600	1249	-1122	13.688	29.638	1799.975	1467.238
14.5	506	-627	1099	-954	14.163	25.663	1786.288	1437.600
15	591	-711	988	-833	16.275	22.763	1772.125	1411.938
15.5	617	-729	848	-708	16.825	19.450	1755.850	1389.175
16	547	-644	681	-532	14.888	15.163	1739.025	1369.725
16.5	451	-564	529	-400	12.688	11.613	1724.138	1354.563
17	651	-775	554	-415	17.825	12.113	1711.450	1342.950
17.5	1001	-1105	595	-469	26.325	13.300	1693.625	1330.838
18	1325	-1439	842	-733	34.550	19.688	1667.300	1317.538
18.5	1579	-1676	1088	-943	40.688	25.388	1632.750	1297.850
19	1696	-1804	1262	-1126	43.750	29.850	1592.063	1272.463
19.5	1457	-1564	1158	-1011	37.763	27.113	1548.313	1242.613
20	1342	-1444	1043	-920	34.825	24.538	1510.550	1215.500
20.5	1568	-1685	1286	-1159	40.663	30.563	1475.725	1190.963
21	1714	-1815	1498	-1378	44.113	35.950	1435.063	1160.400
21.5	1863	-1966	1806	-1662	47.863	43.350	1390.950	1124.450
22	2053	-2164	2080	-1947	52.713	50.338	1343.088	1081.100
22.5	1861	-1963	2085	-1927	47.800	50.150	1290.375	1030.763
23	1770	-1872	2118	-1996	45.525	51.425	1242.575	980.613
23.5	2008	-2109	2168	-2025	51.463	52.413	1197.050	929.188
24	2233	-2364	2058	-1916	57.463	49.675	1145.588	876.775
24.5	2502	-2607	1932	-1795	63.863	46.588	1088.125	827.100
25	2753	-2874	1787	-1645	70.338	42.900	1024.263	780.513
25.5	2840	-2945	1712	-1572	72.313	41.050	953.925	737.613
26	2599	-2698	1572	-1404	66.213	37.200	881.613	696.563
26.5	2465	-2572	1403	-1264	62.963	33.338	815.400	659.363
27	2300	-2399	1222	-1105	58.738	29.088	752.438	626.025
27.5	2169	-2281	1057	-928	55.625	24.813	693.700	596.938
28	2097	-2195	980	-856	53.650	22.950	638.075	572.125
28.5	1827	-1936	809	-675	47.038	18.550	584.425	549.175
29	1633	-1756	760	-622	42.363	17.275	537.388	530.625
29.5	1574	-1665	865	-734	40.488	19.988	495.025	513.350
30	1497	-1617	1133	-984	38.925	26.463	454.538	493.363
30.5	1509	-1605	1467	-1341	38.925	35.100	415.613	466.900
31	1518	-1621	1844	-1715	39.238	44.488	376.688	431.800
31.5	1635	-1743	2022	-1876	42.225	48.725	337.450	387.313
32	1921	-2026	2321	-2187	49.338	56.350	295.225	338.588
32.5	2028	-2122	2468	-2351	51.875	60.238	245.888	282.238
33	2415	-2492	2936	-2802	61.338	71.725	194.013	222.000
33.5	2546	-2656	3170	-3010	65.025	77.250	132.675	150.275
34	2650	-2762	2994	-2848	67.650	73.025	67.650	73.025
<b>Reference Point (34.5m)</b>							0.000	0.000

**C305-IM142030**

Serial number probe: 1035333

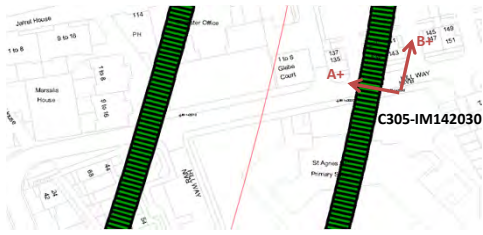


15-9-13 11:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1436	1232	-82	128	-33.353	-2.629	-826.435	-16.684
1	-828	628	-242	317	-18.203	-6.991	-793.083	-14.055
1.5	-339	123	-431	511	-5.778	-11.779	-774.880	-7.064
2	117	-332	-751	822	5.610	-19.666	-769.103	4.715
2.5	556	-747	-1294	1369	16.285	-33.291	-774.713	24.381
3	369	-577	-1399	1471	11.823	-35.879	-790.998	57.673
3.5	-25	-194	-1242	1329	2.110	-32.141	-802.820	93.551
4	-515	292	-876	968	-10.090	-23.054	-804.930	125.693
4.5	-1007	806	-535	609	-22.665	-14.304	-794.840	148.746
5	-1304	1106	-221	307	-30.128	-6.604	-772.175	163.050
5.5	-1612	1408	-37	126	-37.753	-2.041	-742.048	169.654
6	-1411	1200	98	2	-32.640	1.196	-704.295	171.695
6.5	-1019	823	165	-102	-23.028	3.334	-671.655	170.499
7	-775	567	246	-172	-16.778	5.221	-648.628	167.165
7.5	-519	314	244	-152	-10.415	4.946	-631.850	161.944
8	-388	187	280	-195	-7.190	5.934	-621.435	156.998
8.5	-802	599	555	-462	-17.515	12.709	-614.245	151.064
9	-857	645	461	-393	-18.778	10.671	-596.730	138.355
9.5	-626	427	314	-240	-13.165	6.921	-577.953	127.684
10	-364	167	136	-55	-6.640	2.384	-564.788	120.763
10.5	26	-244	-139	201	3.373	-4.254	-558.148	118.379
11	459	-662	-423	501	14.010	-11.554	-561.520	122.633
11.5	470	-682	-483	553	14.398	-12.954	-575.530	134.186
12	221	-427	-405	498	8.098	-11.291	-589.928	147.140
12.5	35	-221	-394	477	3.198	-10.891	-598.025	158.431
13	-200	-8	-326	407	-2.403	-9.166	-601.223	169.323
13.5	-444	235	-246	326	-8.490	-7.154	-598.220	178.489
14	-692	489	-150	238	-14.765	-4.854	-590.330	185.643
14.5	-1063	868	164	-57	-24.140	2.759	-575.565	190.496
15	-1393	1182	294	-186	-32.190	5.996	-551.425	187.738
15.5	-1641	1446	340	-238	-38.590	7.221	-519.235	181.741
16	-1693	1492	473	-363	-39.815	10.446	-480.645	174.520
16.5	-1184	987	704	-601	-27.140	16.309	-440.830	164.074
17	-651	442	827	-725	-13.665	19.396	-413.690	147.765
17.5	-541	339	967	-871	-11.003	22.971	-400.025	128.369
18	-501	276	726	-636	-9.715	17.021	-389.023	105.398
18.5	-413	205	299	-220	-7.728	6.484	-379.308	88.376
19	-278	81	-50	140	-4.490	-2.379	-371.580	81.893
19.5	-412	206	-240	320	-7.728	-7.004	-367.090	84.271
20	-253	42	-505	591	-3.690	-13.704	-359.363	91.275
20.5	-182	-16	-648	749	-2.078	-17.466	-355.673	104.979
21	-273	46	-469	568	-3.990	-12.966	-353.595	122.445
21.5	-103	-121	-118	225	0.223	-4.291	-349.605	135.411
22	60	-254	127	-12	3.923	1.734	-349.828	139.703
22.5	138	-355	299	-216	6.160	6.434	-353.750	137.969
23	264	-483	488	-389	9.335	10.959	-359.910	131.535
23.5	439	-645	662	-553	13.548	15.184	-369.245	120.576
24	317	-522	695	-605	10.485	16.246	-382.793	105.393
24.5	158	-358	533	-428	6.448	12.009	-393.278	89.146
25	-77	-153	463	-377	0.948	10.496	-399.725	77.138
25.5	-472	269	432	-346	-9.265	9.721	-400.673	66.641
26	-1064	844	298	-222	-23.853	6.496	-391.408	56.920
26.5	-1330	1128	134	7	-30.728	1.584	-367.555	50.424
27	-1362	1164	214	-126	-31.578	4.246	-336.828	48.840
27.5	-1371	1172	258	-160	-31.790	5.221	-305.250	44.594
28	-1471	1269	273	-163	-34.253	5.446	-273.460	39.373
28.5	-1564	1351	284	-174	-36.440	5.721	-239.208	33.926
29	-1624	1420	361	-250	-38.053	7.634	-202.768	28.205
29.5	-1616	1415	431	-337	-37.890	9.596	-164.715	20.571
30	-1257	1042	516	-447	-28.740	12.034	-126.825	10.975
30.5	-902	715	458	-369	-20.215	10.334	-98.085	-1.059
31	-557	351	174	-92	-11.353	3.321	-77.870	-11.393
31.5	-121	-122	-198	281	0.010	-5.991	-66.518	-14.714
32	287	-494	-123	193	9.760	-3.954	-66.528	-8.723
32.5	82	-283	7	76	4.560	-0.866	-76.288	-4.769
33	-617	414	30	72	-12.890	-0.529	-80.848	-3.903
33.5	-938	732	27	72	-20.878	-0.566	-67.958	-3.374
34	-997	796	8	114	-22.415	-1.329	-47.800	-2.808
34.5	-1081	892	-9	109	-24.665	-1.479	-24.665	-1.479
Reference Point (35 m)							0.000	0.000

**C305-IM142030**

Serial number probe: D11244



16-9-13 15:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1396	1265	-59	148	-33.263	-2.588	-823.113	-16.025
1	-790	663	-217	336	-18.163	-6.913	-789.850	-13.438
1.5	-301	159	-410	533	-5.750	-11.788	-771.688	-6.525
2	158	-299	-729	849	5.713	-19.725	-765.938	5.263
2.5	594	-717	-1268	1394	16.388	-33.275	-771.650	24.988
3	409	-540	-1374	1498	11.863	-35.900	-788.038	58.263
3.5	15	-160	-1217	1351	2.188	-32.100	-799.900	94.163
4	-474	332	-855	994	-10.075	-23.113	-802.088	126.263
4.5	-963	842	-506	635	-22.563	-14.263	-792.013	149.375
5	-1263	1136	-195	328	-29.988	-6.538	-769.450	163.638
5.5	-1572	1442	-16	153	-37.675	-2.113	-739.463	170.175
6	-1370	1231	119	29	-32.513	1.125	-701.788	172.288
6.5	-984	862	189	-75	-23.075	3.300	-669.275	171.163
7	-737	606	266	-145	-16.788	5.138	-646.200	167.863
7.5	-477	351	266	-132	-10.350	4.975	-629.413	162.725
8	-351	222	308	-175	-7.163	6.038	-619.063	157.750
8.5	-761	634	581	-436	-17.438	12.713	-611.900	151.713
9	-817	685	485	-365	-18.775	10.625	-594.463	139.000
9.5	-589	461	341	-218	-13.125	6.988	-575.688	128.375
10	-327	201	160	-31	-6.600	2.388	-562.563	121.388
10.5	65	-205	-112	225	3.375	-4.213	-555.963	119.000
11	493	-628	-401	521	14.013	-11.525	-559.338	123.213
11.5	510	-643	-456	578	14.413	-12.925	-573.350	134.738
12	255	-395	-380	518	8.125	-11.225	-587.763	147.663
12.5	69	-189	-365	500	3.225	-10.813	-595.888	158.888
13	-163	29	-298	435	-2.400	-9.163	-599.113	169.700
13.5	-410	272	-226	349	-8.525	-7.188	-596.713	178.863
14	-657	525	-129	259	-14.775	-4.850	-588.188	186.050
14.5	-1028	908	183	-29	-24.200	2.650	-573.413	190.900
15	-1350	1213	314	-163	-32.038	5.963	-549.213	188.250
15.5	-1607	1482	367	-218	-38.613	7.313	-517.175	182.288
16	-1652	1526	495	-342	-39.725	10.463	-478.563	174.975
16.5	-1149	1023	731	-581	-27.150	16.400	-438.838	164.513
17	-613	479	852	-698	-13.650	19.375	-411.688	148.113
17.5	-500	373	991	-845	-10.913	22.950	-398.038	128.738
18	-460	309	755	-615	-9.613	17.125	-387.125	105.788
18.5	-369	242	328	-193	-7.638	6.513	-377.513	88.663
19	-241	121	-27	159	-4.525	-2.325	-369.875	82.150
19.5	-375	236	-218	346	-7.638	-7.050	-365.350	84.475
20	-219	74	-477	615	-3.663	-13.650	-357.713	91.525
20.5	-141	20	-621	777	-2.013	-17.475	-354.050	105.175
21	-235	85	-441	586	-4.000	-12.838	-352.038	122.650
21.5	-67	-82	-91	251	0.188	-4.275	-348.038	135.488
22	-98	-218	151	11	3.950	1.750	-348.225	139.763
22.5	182	-318	325	-192	6.250	6.463	-352.175	138.013
23	304	-444	507	-369	9.350	10.950	-358.425	131.550
23.5	483	-608	682	-531	13.638	15.163	-367.775	120.600
24	351	-489	720	-585	10.500	16.313	-381.413	105.438
24.5	201	-323	556	-401	6.550	11.963	-391.913	89.125
25	-33	-121	489	-349	1.100	10.475	-398.463	77.163
25.5	-433	306	453	-323	-9.238	9.700	-399.563	66.688
26	-1026	878	321	-202	-23.800	6.538	-390.325	56.988
26.5	-1287	1161	155	27	-30.600	1.600	-366.525	50.450
27	-1318	1195	234	-98	-31.413	4.150	-335.925	48.850
27.5	-1337	1209	282	-141	-31.825	5.288	-304.513	44.700
28	-1435	1301	292	-139	-34.200	5.388	-272.688	39.413
28.5	-1525	1384	310	-152	-36.363	5.775	-238.488	34.025
29	-1585	1457	386	-231	-38.025	7.713	-202.125	28.250
29.5	-1577	1453	456	-309	-37.875	9.563	-164.100	20.538
30	-1222	1077	543	-420	-28.738	12.038	-126.225	10.975
30.5	-867	749	480	-348	-20.200	10.350	-97.488	-1.063
31	-515	387	194	-66	-11.275	3.250	-77.288	-11.413
31.5	-86	-86	-176	303	0.000	-5.988	-66.013	-14.663
32	331	-463	-94	214	9.925	-3.850	-66.013	-8.675
32.5	126	-245	32	103	4.638	-0.888	-75.938	-4.825
33	-583	444	51	98	-12.838	-0.588	-80.575	-3.938
33.5	-902	766	54	95	-20.850	-0.513	-67.738	-3.350
34	-955	828	32	140	-22.288	-1.350	-46.888	-2.838
34.5	-1045	923	15	134	-24.600	-1.488	-24.600	-1.488
Reference Point (35 m)							0.000	0.000



**C305-IM142030**

Serial number probe: 1035333

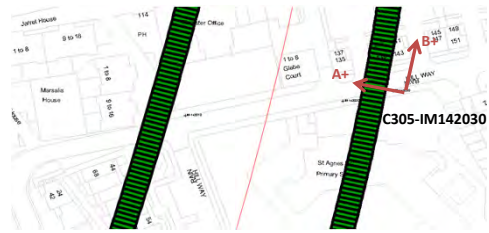


15-9-13 12:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1418	1244	-85	142	-33.278	-2.841	-825.773	-20.159
1	-807	638	-239	333	-18.065	-7.154	-792.495	-17.318
1.5	-322	136	-439	509	-5.728	-11.854	-774.430	-10.164
2	129	-318	-756	839	5.585	-19.941	-768.703	1.690
2.5	572	-756	-1278	1360	16.598	-32.979	-774.288	21.631
3	404	-569	-1394	1461	12.160	-35.691	-790.885	54.610
3.5	1	-168	-1239	1323	2.110	-32.029	-803.045	90.301
4	-491	316	-881	975	-10.090	-23.204	-805.155	122.330
4.5	-981	819	-529	602	-22.503	-14.141	-795.065	145.534
5	-1276	1117	-223	308	-29.915	-6.641	-772.563	159.675
5.5	-1591	1423	-40	138	-37.678	-2.229	-742.648	166.316
6	-1386	1216	106	1	-32.528	1.309	-704.970	168.545
6.5	-1013	836	173	-96	-23.115	3.359	-672.443	167.236
7	-761	578	233	-172	-16.740	5.059	-649.328	163.878
7.5	-504	324	242	-162	-10.353	5.046	-632.588	158.819
8	-365	203	286	-199	-7.103	6.059	-622.235	153.773
8.5	-784	623	547	-461	-17.590	12.596	-615.133	147.714
9	-845	670	462	-375	-18.940	10.459	-597.543	135.118
9.5	-612	442	313	-237	-13.178	6.871	-578.603	124.659
10	-348	188	132	-32	-6.703	2.046	-565.425	117.788
10.5	35	-223	-130	209	3.223	-4.241	-558.723	115.741
11	469	-639	-424	513	13.848	-11.716	-561.945	119.983
11.5	497	-659	-481	561	14.448	-13.029	-575.793	131.699
12	233	-411	-404	487	8.048	-11.141	-590.240	144.728
12.5	56	-206	-386	473	3.273	-10.741	-598.288	155.869
13	-186	8	-328	411	-2.428	-9.241	-601.560	166.610
13.5	-429	253	-240	319	-8.528	-6.991	-599.133	175.851
14	-670	515	-150	235	-14.815	-4.816	-590.605	182.843
14.5	-1040	891	148	-62	-24.140	2.621	-575.790	187.659
15	-1374	1191	275	-187	-32.065	5.771	-551.650	185.038
15.5	-1625	1461	328	-235	-38.578	7.034	-519.585	179.266
16	-1677	1511	460	-357	-39.853	10.209	-481.008	172.233
16.5	-1187	1002	700	-594	-27.365	16.171	-441.155	162.024
17	-648	456	820	-718	-13.803	19.221	-413.790	145.853
17.5	-520	359	961	-862	-10.990	22.784	-399.988	126.631
18	-484	285	739	-641	-9.615	17.246	-388.998	103.848
18.5	-401	228	304	-218	-7.865	6.521	-379.383	86.601
19	-260	106	-45	142	-4.578	-2.341	-371.518	80.080
19.5	-392	226	-240	338	-7.728	-7.229	-366.940	82.421
20	-248	59	-493	586	-3.840	-13.491	-359.213	89.650
20.5	-154	2	-641	754	-1.953	-17.441	-355.373	103.141
21	-263	68	-481	556	-4.140	-12.966	-353.420	120.583
21.5	-93	-97	-112	229	0.048	-4.266	-349.280	133.549
22	82	-232	122	-1	3.923	1.534	-349.328	137.815
22.5	156	-331	301	-211	6.085	6.396	-353.250	136.281
23	283	-459	485	-393	9.273	10.971	-359.335	129.885
23.5	454	-620	669	-558	13.423	15.334	-368.608	118.914
24	326	-508	691	-619	10.423	16.371	-382.030	103.580
24.5	174	-345	538	-422	6.485	11.996	-392.453	87.209
25	-48	-136	470	-369	1.098	10.484	-398.938	75.213
25.5	-449	288	432	-344	-9.215	9.696	-400.035	64.729
26	-1047	866	304	-221	-23.915	6.559	-390.820	55.033
26.5	-1297	1136	124	16	-30.415	1.346	-366.905	48.474
27	-1338	1180	210	-110	-31.478	3.996	-336.490	47.128
27.5	-1358	1183	254	-158	-31.765	5.146	-305.013	43.131
28	-1450	1284	271	-170	-34.178	5.509	-273.248	37.985
28.5	-1545	1366	282	-174	-36.390	5.696	-239.070	32.476
29	-1613	1438	339	-253	-38.140	7.396	-202.680	26.780
29.5	-1599	1438	426	-337	-37.965	9.534	-164.540	19.384
30	-1245	1064	497	-432	-28.865	11.609	-126.575	9.850
30.5	-891	726	465	-355	-20.215	10.246	-97.710	-1.759
31	-538	366	169	-75	-11.303	3.046	-77.495	-12.005
31.5	-122	-109	-205	282	-0.165	-6.091	-66.193	-15.051
32	303	-482	-97	197	9.810	-3.679	-66.028	-8.960
32.5	125	-265	21	80	4.873	-0.741	-75.838	-5.281
33	-601	429	20	78	-12.878	-0.729	-80.710	-4.540
33.5	-920	757	45	77	-20.965	-0.404	-67.833	-3.811
34	-979	806	-36	132	-22.315	-2.104	-46.868	-3.408
34.5	-1066	898	2	106	-24.553	-1.304	-24.553	-1.304
Reference Point (35 m)							0.000	0.000

**C305-IM142030**

Serial number probe: D11244

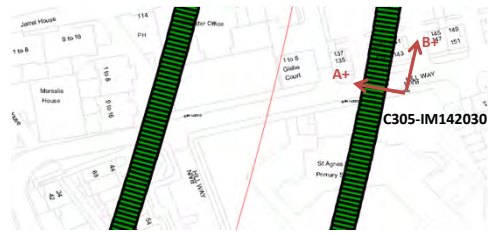


16-9-13 16:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1385	1281	-67	161	-33.325	-2.850	-822.388	-19.188
1	-773	677	-219	354	-18.125	-7.163	-789.063	-16.338
1.5	-284	171	-419	535	-5.688	-11.925	-770.938	-9.175
2	173	-288	-731	858	5.763	-19.863	-765.250	2.750
2.5	609	-715	-1258	1378	16.550	-32.950	-771.013	22.613
3	442	-530	-1376	1490	12.150	-35.825	-787.563	55.563
3.5	34	-140	-1209	1344	2.175	-31.913	-799.713	91.388
4	-450	350	-858	997	-10.000	-23.188	-801.888	123.300
4.5	-942	859	-509	628	-22.513	-14.213	-791.888	146.488
5	-1244	1152	-206	331	-29.950	-6.713	-769.375	160.700
5.5	-1553	1459	-22	159	-37.650	-2.263	-739.425	167.413
6	-1354	1247	130	27	-32.513	1.288	-701.775	169.675
6.5	-970	878	192	-70	-23.100	3.275	-669.263	168.388
7	-719	620	264	-149	-16.738	5.163	-646.163	165.113
7.5	-466	366	261	-136	-10.400	4.963	-629.425	159.950
8	-333	241	309	-182	-7.175	6.138	-619.025	154.988
8.5	-745	651	574	-437	-17.450	12.638	-611.850	148.850
9	-799	702	480	-358	-18.763	10.475	-594.400	136.213
9.5	-578	479	341	-220	-13.213	7.013	-575.638	125.738
10	-310	216	162	-16	-6.575	2.225	-562.425	118.725
10.5	76	-190	-112	230	3.325	-4.275	-555.850	116.500
11	506	-611	-393	537	13.963	-11.625	-559.175	120.775
11.5	536	-624	-459	587	14.500	-13.075	-573.138	132.400
12	276	-377	-384	515	8.163	-11.238	-587.638	145.475
12.5	89	-171	-365	500	3.250	-10.813	-595.800	156.713
13	-142	46	-299	434	-2.350	-9.163	-599.050	167.525
13.5	-391	290	-210	348	-8.513	-6.975	-596.700	176.688
14	-634	544	-124	262	-14.725	-4.825	-588.188	183.663
14.5	-1005	924	175	-39	-24.113	2.675	-573.463	188.488
15	-1332	1231	297	-158	-32.038	5.688	-549.350	185.813
15.5	-1588	1500	354	-214	-38.600	7.100	-517.313	180.125
16	-1635	1544	484	-336	-39.738	10.250	-478.713	173.025
16.5	-1143	1038	721	-576	-27.263	16.213	-438.975	162.775
17	-602	496	851	-697	-13.725	19.350	-411.713	146.563
17.5	-484	387	990	-832	-10.888	22.775	-397.988	127.213
18	-442	327	757	-611	-9.613	17.100	-387.100	104.438
18.5	-358	260	329	-190	-7.725	6.488	-377.488	87.338
19	-221	136	-26	161	-4.463	-2.338	-369.763	80.850
19.5	-358	255	-216	355	-7.663	-7.138	-365.300	83.188
20	-204	94	-469	609	-3.725	-13.475	-357.638	90.325
20.5	-122	38	-618	775	-2.000	-17.413	-353.913	103.800
21	-220	104	-451	581	-4.050	-12.900	-351.913	121.213
21.5	-51	-65	-92	253	0.175	-4.313	-347.863	134.113
22	117	-203	150	18	4.000	1.650	-348.038	138.425
22.5	199	-302	324	-190	6.263	6.425	-352.038	136.775
23	318	-422	511	-366	9.250	10.963	-358.300	130.350
23.5	494	-590	686	-530	13.550	15.200	-367.550	119.388
24	369	-467	718	-594	10.450	16.400	-381.100	104.188
24.5	214	-305	563	-405	6.488	12.100	-391.550	87.788
25	-5	-99	490	-349	1.175	10.488	-398.038	75.688
25.5	-408	323	463	-324	-9.138	9.838	-399.213	65.200
26	-1001	895	323	-198	-23.700	6.513	-390.075	55.363
26.5	-1265	1178	151	37	-30.538	1.425	-366.375	48.850
27	-1302	1212	236	-86	-31.425	4.025	-335.838	47.425
27.5	-1316	1225	283	-131	-31.763	5.175	-304.413	43.400
28	-1413	1316	291	-143	-34.113	5.425	-272.650	38.225
28.5	-1506	1403	305	-150	-36.363	5.688	-238.538	32.800
29	-1570	1472	362	-233	-38.025	7.438	-202.175	27.113
29.5	-1562	1469	453	-310	-37.888	9.538	-164.150	19.675
30	-1212	1095	528	-409	-28.838	11.713	-126.263	10.138
30.5	-854	768	484	-330	-20.275	10.175	-97.425	-1.575
31	-503	401	200	-59	-11.300	3.238	-77.150	-11.750
31.5	-76	-69	-175	308	-0.088	-6.038	-65.850	-14.988
32	343	-445	-78	213	9.850	-3.638	-65.763	-8.950
32.5	158	-229	47	107	4.838	-0.750	-75.613	-5.313
33	-559	459	42	103	-12.725	-0.763	-80.450	-4.563
33.5	-883	785	65	101	-20.850	-0.450	-67.725	-3.800
34	-939	845	-5	152	-22.300	-1.963	-46.875	-3.350
34.5	-1026	940	19	130	-24.575	-1.388	-24.575	-1.388
Reference Point (35 m)							0.000	0.000

**C305-IM142030**

Serial number probe: 1035333

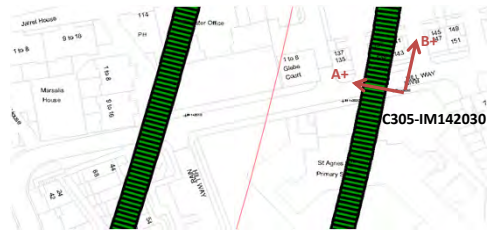


15-9-13 13:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1420	1238	-91	131	-33.228	-2.779	-822.935	-19.571
1	-811	633	-238	315	-18.053	-6.916	-789.708	-16.793
1.5	-325	135	-447	506	-5.753	-11.916	-771.655	-9.876
2	138	-325	-755	842	5.785	-19.966	-765.903	2.040
2.5	575	-744	-1292	1367	16.485	-33.241	-771.688	22.006
3	401	-573	-1373	1473	12.173	-35.579	-788.173	55.248
3.5	-5	-181	-1254	1332	2.198	-32.329	-800.345	90.826
4	-497	306	-886	972	-10.040	-23.229	-802.543	123.155
4.5	-983	822	-534	617	-22.565	-14.391	-792.503	146.384
5	-1290	1111	-236	307	-30.015	-6.791	-769.938	160.775
5.5	-1596	1418	-54	132	-37.678	-2.329	-739.923	167.566
6	-1388	1213	92	8	-32.515	1.046	-702.245	169.895
6.5	-1006	838	179	-98	-23.053	3.459	-669.730	168.849
7	-759	577	238	-164	-16.703	5.021	-646.676	165.390
7.5	-502	327	229	-180	-10.365	5.109	-629.975	160.369
8	-379	207	268	-204	-7.328	5.896	-619.610	155.260
8.5	-785	619	546	-466	-17.553	12.646	-612.283	149.364
9	-835	658	461	-386	-18.665	10.584	-594.730	136.718
9.5	-616	446	316	-242	-13.278	6.971	-576.065	126.134
10	-344	176	132	-53	-6.503	2.309	-562.788	119.163
10.5	43	-235	-146	208	3.473	-4.429	-556.285	116.854
11	473	-650	-415	497	14.035	-11.404	-559.758	121.283
11.5	489	-663	-473	559	14.398	-12.904	-573.793	132.686
12	232	-418	-409	489	8.123	-11.229	-588.190	145.590
12.5	46	-208	-391	475	3.173	-10.829	-596.313	156.819
13	-182	13	-327	414	-2.440	-9.266	-599.485	167.648
13.5	-424	258	-245	321	-8.528	-7.079	-597.045	176.914
14	-676	506	-150	243	-14.778	-4.916	-588.518	183.993
14.5	-1049	889	162	-59	-24.228	2.759	-573.740	188.909
15	-1375	1188	270	-181	-32.040	5.634	-549.513	186.150
15.5	-1628	1463	334	-235	-38.640	7.109	-517.473	180.516
16	-1668	1499	460	-357	-39.590	10.209	-478.833	173.408
16.5	-1176	993	702	-602	-27.115	16.296	-439.243	163.199
17	-637	459	822	-720	-13.703	19.271	-412.128	146.903
17.5	-523	357	966	-861	-11.003	22.834	-398.425	127.631
18	-480	283	729	-634	-9.540	17.034	-387.423	104.798
18.5	-393	225	303	-208	-7.728	6.384	-377.883	87.764
19	-257	97	-45	145	-4.428	-2.379	-370.155	81.380
19.5	-391	218	-239	332	-7.615	-7.141	-365.728	83.759
20	-241	53	-506	584	-3.678	-13.629	-358.113	90.900
20.5	-168	-4	-648	746	-2.053	-17.429	-354.435	104.529
21	-252	70	-464	568	-4.028	-12.904	-352.383	121.958
21.5	-87	-111	-108	225	0.298	-4.166	-348.355	134.861
22	79	-240	131	-13	3.985	1.796	-348.653	139.028
22.5	157	-342	301	-212	6.235	6.409	-352.638	137.231
23	280	-462	483	-394	9.273	10.959	-358.873	130.823
23.5	463	-622	656	-552	13.560	15.096	-368.145	119.864
24	329	-505	689	-628	10.423	16.459	-381.705	104.768
24.5	182	-346	529	-430	6.598	11.984	-392.128	88.309
25	-49	-140	463	-367	1.135	10.371	-398.725	76.325
25.5	-461	292	435	-347	-9.415	9.771	-399.860	65.954
26	-1051	851	306	-221	-23.778	6.584	-390.445	56.183
26.5	-1302	1138	124	5	-30.503	1.484	-366.668	49.599
27	-1344	1175	212	-119	-31.490	4.134	-336.165	48.115
27.5	-1358	1190	260	-160	-31.853	5.246	-304.675	43.981
28	-1454	1275	265	-155	-34.115	5.246	-272.823	38.735
28.5	-1541	1372	285	-170	-36.415	5.684	-238.708	33.489
29	-1608	1436	347	-252	-38.053	7.484	-202.293	27.805
29.5	-1598	1432	411	-331	-37.878	9.271	-164.240	20.321
30	-1238	1057	512	-429	-28.690	11.759	-126.363	11.050
30.5	-889	722	450	-379	-20.140	10.359	-97.673	-0.709
31	-534	364	178	-84	-11.228	3.271	-77.533	-11.068
31.5	-100	-104	-206	285	0.048	-6.141	-66.305	-14.339
32	308	-484	-113	184	9.898	-3.716	-66.353	-8.198
32.5	106	-261	-1	84	4.585	-1.066	-76.250	-4.481
33	-606	431	58	81	-12.965	-0.291	-80.835	-3.415
33.5	-927	742	44	67	-20.865	-0.291	-67.870	-3.124
34	-971	812	12	124	-22.290	-1.404	-47.005	-2.833
34.5	-1069	908	-4	110	-24.715	-1.429	-24.715	-1.429
Reference Point (35 m)							0.000	0.000

**C305-IM142030**

Serial number probe: D11244

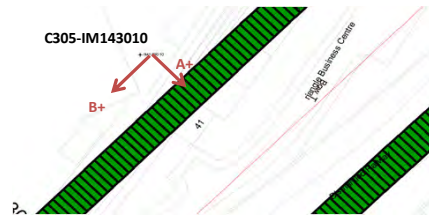


16-9-13 17:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1379	1277	-68	158	-33.200	-2.825	-819.538	-18.600
1	-770	672	-220	341	-18.025	-7.013	-786.338	-15.775
1.5	-281	170	-418	534	-5.638	-11.900	-768.313	-8.762
2	179	-291	-733	869	5.875	-20.025	-762.675	3.138
2.5	610	-714	-1265	1384	16.550	-33.113	-768.550	23.163
3	440	-532	-1355	1493	12.150	-35.600	-785.100	56.275
3.5	33	-144	-1228	1350	2.213	-32.225	-797.250	91.875
4	-453	346	-862	996	-9.988	-23.225	-799.463	124.100
4.5	-947	856	-510	635	-22.538	-14.313	-789.475	147.325
5	-1247	1148	-210	331	-29.938	-6.763	-766.938	161.638
5.5	-1558	1455	-27	155	-37.663	-2.275	-737.000	168.400
6	-1351	1244	115	28	-32.438	1.088	-699.338	170.675
6.5	-966	875	201	-71	-23.013	3.400	-666.900	169.588
7	-722	618	256	-142	-16.750	4.975	-643.888	166.188
7.5	-464	364	249	-152	-10.350	5.013	-627.138	161.213
8	-338	236	297	-183	-7.175	6.000	-616.788	156.200
8.5	-748	650	573	-438	-17.475	12.638	-609.613	150.200
9	-800	699	484	-360	-18.738	10.550	-592.138	137.563
9.5	-573	476	339	-221	-13.113	7.000	-573.400	127.013
10	-309	212	153	-31	-6.513	2.300	-560.288	120.013
10.5	84	-194	-118	225	3.475	-4.288	-553.775	117.713
11	513	-614	-396	526	14.088	-11.525	-557.250	122.000
11.5	529	-630	-455	588	14.488	-13.038	-571.338	133.525
12	272	-378	-389	514	8.125	-11.288	-585.825	146.563
12.5	86	-174	-363	500	3.250	-10.788	-593.950	157.850
13	-147	43	-304	435	-2.375	-9.238	-597.200	168.638
13.5	-391	288	-218	348	-8.488	-7.075	-594.828	177.875
14	-641	539	-131	262	-14.750	-4.913	-586.338	184.950
14.5	-1012	921	183	-39	-24.163	2.775	-571.588	189.863
15	-1334	1228	298	-161	-32.025	5.738	-547.425	187.088
15.5	-1590	1496	361	-216	-38.575	7.213	-515.400	181.350
16	-1633	1539	489	-340	-39.650	10.363	-476.825	174.138
16.5	-1131	1034	731	-577	-27.063	16.350	-437.175	163.775
17	-599	492	844	-698	-13.638	19.275	-410.113	147.425
17.5	-483	390	992	-836	-10.913	22.850	-396.475	128.150
18	-442	324	752	-611	-9.575	17.038	-385.563	105.300
18.5	-352	256	325	-187	-7.600	6.400	-375.988	88.263
19	-221	132	-26	163	-4.413	-2.363	-368.388	81.863
19.5	-358	251	-219	351	-7.613	-7.125	-363.975	84.225
20	-198	91	-476	609	-3.613	-13.563	-356.363	91.350
20.5	-124	33	-619	772	-1.963	-17.388	-352.750	104.913
21	-218	102	-444	585	-4.000	-12.863	-350.788	122.300
21.5	-44	-71	-88	252	0.338	-4.250	-346.788	135.163
22	117	-206	154	10	4.038	1.800	-347.125	139.413
22.5	200	-303	331	-191	6.288	6.525	-351.163	137.613
23	321	-427	505	-368	9.350	10.913	-357.450	131.088
23.5	501	-593	686	-531	13.675	15.213	-366.800	120.175
24	365	-469	714	-599	10.425	16.413	-380.475	104.963
24.5	218	-309	558	-409	6.588	12.088	-390.900	88.550
25	-9	-102	485	-350	1.163	10.438	-397.488	76.463
25.5	-416	322	462	-321	-9.225	9.788	-398.650	66.025
26	-1006	892	328	-195	-23.725	6.538	-389.425	56.238
26.5	-1268	1174	152	34	-30.525	1.475	-365.700	49.700
27	-1301	1210	237	-92	-31.388	4.113	-335.175	48.225
27.5	-1319	1223	278	-131	-31.775	5.113	-303.788	44.113
28	-1416	1316	293	-136	-34.150	5.363	-272.013	39.000
28.5	-1507	1401	308	-153	-36.350	5.763	-237.863	33.638
29	-1566	1472	376	-224	-37.975	7.500	-201.513	27.875
29.5	-1559	1468	440	-311	-37.838	9.388	-163.538	20.375
30	-1205	1095	540	-406	-28.750	11.825	-125.700	10.988
30.5	-849	763	473	-354	-20.150	10.338	-96.950	-0.838
31	-497	400	196	-59	-11.213	3.188	-76.800	-11.175
31.5	-67	-71	-176	314	0.050	-6.125	-65.588	-14.363
32	353	-449	-86	212	10.025	-3.725	-65.638	-8.238
32.5	147	-230	21	102	4.713	-1.013	-75.663	-4.513
33	-564	460	77	100	-12.800	-0.288	-80.375	-3.500
33.5	-883	781	69	95	-20.800	-0.325	-67.575	-3.213
34	-935	844	32	147	-22.238	-1.438	-46.775	-2.888
34.5	-1026	937	16	132	-24.538	-1.450	-24.538	-1.450
Reference Point (35 m)							0.000	0.000

C305-IM143010

Serial number probe: 1035333



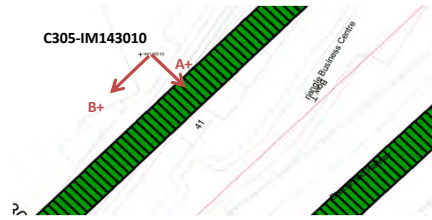
8-7-13 10:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	1438	-1627	-305	407	38.310	-8.904	1382.148	606.909
1	927	-1127	-263	353	25.673	-7.704	1343.838	615.813
1.5	527	-725	-118	203	15.648	-4.016	1318.165	623.516
2	211	-402	149	-17	7.660	2.071	1302.518	627.533
2.5	-108	-103	415	-322	-0.065	9.209	1294.858	625.461
3	117	-308	560	-447	5.310	12.584	1294.923	616.253
3.5	135	-339	586	-496	5.923	13.521	1289.613	603.669
4	39	-234	681	-586	3.410	15.834	1283.690	590.148
4.5	-47	-165	791	-704	1.473	18.684	1280.280	574.314
5	-127	-76	879	-787	-0.640	20.821	1278.808	555.630
5.5	-190	-9	921	-835	-2.265	21.946	1279.448	534.809
6	-11	-183	881	-769	2.148	20.621	1281.713	512.863
6.5	30	-215	777	-658	3.060	17.934	1279.565	492.241
7	70	-274	583	-494	4.298	13.459	1276.505	474.308
7.5	190	-381	418	-333	7.135	9.384	1272.208	460.849
8	267	-447	316	-227	8.923	6.784	1265.073	451.465
8.5	422	-608	219	-134	12.873	4.409	1256.150	444.681
9	392	-585	457	-325	12.210	9.771	1243.278	440.273
9.5	262	-463	487	-381	9.060	10.846	1231.068	430.501
10	188	-385	457	-357	7.160	10.171	1222.008	419.655
10.5	119	-313	428	-330	5.398	9.471	1214.848	409.484
11	69	-273	397	-296	4.273	8.659	1209.450	400.013
11.5	40	-237	384	-291	3.460	8.434	1205.178	391.354
12	131	-322	449	-346	5.660	9.934	1201.718	382.920
12.5	303	-506	448	-340	10.110	9.846	1196.058	372.986
13	474	-664	347	-241	14.223	7.346	1185.948	363.140
13.5	733	-920	191	-90	20.660	3.509	1171.725	355.794
14	937	-1134	71	58	25.885	0.159	1151.065	352.285
14.5	1071	-1260	124	-6	29.135	1.621	1125.180	352.126
15	1176	-1354	460	-343	31.623	10.034	1096.045	350.505
15.5	1144	-1342	532	-432	31.073	12.046	1064.423	340.471
16	1126	-1322	523	-436	30.598	11.984	1033.350	328.425
16.5	1071	-1265	506	-410	29.198	11.446	1002.753	316.441
17	1045	-1239	545	-437	28.548	12.271	973.555	304.995
17.5	1077	-1264	548	-461	29.260	12.609	945.008	292.724
18	1394	-1569	647	-565	37.035	15.146	915.748	280.115
18.5	1389	-1592	527	-447	37.260	12.171	878.713	264.969
19	1263	-1458	400	-311	34.010	8.884	841.453	252.798
19.5	1123	-1314	306	-234	30.460	6.746	807.443	243.914
20	1010	-1203	268	-181	27.660	5.609	776.983	237.168
20.5	933	-1118	252	-159	25.635	5.134	749.323	231.559
21	1156	-1345	281	-202	31.260	6.034	723.688	226.425
21.5	1195	-1392	325	-236	32.335	7.009	692.428	220.391
22	1134	-1317	369	-271	30.635	7.996	660.093	213.383
22.5	1009	-1195	398	-317	27.548	8.934	629.458	205.386
23	849	-1044	456	-368	23.660	10.296	601.910	196.453
23.5	663	-851	620	-519	18.923	14.234	578.250	186.156
24	636	-825	724	-633	18.260	16.959	559.328	171.923
24.5	850	-1028	653	-553	23.473	15.071	541.068	154.964
25	962	-1163	589	-482	26.560	13.384	517.595	139.893
25.5	1006	-1205	548	-451	27.635	12.484	491.035	126.509
26	1088	-1259	531	-425	29.335	11.946	463.400	114.025
26.5	1151	-1371	439	-355	31.523	9.921	434.065	102.079
27	1406	-1591	289	-224	37.460	6.409	402.543	92.158
27.5	1256	-1436	336	-246	33.648	7.271	365.083	85.749
28	1043	-1243	361	-271	28.573	7.896	331.435	78.478
28.5	948	-1121	386	-287	25.860	8.409	302.863	70.581
29	1005	-1197	299	-205	27.523	6.296	277.003	62.173
29.5	998	-1184	214	-134	27.273	4.346	249.480	55.876
30	819	-1006	286	-193	22.810	5.984	222.208	51.530
30.5	668	-857	266	-181	19.060	5.584	199.398	45.546
31	575	-752	311	-224	16.585	6.684	180.338	39.963
31.5	491	-674	360	-278	14.560	7.971	163.753	33.279
32	418	-605	399	-319	12.785	8.971	149.193	25.308
32.5	401	-576	409	-328	12.210	9.209	136.408	16.336
33	409	-609	453	-322	12.723	9.684	124.198	7.128
33.5	618	-818	238	-129	17.948	4.584	111.475	-2.556
34	1067	-1251	-28	133	28.973	-2.016	93.528	-7.140
34.5	1021	-1211	-75	171	27.898	-3.079	64.555	-5.124
35	713	-915	-74	156	20.348	-2.879	36.658	-2.045
35.5	563	-742	89	22	16.310	0.834	16.310	0.834
Reference Point (36 m)							0.000	0.000



C305-IM143010

Serial number probe: D11244

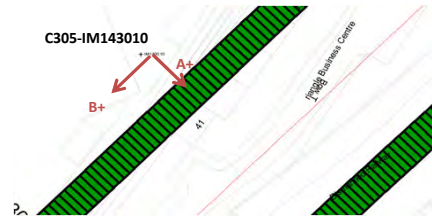


9-7-13 11:30

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	1479	-1595	-281	425	38.425	-8.825	1386.688	608.225
1	968	-1090	-240	381	25.725	-7.763	1348.263	617.050
1.5	565	-686	-89	224	15.638	-3.913	1322.538	624.813
2	252	-366	168	5	7.725	2.038	1306.900	628.725
2.5	-73	-71	439	-302	-0.025	9.263	1299.175	626.688
3	155	-277	579	-423	5.400	12.525	1299.200	617.425
3.5	176	-303	615	-478	5.988	13.663	1293.800	604.900
4	79	-201	710	-565	3.500	15.938	1287.813	591.238
4.5	-5	-129	816	-680	1.550	18.700	1284.313	575.300
5	-92	-40	908	-764	-0.650	20.900	1282.763	556.600
5.5	-148	24	947	-817	-2.150	22.050	1283.413	535.700
6	28	-152	900	-745	2.250	20.563	1285.563	513.650
6.5	68	-181	799	-632	3.113	17.888	1283.313	493.088
7	112	-240	612	-470	4.400	13.525	1280.200	475.200
7.5	229	-351	441	-306	7.250	9.338	1275.800	461.675
8	302	-416	342	-203	8.975	6.813	1268.550	452.338
8.5	458	-577	239	-111	12.938	4.375	1259.575	445.525
9	431	-550	476	-302	12.263	9.725	1246.638	441.150
9.5	303	-432	511	-355	9.188	10.825	1234.375	431.425
10	229	-346	483	-339	7.188	10.275	1225.188	420.600
10.5	162	-278	457	-302	5.500	9.488	1218.000	410.325
11	112	-237	426	-270	4.363	8.700	1212.500	400.838
11.5	79	-199	403	-268	3.475	8.388	1208.138	392.138
12	172	-282	477	-324	5.675	10.013	1204.663	383.750
12.5	344	-468	474	-319	10.150	9.913	1198.988	373.738
13	518	-632	375	-222	14.375	7.463	1188.838	363.825
13.5	776	-886	215	-68	20.775	3.538	1174.463	356.363
14	974	-1100	90	77	25.925	0.163	1153.688	352.825
14.5	1109	-1225	150	20	29.175	1.625	1127.763	352.663
15	1217	-1321	489	-315	31.725	10.050	1098.588	351.038
15.5	1187	-1307	552	-413	31.175	12.063	1066.863	340.988
16	1165	-1291	552	-413	30.700	12.063	1035.688	328.925
16.5	1114	-1227	525	-388	29.263	11.413	1004.988	316.863
17	1089	-1207	573	-417	28.700	12.375	975.725	305.450
17.5	1115	-1233	571	-441	29.350	12.650	947.025	293.075
18	1428	-1539	676	-537	37.088	15.163	917.675	280.425
18.5	1426	-1554	554	-419	37.250	12.163	880.588	265.263
19	1303	-1423	423	-291	34.075	8.925	843.338	253.100
19.5	1157	-1275	335	-209	30.400	6.800	809.263	244.175
20	1052	-1164	296	-160	27.700	5.700	778.863	237.375
20.5	972	-1082	271	-141	25.675	5.150	751.163	231.675
21	1197	-1314	310	-175	31.388	6.063	725.488	226.525
21.5	1233	-1361	350	-215	32.425	7.063	694.100	220.463
22	1170	-1285	390	-250	30.888	8.000	661.675	213.400
22.5	1049	-1163	424	-294	27.650	8.975	630.988	205.400
23	887	-1008	485	-343	23.688	10.350	603.338	196.425
23.5	699	-817	640	-493	18.950	14.163	579.650	186.075
24	675	-789	750	-612	18.300	17.025	560.700	171.913
24.5	886	-997	673	-528	23.538	15.013	542.400	154.888
25	996	-1124	609	-463	26.500	13.400	518.863	139.875
25.5	1048	-1167	572	-425	27.688	12.463	492.363	126.475
26	1128	-1227	554	-407	29.438	12.013	464.675	114.013
26.5	1192	-1332	466	-327	31.550	9.913	435.238	102.000
27	1440	-1559	310	-199	37.488	6.363	403.688	92.088
27.5	1296	-1405	360	-220	33.763	7.250	366.200	85.725
28	1082	-1207	387	-252	28.613	7.988	332.438	78.475
28.5	983	-1082	405	-267	25.813	8.400	303.825	70.488
29	1045	-1162	319	-185	27.588	6.300	278.013	62.088
29.5	1033	-1149	243	-107	27.275	4.375	250.425	55.788
30	855	-969	305	-165	22.800	5.875	223.150	51.413
30.5	711	-826	285	-162	19.213	5.588	200.350	45.538
31	614	-718	333	-197	16.650	6.625	181.138	39.950
31.5	526	-643	383	-257	14.613	8.000	164.488	33.325
32	462	-571	422	-294	12.913	8.950	149.675	25.325
32.5	440	-546	429	-304	12.325	9.163	136.963	16.375
33	452	-574	479	-303	12.825	9.775	124.638	7.213
33.5	659	-781	257	-109	18.000	4.575	111.813	-2.563
34	1111	-1217	-8	156	29.100	-2.050	93.813	-7.138
34.5	1058	-1171	-48	196	27.863	-3.050	64.713	-5.088
35	753	-883	-47	184	20.450	-2.888	36.850	-2.038
35.5	604	-708	111	43	16.400	0.850	16.400	0.850
Reference Point (36 m)							0.000	0.000

C305-IM143010

Serial number probe: 1035333



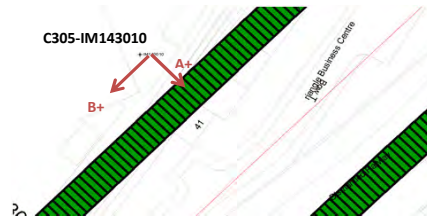
8-7-13 11:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	1439	-1639	-301	393	38.473	-8.679	1381.560	607.871
1	926	-1125	-257	362	25.635	-7.741	1343.088	616.550
1.5	521	-727	-120	201	15.598	-4.016	1317.453	624.291
2	209	-400	144	-18	7.610	2.021	1301.855	628.308
2.5	-116	-100	419	-330	-0.203	9.359	1294.245	626.286
3	118	-318	556	-443	5.448	12.484	1294.448	616.928
3.5	138	-337	595	-511	5.935	13.821	1289.000	604.444
4	30	-241	681	-592	3.385	15.909	1283.065	590.623
4.5	-42	-161	793	-710	1.485	18.784	1279.680	574.714
5	-143	-75	887	-778	-0.853	20.809	1278.195	555.930
5.5	-194	-11	923	-839	-2.290	22.021	1279.048	535.121
6	-11	-177	875	-768	2.073	20.534	1281.338	513.100
6.5	29	-213	771	-649	3.023	17.746	1279.265	492.566
7	71	-277	587	-496	4.348	13.534	1276.243	474.820
7.5	194	-388	409	-329	7.273	9.221	1271.895	461.286
8	269	-442	318	-223	8.885	6.759	1264.623	452.065
8.5	431	-615	213	-131	13.073	4.296	1255.738	445.306
9	395	-578	449	-327	12.160	9.696	1242.665	441.010
9.5	269	-471	489	-375	9.248	10.796	1230.505	431.314
10	185	-373	455	-366	6.973	10.259	1221.258	420.518
10.5	127	-319	430	-328	5.573	9.471	1214.285	410.259
11	68	-263	396	-298	4.135	8.671	1208.713	400.788
11.5	43	-229	380	-292	3.398	8.396	1204.578	392.116
12	125	-315	452	-353	5.498	10.059	1201.180	383.720
12.5	312	-507	448	-346	10.235	9.921	1195.683	373.661
13	473	-669	358	-246	14.273	7.546	1185.448	363.740
13.5	729	-916	198	-92	20.560	3.621	1171.175	356.194
14	937	-1132	68	58	25.860	0.121	1150.615	352.573
14.5	1071	-1265	123	-3	29.198	1.571	1124.755	352.451
15	1183	-1355	470	-348	31.723	10.221	1095.558	350.880
15.5	1140	-1340	537	-442	30.998	12.234	1063.835	340.659
16	1122	-1333	522	-437	30.685	11.984	1032.838	328.425
16.5	1069	-1263	507	-407	29.148	11.421	1002.153	316.441
17	1054	-1234	553	-437	28.598	12.371	973.005	305.020
17.5	1074	-1272	537	-458	29.323	12.434	944.408	292.649
18	1378	-1579	652	-560	36.960	15.146	915.085	280.215
18.5	1391	-1586	528	-437	37.210	12.059	878.125	265.069
19	1261	-1452	392	-320	33.910	8.896	840.915	253.010
19.5	1116	-1302	318	-239	30.223	6.959	807.005	244.114
20	1005	-1200	274	-186	27.560	5.746	776.783	237.155
20.5	933	-1112	242	-168	25.560	5.121	749.223	231.409
21	1171	-1347	284	-208	31.473	6.146	723.663	226.288
21.5	1191	-1393	324	-238	32.298	7.021	692.190	220.141
22	1132	-1327	359	-271	30.735	7.871	659.893	213.120
22.5	1007	-1188	391	-317	27.435	8.846	629.158	205.249
23	848	-1045	469	-369	23.660	10.471	601.723	196.403
23.5	659	-854	620	-513	18.910	14.159	578.063	185.931
24	639	-826	724	-641	18.310	17.059	559.153	171.773
24.5	846	-1041	652	-556	23.585	15.096	540.843	154.714
25	950	-1166	586	-485	26.448	13.384	517.258	139.618
25.5	1012	-1207	547	-450	27.735	12.459	490.810	126.234
26	1086	-1267	531	-432	29.410	12.034	463.075	113.775
26.5	1154	-1366	441	-353	31.498	9.921	433.665	101.741
27	1391	-1603	286	-216	37.423	6.271	402.168	91.820
27.5	1263	-1443	333	-245	33.823	7.221	364.745	85.549
28	1041	-1240	360	-277	28.510	7.959	330.923	78.328
28.5	941	-1108	381	-299	25.610	8.496	302.413	70.369
29	1008	-1194	300	-207	27.523	6.334	276.803	61.873
29.5	987	-1175	226	-127	27.023	4.409	249.280	55.539
30	823	-1003	286	-184	22.823	5.871	222.258	51.130
30.5	668	-860	271	-180	19.098	5.634	199.435	45.259
31	572	-757	307	-221	16.610	6.596	180.338	39.625
31.5	483	-675	362	-269	14.473	7.884	163.728	33.029
32	425	-607	397	-314	12.898	8.884	149.255	25.145
32.5	396	-576	414	-318	12.148	9.146	136.358	16.261
33	414	-615	457	-333	12.860	9.871	124.210	7.115
33.5	621	-812	242	-132	17.910	4.671	111.350	-2.756
34	1071	-1244	-35	137	28.935	-2.154	93.440	-7.428
34.5	1013	-1210	-68	173	27.785	-3.016	64.505	-5.274
35	710	-912	-75	156	20.273	-2.891	36.720	-2.258
35.5	567	-749	82	31	16.448	0.634	16.448	0.634
Reference Point (36 m)							0.000	0.000

C305-IM143010

Serial number probe:

D1244

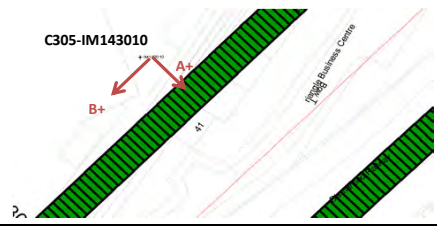


9-7-13 12:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	1485	-1601	-279	421	38.575	-8.750	1386.413	608.625
1	968	-1090	-235	379	25.725	-7.675	1347.838	617.375
1.5	562	-690	-91	227	15.650	-3.975	1322.113	625.050
2	255	-370	172	4	7.813	2.100	1306.463	629.025
2.5	-70	-72	442	-301	0.025	9.288	1298.650	626.925
3	155	-281	585	-420	5.450	12.563	1298.625	617.638
3.5	173	-303	615	-484	5.950	13.738	1293.175	605.075
4	73	-202	710	-562	3.438	15.900	1287.225	591.338
4.5	-7	-129	816	-682	1.525	18.725	1283.788	575.438
5	-98	-36	910	-761	-0.775	20.888	1282.263	556.713
5.5	-148	23	947	-817	-2.138	22.050	1283.038	535.825
6	28	-149	902	-747	2.213	20.613	1285.175	513.775
6.5	69	-175	798	-632	3.050	17.875	1282.963	493.163
7	108	-235	612	-466	4.288	13.475	1279.913	475.288
7.5	228	-353	437	-300	7.263	9.213	1275.625	461.813
8	307	-413	347	-203	9.000	6.875	1268.363	452.600
8.5	463	-583	239	-107	13.075	4.325	1259.363	445.725
9	431	-550	477	-305	12.263	9.775	1246.288	441.400
9.5	302	-429	516	-355	9.138	10.888	1234.025	431.625
10	231	-344	486	-342	7.188	10.350	1224.888	420.738
10.5	160	-280	454	-303	5.500	9.463	1217.700	410.388
11	108	-233	421	-268	4.263	8.613	1212.200	400.925
11.5	81	-199	407	-268	3.500	8.438	1207.938	392.313
12	169	-286	481	-323	5.688	10.050	1204.438	383.875
12.5	345	-470	473	-322	10.188	9.938	1198.750	373.825
13	515	-632	375	-220	14.338	7.438	1188.563	363.888
13.5	774	-883	218	-68	20.713	3.575	1174.225	356.450
14	977	-1100	88	74	25.963	0.175	1153.513	352.875
14.5	1105	-1224	153	17	29.113	1.700	1127.550	352.700
15	1216	-1321	489	-321	31.713	10.125	1098.438	351.000
15.5	1185	-1311	556	-413	31.200	12.113	1066.725	340.875
16	1165	-1291	553	-408	30.700	12.013	1035.525	328.763
16.5	1113	-1226	528	-388	29.238	11.450	1004.825	316.750
17	1094	-1203	570	-417	28.713	12.338	975.588	305.300
17.5	1110	-1234	568	-441	29.300	12.613	946.875	292.963
18	1424	-1538	677	-536	37.025	15.163	917.575	280.350
18.5	1431	-1550	555	-418	37.263	12.163	880.550	265.188
19	1304	-1420	422	-292	34.050	8.925	843.288	253.025
19.5	1157	-1272	336	-211	30.363	6.838	809.238	244.100
20	1048	-1167	296	-164	27.688	5.750	778.875	237.263
20.5	975	-1081	266	-142	25.700	5.100	751.188	231.513
21	1203	-1315	311	-179	31.475	6.125	725.488	226.413
21.5	1232	-1364	350	-218	32.450	7.100	694.013	220.288
22	1169	-1286	385	-250	30.688	7.938	661.563	213.188
22.5	1050	-1158	420	-289	27.600	8.863	630.875	205.250
23	887	-1009	486	-348	23.700	10.425	603.275	196.388
23.5	701	-816	641	-494	18.963	14.188	579.575	185.963
24	674	-789	751	-612	18.288	17.038	560.613	171.775
24.5	882	-1002	670	-529	23.550	14.988	542.325	154.738
25	991	-1124	603	-458	26.438	13.263	518.775	139.750
25.5	1053	-1170	566	-424	27.788	12.375	492.338	126.488
26	1128	-1226	549	-409	29.425	11.975	464.550	114.113
26.5	1196	-1329	464	-324	31.563	9.850	435.125	102.138
27	1437	-1561	314	-199	37.475	6.413	403.563	92.288
27.5	1301	-1401	361	-219	33.775	7.250	366.088	85.875
28	1077	-1207	383	-249	28.550	7.900	332.313	78.625
28.5	982	-1077	404	-269	25.738	8.413	303.763	70.725
29	1048	-1159	322	-183	27.588	6.313	278.025	62.313
29.5	1031	-1147	244	-111	27.225	4.438	250.438	56.000
30	855	-963	305	-166	22.725	5.888	223.213	51.563
30.5	712	-827	290	-164	19.238	5.675	200.488	45.675
31	611	-716	337	-197	16.588	6.675	181.250	40.000
31.5	525	-645	386	-251	14.625	7.963	164.663	33.325
32	462	-574	420	-294	12.950	8.925	150.038	25.363
32.5	439	-542	431	-301	12.263	9.150	137.088	16.438
33	455	-579	476	-307	12.925	9.788	124.825	7.288
33.5	663	-782	259	-111	18.063	4.625	111.900	-2.500
34	1114	-1215	-4	155	29.113	-1.988	93.838	-7.125
34.5	1058	-1171	-51	196	27.863	-3.088	64.725	-5.138
35	751	-881	-48	181	20.400	-2.863	36.863	-2.050
35.5	606	-711	113	48	16.463	0.813	16.463	0.813
Reference Point (36 m)							0.000	0.000

C305-IM143010

Serial number probe: 1035333

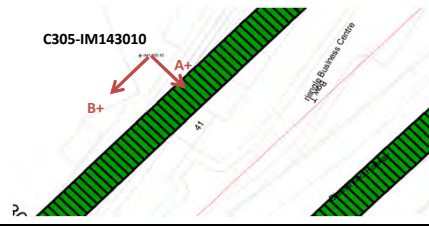


8-7-13 12:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	1441	-1627	-300	393	38.348	-8.666	1382.498	608.309
1	924	-1122	-256	360	25.573	-7.704	1344.150	616.975
1.5	524	-720	-118	203	15.548	-4.016	1318.578	624.679
2	218	-397	154	-12	7.685	2.071	1303.030	628.695
2.5	-100	-102	419	-329	0.023	9.346	1295.345	626.624
3	121	-310	552	-445	5.385	12.459	1295.323	617.278
3.5	133	-334	594	-500	5.835	13.671	1289.938	604.819
4	34	-240	696	-576	3.423	15.896	1284.103	591.148
4.5	-41	-159	799	-702	1.473	18.759	1280.680	575.251
5	-132	-70	883	-790	-0.778	20.909	1279.208	556.493
5.5	-189	-9	914	-837	-2.253	21.884	1279.985	535.584
6	-14	-185	883	-763	2.135	20.571	1282.238	513.700
6.5	25	-221	770	-658	3.073	17.846	1280.103	493.129
7	66	-277	593	-495	4.285	13.596	1277.030	475.283
7.5	191	-393	411	-326	7.298	9.209	1272.745	461.686
8	268	-447	321	-218	8.935	6.734	1265.448	452.478
8.5	423	-615	218	-130	12.973	4.346	1256.513	445.744
9	384	-577	446	-321	12.010	9.584	1243.540	441.398
9.5	255	-473	498	-384	9.098	11.021	1231.530	431.814
10	191	-374	464	-370	7.060	10.421	1222.433	420.793
10.5	123	-313	441	-331	5.448	9.646	1215.373	410.371
11	71	-269	404	-294	4.248	8.721	1209.925	400.725
11.5	46	-225	376	-294	3.385	8.371	1205.678	392.004
12	135	-327	457	-355	5.773	10.146	1202.293	383.633
12.5	312	-501	449	-350	10.160	9.984	1196.520	373.486
13	479	-677	347	-238	14.448	7.309	1186.360	363.503
13.5	738	-920	196	-96	20.723	3.646	1171.913	356.194
14	934	-1135	61	52	25.860	0.109	1151.190	352.548
14.5	1074	-1262	131	-11	29.198	1.771	1125.330	352.439
15	1180	-1355	470	-337	31.685	10.084	1096.133	350.668
15.5	1153	-1346	530	-434	31.235	12.046	1064.448	340.584
16	1122	-1321	532	-435	30.535	12.084	1033.213	328.538
16.5	1074	-1258	505	-407	29.148	11.396	1002.678	316.454
17	1049	-1239	545	-444	28.598	12.359	973.530	305.058
17.5	1077	-1269	542	-471	29.323	12.659	944.933	292.699
18	1391	-1578	645	-566	37.110	15.134	915.610	280.040
18.5	1391	-1584	530	-439	37.185	12.109	878.500	264.906
19	1272	-1457	402	-313	34.110	8.934	841.315	252.798
19.5	1121	-1305	316	-226	30.323	6.771	807.205	243.864
20	1010	-1205	273	-189	27.685	5.771	776.883	237.093
20.5	943	-1122	246	-170	25.810	5.196	749.198	231.321
21	1166	-1355	283	-205	31.510	6.096	723.388	226.125
21.5	1197	-1395	335	-232	32.398	7.084	691.878	220.029
22	1137	-1317	360	-277	30.673	7.959	659.480	212.945
22.5	1008	-1196	405	-309	27.548	8.921	628.808	204.986
23	849	-1047	464	-369	23.698	10.409	601.260	196.065
23.5	658	-853	618	-510	18.885	14.096	577.563	185.656
24	632	-818	726	-632	18.123	16.971	558.678	171.560
24.5	851	-1038	643	-552	23.610	14.934	540.555	154.589
25	951	-1158	589	-488	26.360	13.459	516.945	139.655
25.5	1010	-1201	546	-450	27.635	12.446	490.585	126.196
26	1093	-1257	525	-436	29.373	12.009	462.950	113.750
26.5	1159	-1356	445	-350	31.435	9.934	433.578	101.741
27	1403	-1599	285	-217	37.523	6.271	402.143	91.808
27.5	1254	-1436	329	-247	33.623	7.196	364.620	85.536
28	1037	-1241	357	-274	28.473	7.884	330.998	78.340
28.5	946	-1111	374	-290	25.710	8.296	302.525	70.456
29	1010	-1201	291	-201	27.635	6.146	276.815	62.160
29.5	990	-1184	217	-133	27.173	4.371	249.180	56.014
30	812	-997	277	-193	22.610	5.871	222.008	51.643
30.5	668	-859	267	-185	19.085	5.646	199.398	45.771
31	567	-750	310	-231	16.460	6.759	180.313	40.125
31.5	487	-674	356	-284	14.510	7.996	163.853	33.366
32	429	-600	392	-308	12.860	8.746	149.343	25.370
32.5	392	-575	400	-336	12.085	9.196	136.483	16.624
33	413	-606	449	-332	12.735	9.759	124.398	7.428
33.5	622	-819	223	-140	18.010	4.534	111.663	-2.331
34	1074	-1250	-25	122	29.048	-1.841	93.653	-6.865
34.5	1022	-1207	-76	164	27.860	-3.004	64.605	-5.024
35	718	-913	-78	150	20.385	-2.854	36.745	-2.020
35.5	569	-740	84	17	16.360	0.834	16.360	0.834
Reference Point (36 m)							0.000	0.000

C305-IM143010

Serial number probe: D11244



9-7-13 12:30

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	1483	-1595	-279	422	38.475	-8.763	1386.538	609.038
1	968	-1091	-237	379	25.738	-7.700	1348.063	617.800
1.5	561	-687	-89	224	15.600	-3.913	1322.325	625.500
2	256	-367	173	5	7.788	2.100	1306.725	629.413
2.5	-67	-70	442	-300	0.038	9.275	1298.938	627.313
3	159	-277	582	-426	5.450	12.600	1298.900	618.038
3.5	177	-297	616	-479	5.925	13.688	1293.450	605.438
4	73	-200	715	-559	3.413	15.925	1287.525	591.750
4.5	-8	-128	822	-685	1.500	18.838	1284.113	575.825
5	-92	-38	909	-761	-0.675	20.875	1282.613	556.988
5.5	-145	23	942	-816	-2.100	21.975	1283.288	536.113
6	28	-150	903	-746	2.225	20.613	1285.388	514.138
6.5	68	-181	799	-636	3.113	17.938	1283.163	493.525
7	111	-238	611	-466	4.363	13.463	1280.050	475.588
7.5	227	-355	437	-300	7.275	9.213	1275.688	462.125
8	301	-413	346	-200	8.925	6.825	1268.413	452.913
8.5	462	-581	239	-107	13.038	4.325	1259.488	446.088
9	427	-544	475	-303	12.138	9.725	1246.450	441.763
9.5	298	-435	517	-357	9.163	10.925	1234.313	432.038
10	235	-343	482	-341	7.225	10.288	1225.150	421.113
10.5	163	-277	460	-304	5.500	9.550	1217.925	410.825
11	113	-232	422	-271	4.313	8.663	1212.425	401.275
11.5	83	-196	404	-268	3.488	8.400	1208.113	392.613
12	170	-287	478	-327	5.713	10.063	1204.625	384.213
12.5	346	-470	475	-323	10.200	9.975	1198.913	374.150
13	518	-637	370	-220	14.438	7.375	1188.713	364.175
13.5	777	-883	217	-73	20.750	3.625	1174.275	356.800
14	976	-1100	89	77	25.950	0.150	1153.525	353.175
14.5	1109	-1223	150	18	29.150	1.650	1127.575	353.025
15	1214	-1322	490	-318	31.700	10.100	1098.425	351.375
15.5	1186	-1312	553	-414	31.225	12.088	1066.725	341.275
16	1165	-1291	551	-408	30.700	11.988	1035.500	329.188
16.5	1116	-1224	529	-384	29.250	11.413	1004.800	317.200
17	1094	-1201	570	-421	28.688	12.388	975.550	305.788
17.5	1111	-1237	568	-442	29.350	12.625	946.863	293.400
18	1424	-1538	675	-541	37.025	15.200	917.513	280.775
18.5	1429	-1550	556	-419	37.238	12.188	880.488	265.575
19	1309	-1423	420	-289	34.150	8.863	843.250	253.388
19.5	1157	-1274	340	-206	30.388	6.825	809.100	244.525
20	1050	-1168	295	-164	27.725	5.738	778.713	237.700
20.5	976	-1085	269	-144	25.763	5.163	750.988	231.963
21	1202	-1316	311	-180	31.475	6.138	725.225	226.800
21.5	1238	-1364	353	-215	32.525	7.100	693.750	220.663
22	1170	-1286	388	-251	30.700	7.988	661.225	213.563
22.5	1052	-1160	426	-292	27.650	8.975	630.525	205.575
23	891	-1006	487	-348	23.713	10.438	602.875	196.600
23.5	700	-814	638	-492	18.925	14.125	579.163	186.163
24	675	-788	752	-615	18.288	17.088	560.238	172.038
24.5	884	-997	669	-525	23.513	14.925	541.950	154.950
25	992	-1122	608	-461	26.425	13.363	518.438	140.025
25.5	1052	-1170	566	-422	27.775	12.350	492.013	126.663
26	1126	-1224	551	-408	29.375	11.988	464.238	114.313
26.5	1195	-1327	465	-329	31.525	9.925	434.863	102.325
27	1439	-1560	309	-199	37.488	6.350	403.338	92.400
27.5	1295	-1403	358	-218	33.725	7.200	365.850	86.050
28	1078	-1209	386	-251	28.588	7.963	332.125	78.850
28.5	981	-1076	404	-271	25.713	8.438	303.538	70.888
29	1049	-1160	320	-184	27.613	6.300	277.825	62.450
29.5	1030	-1151	244	-110	27.263	4.425	250.213	56.150
30	853	-965	306	-165	22.725	5.888	222.950	51.725
30.5	712	-825	288	-164	19.213	5.650	200.225	45.838
31	608	-715	331	-202	16.538	6.663	181.013	40.188
31.5	527	-643	383	-256	14.625	7.988	164.475	33.525
32	465	-568	421	-289	12.913	8.875	149.850	25.538
32.5	437	-542	430	-307	12.238	9.213	136.938	16.663
33	456	-577	475	-309	12.913	9.800	124.700	7.450
33.5	663	-780	253	-114	18.038	4.588	111.788	-2.350
34	1111	-1214	-6	150	29.063	-1.950	93.750	-6.938
34.5	1062	-1172	-50	192	27.925	-3.025	64.688	-4.988
35	752	-880	-49	178	20.400	-2.838	36.763	-1.963
35.5	603	-706	113	43	16.363	0.875	16.363	0.875
Reference Point (36 m)							0.000	0.000



**C305-IM143020**

Serial number probe: 1035333

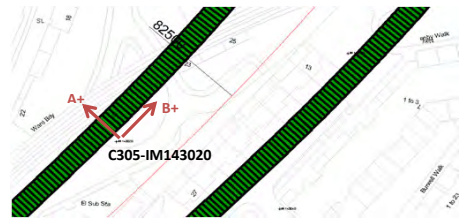


**21-6-13 9:00**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-298	137	562	-523	-5.440	13.559	-247.160	1615.879
1	-480	307	464	-407	-9.840	10.884	-241.720	1602.320
1.5	-459	282	469	-412	-9.265	11.009	-231.880	1591.436
2	-359	204	337	-263	-7.040	7.496	-222.615	1580.428
2.5	-275	118	208	-131	-4.915	4.234	-215.575	1572.931
3	-298	123	319	-261	-5.265	7.246	-210.660	1568.698
3.5	-324	160	457	-406	-6.053	10.784	-205.395	1561.451
4	-324	167	533	-475	-6.140	12.596	-199.343	1550.668
4.5	-218	52	709	-649	-3.378	16.971	-193.203	1538.071
5	128	-285	502	-437	5.160	11.734	-189.825	1521.100
5.5	245	-433	391	-320	8.473	8.884	-194.985	1509.366
6	119	-293	494	-433	5.148	11.584	-203.458	1500.483
6.5	-153	-52	640	-561	-1.265	15.009	-208.605	1488.899
7	-374	211	697	-628	-7.315	16.559	-207.340	1473.890
7.5	-540	363	802	-726	-11.290	19.096	-200.025	1457.331
8	-559	386	901	-849	-11.815	21.871	-188.735	1438.235
8.5	-503	338	890	-824	-10.515	21.421	-176.920	1416.364
9	-380	210	894	-857	-7.378	21.884	-166.405	1394.943
9.5	-329	147	933	-889	-5.953	22.771	-159.028	1373.059
10	-265	97	996	-906	-4.528	23.771	-153.075	1350.288
10.5	-173	4	958	-895	-2.215	23.159	-148.548	1326.516
11	-81	-123	824	-747	0.523	19.634	-146.333	1303.358
11.5	-15	-155	719	-650	1.748	17.109	-146.855	1283.724
12	-159	-12	686	-614	-1.840	16.246	-148.603	1266.615
12.5	-287	109	698	-629	-4.953	16.584	-146.763	1250.369
13	-373	205	712	-648	-7.228	16.996	-141.810	1233.785
13.5	-469	330	662	-606	-9.990	15.846	-134.583	1216.789
14	-638	462	707	-642	-13.753	16.859	-124.593	1200.943
14.5	-571	393	831	-779	-12.053	20.121	-110.840	1184.084
15	-340	175	991	-959	-6.440	24.371	-98.788	1163.963
15.5	-176	2	1106	-1041	-2.228	26.834	-92.348	1139.591
16	-46	-143	1032	-985	1.210	25.209	-90.120	1112.758
16.5	67	-235	991	-924	3.773	23.934	-91.330	1087.549
17	12	-184	1090	-1021	2.448	26.384	-95.103	1063.615
17.5	-97	-79	1052	-1010	-0.228	25.771	-97.550	1037.231
18	-145	-54	978	-934	-1.140	23.896	-97.323	1011.460
18.5	-173	19	962	-902	-2.403	23.296	-96.183	987.564
19	-220	61	962	-889	-3.515	23.134	-93.780	964.268
19.5	-243	62	978	-913	-3.815	23.634	-90.265	941.134
20	-176	14	1069	-1025	-2.378	26.171	-86.450	917.500
20.5	-137	-39	1152	-1100	-1.228	28.146	-84.073	891.329
21	-68	-118	1137	-1075	0.623	27.646	-82.845	863.183
21.5	80	-247	1126	-1079	4.085	27.559	-83.468	835.536
22	203	-371	1102	-1049	7.173	26.884	-87.553	807.978
22.5	266	-432	1103	-1034	8.723	26.709	-94.725	781.094
23	328	-505	1064	-1016	10.410	25.996	-103.448	754.385
23.5	424	-579	1127	-1077	12.535	27.546	-113.858	728.389
24	233	-408	1199	-1170	8.010	29.609	-126.393	700.843
24.5	-102	-110	1160	-1113	0.098	28.409	-134.403	671.234
25	-360	197	1214	-1158	-6.965	29.646	-134.500	642.825
25.5	-476	310	1274	-1208	-9.828	31.021	-127.535	613.179
26	-342	174	1258	-1187	-6.453	30.559	-117.708	582.158
26.5	-210	37	1209	-1155	-3.090	29.546	-111.255	551.599
27	-169	8	1231	-1195	-2.215	30.321	-108.165	522.053
27.5	-127	-35	1080	-1023	-1.153	26.284	-105.950	491.731
28	-104	-86	786	-725	-0.228	18.884	-104.798	465.448
28.5	-83	-117	448	-393	0.423	10.509	-104.570	446.564
29	74	-228	351	-286	3.773	7.959	-104.993	436.055
29.5	101	-280	570	-500	4.760	13.371	-108.765	428.096
30	17	-184	850	-766	2.510	20.196	-113.525	414.725
30.5	-94	-100	1193	-1143	0.073	29.196	-116.035	394.529
31	-171	20	1537	-1474	-2.390	37.634	-116.108	365.333
31.5	-226	53	1770	-1732	-3.490	43.771	-113.718	327.699
32	-79	-114	1903	-1844	0.435	46.834	-110.228	283.928
32.5	-80	-89	1901	-1859	0.110	46.996	-110.663	237.094
33	-669	485	1968	-1930	-14.428	48.721	-110.773	190.098
33.5	-1153	975	1956	-1919	-26.603	48.434	-96.345	141.376
34	-1437	1272	1911	-1882	-33.865	47.409	-69.743	92.943
34.5	-1518	1352	1847	-1796	-35.878	45.534	-35.878	45.534
Reference Point (35 m)							0.000	0.000

**C305-IM143020**

Serial number probe: D11244



**24-6-13 10:00**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-262	175	591	-502	-5.463	13.663	-244.125	1617.188
1	-436	342	490	-383	-9.725	10.913	-238.663	1603.525
1.5	-424	319	490	-391	-9.288	11.013	-228.938	1592.613
2	-323	237	358	-240	-7.000	7.475	-219.650	1581.600
2.5	-237	153	227	-112	-4.875	4.238	-212.650	1574.125
3	-258	154	346	-235	-5.150	7.263	-207.775	1569.888
3.5	-290	199	486	-382	-6.113	10.850	-202.625	1562.625
4	-290	203	562	-447	-6.163	12.613	-196.513	1551.775
4.5	-182	85	729	-627	-3.338	16.950	-190.350	1539.163
5	166	-247	530	-416	5.163	11.825	-187.013	1522.213
5.5	288	-397	418	-300	8.563	8.975	-192.175	1510.388
6	160	-260	517	-410	5.250	11.588	-200.738	1501.413
6.5	-115	-19	660	-538	-1.200	14.975	-205.988	1489.825
7	-337	248	722	-609	-7.313	16.638	-204.788	1474.850
7.5	-503	401	824	-707	-11.300	19.138	-197.475	1458.213
8	-524	424	929	-821	-11.850	21.875	-186.175	1439.075
8.5	-467	376	913	-804	-10.538	21.463	-174.325	1417.200
9	-343	240	920	-838	-7.288	21.975	-163.788	1395.738
9.5	-288	181	961	-866	-5.863	22.838	-156.500	1373.763
10	-228	137	1017	-888	-4.563	23.613	-150.638	1350.925
10.5	-138	39	978	-873	-2.213	23.138	-146.075	1327.113
11	-42	-87	851	-719	0.563	19.625	-143.863	1303.975
11.5	23	-116	740	-629	1.738	17.113	-144.425	1284.350
12	-116	25	711	-593	-1.763	16.300	-146.163	1267.238
12.5	-246	139	727	-605	-4.813	16.650	-144.400	1250.938
13	-338	235	741	-622	-7.163	17.038	-139.588	1234.288
13.5	-428	362	685	-581	-9.875	15.825	-132.425	1217.250
14	-599	495	726	-616	-13.675	16.775	-122.550	1201.425
14.5	-528	426	852	-754	-11.925	20.075	-108.875	1184.650
15	-297	207	1017	-931	-6.300	24.350	-96.950	1164.575
15.5	-132	40	1125	-1022	-2.150	26.838	-90.660	1140.225
16	-6	-105	1052	-964	1.238	25.200	-88.500	1113.388
16.5	107	-201	1016	-905	3.850	24.013	-89.738	1088.188
17	51	-148	1115	-1001	2.488	26.450	-93.588	1064.175
17.5	-61	-48	1071	-991	-0.163	25.775	-96.075	1037.725
18	-107	-18	1001	-910	-1.113	23.888	-95.913	1011.950
18.5	-135	57	984	-874	-2.400	23.225	-94.800	988.063
19	-183	101	982	-868	-3.550	23.125	-92.400	964.838
19.5	-205	102	1003	-889	-3.838	23.650	-88.850	941.713
20	-138	49	1092	-997	-2.338	26.113	-85.013	918.063
20.5	-98	-2	1171	-1076	-1.200	28.088	-82.675	891.950
21	-33	-84	1157	-1055	0.638	27.650	-81.475	863.863
21.5	123	-216	1155	-1058	4.238	27.663	-82.113	836.213
22	246	-333	1130	-1025	7.238	26.938	-86.350	808.550
22.5	304	-402	1123	-1013	8.825	26.700	-93.588	781.613
23	370	-471	1084	-997	10.513	26.013	-102.413	754.913
23.5	460	-541	1156	-1059	12.513	27.688	-112.925	728.900
24	271	-373	1228	-1145	8.050	29.663	-125.438	701.213
24.5	-60	-71	1189	-1086	0.138	28.438	-133.488	671.550
25	-326	237	1238	-1140	-7.038	29.725	-133.625	643.113
25.5	-439	348	1296	-1180	-9.838	30.950	-126.588	613.388
26	-308	213	1280	-1164	-6.513	30.550	-116.750	582.438
26.5	-167	68	1234	-1137	-2.938	29.638	-110.238	551.888
27	-129	40	1253	-1169	-2.113	30.275	-107.300	522.250
27.5	-93	3	1103	-1004	-1.200	26.338	-105.188	491.975
28	-60	-53	808	-706	-0.088	18.925	-103.988	465.638
28.5	-42	-87	475	-371	0.563	10.575	-103.900	446.713
29	108	-194	372	-268	3.775	8.000	-104.463	436.138
29.5	144	-248	597	-481	4.900	13.475	-108.238	428.138
30	52	-153	870	-740	2.563	20.125	-113.138	414.663
30.5	-53	-67	1218	-1118	0.175	29.200	-115.700	394.538
31	-136	57	1562	-1456	-2.413	37.725	-115.875	365.338
31.5	-186	85	1797	-1711	-3.388	43.850	-113.463	327.613
32	-39	-75	1924	-1821	0.450	46.813	-110.075	283.763
32.5	-46	-49	1929	-1833	0.038	47.025	-110.525	236.950
33	-628	516	1988	-1906	-14.300	48.675	-110.563	189.925
33.5	-1115	1008	1975	-1892	-26.538	48.338	-96.263	141.250
34	-1400	1308	1932	-1855	-33.850	47.338	-69.725	92.913
34.5	-1482	1388	1871	-1775	-35.875	45.575	-35.875	45.575
Reference Point (35 m)							0.000	0.000

**C305-IM143020**

Serial number probe: 1035333

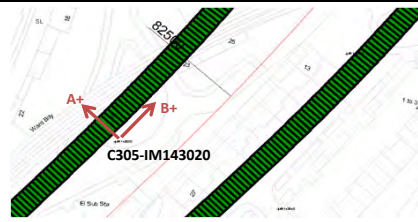


**21-6-13 10:00**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-299	136	583	-539	-5.440	14.021	-247.285	1615.279
1	-472	305	464	-401	-9.715	10.809	-241.845	1601.258
1.5	-463	287	470	-415	-9.378	11.059	-232.130	1590.449
2	-366	191	321	-266	-6.965	7.334	-222.753	1579.390
2.5	-277	105	198	-120	-4.778	3.971	-215.788	1572.056
3	-292	121	314	-267	-5.165	7.259	-211.010	1568.085
3.5	-337	168	454	-406	-6.315	10.746	-205.845	1560.826
4	-329	172	533	-477	-6.265	12.621	-199.530	1550.080
4.5	-230	50	707	-648	-3.503	16.934	-193.265	1537.459
5	130	-295	516	-435	5.310	11.884	-189.763	1520.525
5.5	253	-423	388	-320	8.448	8.846	-195.073	1509.641
6	127	-303	489	-429	5.373	11.471	-203.520	1499.795
6.5	-149	-45	642	-566	-1.303	15.096	-208.893	1488.324
7	-378	209	705	-640	-7.340	16.809	-207.590	1473.228
7.5	-535	363	793	-720	-11.228	18.909	-200.250	1456.419
8	-557	397	905	-844	-11.928	21.859	-189.023	1437.510
8.5	-506	344	891	-835	-10.628	21.571	-177.095	1415.651
9	-381	214	898	-855	-7.440	21.909	-166.468	1394.080
9.5	-327	149	935	-888	-5.953	22.784	-159.028	1372.171
10	-264	113	997	-907	-4.715	23.796	-153.075	1349.388
10.5	-169	14	957	-888	-2.290	23.059	-148.360	1325.591
11	-85	-115	823	-738	0.373	19.509	-146.070	1302.533
11.5	-12	-144	722	-653	1.648	17.184	-146.443	1283.024
12	-149	-9	694	-613	-1.753	16.334	-148.090	1265.840
12.5	-287	108	702	-634	-4.940	16.696	-146.338	1249.506
13	-373	195	714	-634	-7.103	16.846	-141.398	1232.810
13.5	-477	326	666	-601	-10.040	15.834	-134.295	1215.964
14	-638	457	702	-645	-13.690	16.834	-124.255	1200.130
14.5	-567	383	835	-776	-11.878	20.134	-110.565	1183.296
15	-335	182	1002	-952	-6.465	24.421	-98.688	1163.163
15.5	-179	6	1094	-1045	-2.315	26.734	-92.223	1138.741
16	-40	-135	1024	-979	1.185	25.034	-89.908	1112.008
16.5	59	-244	966	-919	3.785	23.809	-91.093	1086.974
17	19	-186	1095	-1031	2.560	26.571	-94.878	1063.165
17.5	-103	-81	1046	-1005	-0.278	25.634	-97.438	1036.594
18	-151	-48	973	-934	-1.290	23.834	-97.160	1010.960
18.5	-183	11	961	-895	-2.428	23.196	-95.870	987.126
19	-221	57	965	-889	-3.478	23.171	-93.443	963.930
19.5	-244	70	985	-925	-3.928	23.871	-89.965	940.759
20	-179	27	1065	-1021	-2.578	26.071	-86.038	916.888
20.5	-135	-32	1148	-1103	-1.290	28.134	-83.460	890.816
21	-69	-114	1134	-1077	0.560	27.634	-82.170	862.683
21.5	83	-255	1122	-1071	4.223	27.409	-82.730	835.049
22	209	-365	1102	-1060	7.173	27.021	-86.953	807.640
22.5	266	-433	1092	-1044	8.735	26.696	-94.125	780.619
23	339	-506	1058	-1014	10.560	25.896	-102.860	753.923
23.5	415	-569	1117	-1077	12.298	27.421	-113.420	728.026
24	235	-414	1207	-1166	8.110	29.659	-125.718	700.605
24.5	-98	-115	1170	-1115	0.210	28.559	-133.828	670.946
25	-374	201	1202	-1177	-7.190	29.734	-134.038	642.388
25.5	-468	316	1273	-1214	-9.803	31.084	-126.848	612.654
26	-344	166	1248	-1196	-6.378	30.546	-117.045	581.570
26.5	-196	22	1214	-1164	-2.728	29.721	-110.668	551.024
27	-170	-4	1231	-1187	-2.078	30.221	-107.940	521.303
27.5	-138	-41	1083	-1033	-1.215	26.446	-105.863	491.081
28	-105	-84	781	-725	-0.265	18.821	-104.648	464.635
28.5	-74	-129	453	-394	0.685	10.584	-104.383	445.814
29	77	-236	358	-302	3.910	8.246	-105.068	435.230
29.5	100	-275	571	-506	4.685	13.459	-108.978	426.984
30	14	-196	848	-756	2.623	20.046	-113.663	413.525
30.5	-98	-91	1185	-1140	-0.090	29.059	-116.285	393.479
31	-176	20	1532	-1466	-2.453	37.471	-116.195	364.420
31.5	-219	41	1782	-1741	-3.253	44.034	-113.743	326.949
32	-69	-107	1899	-1840	0.473	46.734	-110.490	282.915
32.5	-98	-96	1899	-1850	-0.028	46.859	-110.963	236.181
33	-663	490	1950	-1925	-14.415	48.434	-110.935	189.323
33.5	-1159	976	1956	-1908	-26.690	48.296	-96.520	140.889
34	-1447	1268	1912	-1863	-33.940	47.184	-69.830	92.593
34.5	-1525	1346	1844	-1789	-35.890	45.409	-35.890	45.409
Reference Point (35 m)							0.000	0.000

**C305-IM143020**

Serial number probe: D11244



**25-6-13 9:37**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-262	171	600	-512	-5.413	13.900	-244.200	1617.463
1	-434	338	495	-384	-9.850	10.988	-238.788	1603.563
1.5	-428	326	495	-387	-9.425	11.025	-229.138	1592.575
2	-325	232	352	-241	-6.963	7.413	-219.713	1581.550
2.5	-234	144	227	-104	-4.725	4.138	-212.750	1574.138
3	-260	155	345	-239	-5.188	7.300	-208.025	1570.000
3.5	-300	200	480	-384	-6.250	10.800	-202.838	1562.700
4	-295	201	561	-449	-6.200	12.625	-196.588	1551.900
4.5	-190	89	731	-624	-3.488	16.938	-190.388	1539.275
5	163	-253	534	-416	5.200	11.875	-186.900	1522.338
5.5	295	-393	416	-296	8.600	8.900	-192.100	1510.463
6	164	-261	516	-404	5.313	11.500	-200.700	1501.563
6.5	-113	-14	666	-547	-1.238	15.163	-206.013	1490.063
7	-337	250	724	-611	-7.338	16.688	-204.775	1474.900
7.5	-496	398	822	-701	-11.175	19.038	-197.438	1458.213
8	-525	430	925	-825	-11.938	21.875	-186.263	1439.175
8.5	-468	381	916	-808	-10.613	21.550	-174.325	1417.300
9	-345	243	920	-832	-7.350	21.900	-163.713	1395.750
9.5	-289	185	966	-861	-5.925	22.838	-156.363	1373.850
10	-224	144	1014	-890	-4.600	23.600	-150.438	1351.013
10.5	-132	48	979	-872	-2.250	23.138	-145.838	1327.213
11	-46	-84	854	-716	0.475	19.625	-143.588	1304.075
11.5	25	-116	743	-634	1.763	17.213	-144.063	1284.450
12	-117	27	719	-594	-1.800	16.413	-145.825	1267.238
12.5	-241	138	726	-604	-4.738	16.625	-144.025	1250.825
13	-337	235	737	-615	-7.150	16.900	-139.288	1234.200
13.5	-431	359	690	-585	-9.875	15.938	-132.138	1217.300
14	-600	489	724	-619	-13.613	16.788	-122.263	1201.363
14.5	-527	423	854	-747	-11.875	20.013	-108.650	1184.575
15	-300	216	1021	-925	-6.450	24.325	-96.775	1164.563
15.5	-136	40	1123	-1027	-2.200	26.875	-90.325	1140.238
16	-6	-102	1053	-963	1.200	25.200	-88.125	1113.363
16.5	105	-206	1010	-899	3.888	23.863	-89.325	1088.163
17	53	-147	1116	-1002	2.500	26.475	-93.213	1064.300
17.5	-66	-50	1077	-986	-0.200	25.788	-95.713	1037.825
18	-109	-15	999	-918	-1.175	23.963	-95.513	1012.038
18.5	-137	50	981	-872	-2.338	23.163	-94.338	988.075
19	-189	97	991	-865	-3.575	23.200	-92.000	964.913
19.5	-207	101	1002	-895	-3.850	23.713	-88.425	941.713
20	-136	56	1094	-993	-2.400	26.088	-84.575	918.000
20.5	-90	-3	1174	-1081	-1.088	28.188	-82.175	891.913
21	-36	-82	1158	-1056	0.575	27.675	-81.088	863.725
21.5	118	-218	1150	-1054	4.200	27.550	-81.663	836.050
22	253	-335	1129	-1030	7.350	26.988	-85.863	808.500
22.5	307	-403	1120	-1014	8.875	26.675	-93.213	781.513
23	374	-471	1086	-991	10.563	25.963	-102.088	754.838
23.5	461	-540	1148	-1056	12.513	27.550	-112.650	728.875
24	272	-376	1232	-1145	8.100	29.713	-125.163	701.325
24.5	-62	-73	1189	-1087	0.138	28.450	-133.263	671.613
25	-334	235	1232	-1148	-7.113	29.750	-133.400	643.163
25.5	-434	346	1296	-1186	-9.750	31.025	-126.288	613.413
26	-305	208	1279	-1169	-6.413	30.600	-116.538	582.388
26.5	-163	64	1235	-1140	-2.838	29.688	-110.125	551.788
27	-131	31	1255	-1170	-2.025	30.313	-107.288	522.100
27.5	-96	-1	1101	-1006	-1.188	26.338	-105.263	491.788
28	-62	-49	807	-704	-0.163	18.888	-104.075	465.450
28.5	-34	-94	479	-376	0.750	10.688	-103.913	446.563
29	112	-201	375	-273	3.913	8.100	-104.663	435.875
29.5	137	-245	596	-481	4.775	13.463	-108.575	427.775
30	53	-155	867	-737	2.600	20.050	-113.350	414.313
30.5	-61	-58	1216	-1112	-0.038	29.100	-115.950	394.263
31	-143	58	1562	-1450	-2.513	37.650	-115.913	365.163
31.5	-183	80	1807	-1718	-3.288	44.063	-113.400	327.513
32	-33	-70	1926	-1821	0.463	46.838	-110.113	283.450
32.5	-55	-55	1929	-1834	0.000	47.038	-110.575	236.613
33	-627	521	1981	-1909	-14.350	48.625	-110.575	189.575
33.5	-1117	1007	1975	-1885	-26.550	48.250	-96.225	140.950
34	-1404	1304	1935	-1847	-33.850	47.275	-69.675	92.700
34.5	-1485	1381	1865	-1769	-35.825	45.425	-35.825	45.425
Reference Point (35 m)							0.000	0.000

**C305-IM143020**

Serial number probe: 1035333



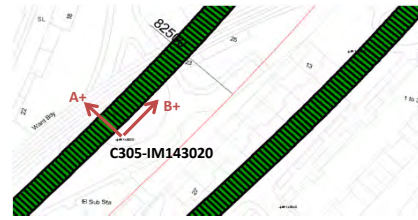
**21-6-13 11:00**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-299	131	569	-520	-5.378	13.609	-247.735	1617.029
1	-480	300	466	-410	-9.753	10.946	-242.358	1603.420
1.5	-467	293	472	-422	-9.503	11.171	-232.605	1592.474
2	-374	196	339	-273	-7.128	7.646	-223.103	1581.303
2.5	-281	109	205	-132	-4.878	4.209	-215.975	1573.656
3	-301	111	327	-266	-5.153	7.409	-211.098	1569.448
3.5	-329	164	458	-405	-6.165	10.784	-205.945	1562.039
4	-330	168	544	-470	-6.228	12.671	-199.780	1551.255
4.5	-228	48	713	-642	-3.453	16.934	-193.553	1538.584
5	117	-280	503	-437	4.960	11.746	-190.100	1521.650
5.5	258	-431	393	-319	8.610	8.896	-195.060	1509.904
6	126	-282	490	-427	5.098	11.459	-203.670	1501.008
6.5	-154	-51	645	-564	-1.290	15.109	-208.768	1489.549
7	-380	207	698	-629	-7.340	16.584	-207.478	1474.440
7.5	-549	374	795	-736	-11.540	19.134	-200.138	1457.856
8	-570	394	902	-846	-12.053	21.846	-188.598	1438.723
8.5	-497	352	891	-828	-10.615	21.484	-176.545	1416.876
9	-386	207	895	-862	-7.415	21.959	-165.930	1395.393
9.5	-330	155	935	-889	-6.065	22.796	-158.515	1373.434
10	-266	105	987	-917	-4.640	23.796	-152.450	1350.638
10.5	-181	7	947	-903	-2.353	23.121	-147.810	1326.841
11	-87	-123	840	-733	0.448	19.659	-145.458	1303.720
11.5	-4	-160	717	-660	1.948	17.209	-145.905	1284.061
12	-150	-10	697	-623	-1.753	16.496	-147.853	1266.853
12.5	-284	102	698	-627	-4.828	16.559	-146.100	1250.356
13	-384	205	715	-645	-7.365	16.996	-141.273	1233.798
13.5	-478	330	675	-601	-10.103	15.946	-133.908	1216.801
14	-641	453	693	-641	-13.678	16.671	-123.805	1200.855
14.5	-562	400	822	-769	-12.028	19.884	-110.128	1184.184
15	-335	177	993	-951	-6.403	24.296	-98.100	1164.300
15.5	-181	-1	1108	-1044	-2.253	26.896	-91.698	1140.004
16	-53	-141	1038	-999	1.098	25.459	-89.445	1113.108
16.5	67	-243	989	-923	3.873	23.896	-90.543	1087.649
17	15	-189	1094	-1025	2.548	26.484	-94.415	1063.753
17.5	-105	-87	1049	-1015	-0.228	25.796	-96.963	1037.269
18	-147	-54	969	-937	-1.165	23.821	-96.735	1011.473
18.5	-172	19	959	-897	-2.390	23.196	-95.570	987.651
19	-222	65	968	-896	-3.590	23.296	-93.180	964.455
19.5	-242	66	979	-916	-3.853	23.684	-89.590	941.159
20	-176	14	1067	-1019	-2.378	26.071	-85.738	917.475
20.5	-133	-36	1157	-1097	-1.215	28.171	-83.360	891.404
21	-73	-122	1134	-1078	0.610	27.646	-82.145	863.233
21.5	86	-257	1121	-1082	4.285	27.534	-82.755	835.586
22	213	-374	1109	-1046	7.335	26.934	-87.040	808.053
22.5	267	-433	1100	-1036	8.748	26.696	-94.375	781.119
23	322	-503	1061	-1012	10.310	25.909	-103.123	754.423
23.5	421	-575	1128	-1088	12.448	27.696	-113.433	728.514
24	241	-399	1205	-1165	7.998	29.621	-125.880	700.818
24.5	-99	-107	1163	-1114	0.098	28.459	-133.878	671.196
25	-370	204	1207	-1163	-7.178	29.621	-133.975	642.738
25.5	-471	314	1271	-1208	-9.815	30.984	-126.798	613.116
26	-332	176	1260	-1195	-6.353	30.684	-116.983	582.133
26.5	-203	37	1206	-1162	-3.003	29.596	-110.630	551.449
27	-172	2	1237	-1199	-2.178	30.446	-107.628	521.853
27.5	-133	-41	1072	-1037	-1.153	26.359	-105.450	491.406
28	-105	-88	797	-730	-0.215	19.084	-104.298	465.048
28.5	-81	-123	449	-395	0.523	10.546	-104.083	445.964
29	75	-234	344	-291	3.860	7.934	-104.605	435.418
29.5	109	-285	568	-497	4.923	13.309	-108.465	427.484
30	22	-184	842	-757	2.573	19.984	-113.388	414.175
30.5	-90	-104	1190	-1130	0.173	28.996	-115.960	394.191
31	-190	14	1535	-1478	-2.553	37.659	-116.133	365.195
31.5	-219	41	1778	-1738	-3.253	43.946	-113.580	327.536
32	-74	-112	1910	-1844	0.473	46.921	-110.328	283.590
32.5	-87	-83	1903	-1867	-0.053	47.121	-110.800	236.669
33	-668	479	1953	-1932	-14.340	48.559	-110.748	189.548
33.5	-1154	975	1949	-1909	-26.615	48.221	-96.408	140.989
34	-1436	1263	1904	-1877	-33.740	47.259	-69.793	92.768
34.5	-1529	1355	1841	-1800	-36.053	45.509	-36.053	45.509
Reference Point (35 m)							0.000	0.000



**C305-IM143020**

Serial number probe: D11244

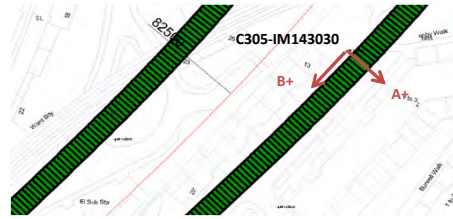


**25-6-13 10:23**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-265	170	590	-502	-5.438	13.650	-244.538	1618.313
1	-435	336	488	-391	-9.838	10.988	-239.100	1604.663
1.5	-429	325	490	-395	-9.425	11.063	-229.463	1593.675
2	-329	235	358	-244	-7.050	7.525	-220.038	1582.613
2.5	-240	143	225	-107	-4.788	4.150	-212.988	1575.088
3	-264	152	354	-241	-5.200	7.438	-208.200	1570.938
3.5	-294	199	485	-382	-6.163	10.838	-203.000	1563.500
4	-292	198	570	-448	-6.125	12.725	-196.838	1552.663
4.5	-186	84	738	-621	-3.375	16.988	-190.713	1539.938
5	161	-248	529	-417	5.113	11.825	-187.338	1522.950
5.5	296	-398	413	-298	8.675	8.888	-192.450	1511.125
6	164	-253	520	-404	5.213	11.550	-201.125	1502.238
6.5	-115	-19	666	-545	-1.200	15.138	-206.338	1490.688
7	-336	246	725	-612	-7.275	16.713	-205.138	1475.550
7.5	-504	404	823	-708	-11.350	19.138	-197.863	1458.838
8	-530	427	929	-823	-11.963	21.900	-186.513	1439.700
8.5	-464	381	914	-810	-10.563	21.550	-174.550	1417.800
9	-349	246	920	-833	-7.438	21.913	-163.968	1396.250
9.5	-291	185	965	-868	-5.950	22.913	-156.550	1374.338
10	-222	141	1013	-890	-4.538	23.788	-150.600	1351.425
10.5	-137	46	972	-877	-2.288	23.113	-146.063	1327.638
11	-50	-83	860	-713	0.413	19.663	-143.775	1304.525
11.5	29	-119	740	-634	1.850	17.175	-144.188	1284.863
12	-117	23	717	-603	-1.750	16.500	-146.038	1267.688
12.5	-244	133	722	-602	-4.713	16.550	-144.288	1251.188
13	-345	235	742	-625	-7.250	17.088	-139.575	1234.638
13.5	-433	362	693	-579	-9.938	15.900	-132.325	1217.550
14	-597	490	723	-618	-13.588	16.763	-122.388	1201.650
14.5	-529	429	849	-749	-11.975	19.975	-108.800	1184.888
15	-301	208	1023	-927	-6.363	24.375	-96.825	1164.913
15.5	-137	35	1128	-1023	-2.150	26.888	-90.463	1140.538
16	-10	-108	1062	-970	1.225	25.400	-88.313	1113.650
16.5	105	-204	1013	-900	3.863	23.913	-89.538	1088.250
17	48	-152	1122	-1006	2.500	26.600	-93.400	1064.338
17.5	-65	-51	1075	-986	-0.175	25.763	-95.900	1037.738
18	-109	-14	993	-914	-1.188	23.838	-95.725	1011.975
18.5	-138	49	981	-872	-2.338	23.163	-94.538	988.138
19	-186	96	986	-871	-3.525	23.213	-92.200	964.975
19.5	-208	102	999	-894	-3.875	23.663	-88.675	941.763
20	-139	50	1097	-995	-2.363	26.150	-84.800	918.100
20.5	-97	-3	1178	-1076	-1.175	28.175	-82.438	891.950
21	-33	-83	1153	-1056	0.625	27.613	-81.263	863.775
21.5	123	-225	1147	-1056	4.350	27.538	-81.888	836.163
22	249	-337	1127	-1024	7.325	26.888	-86.238	808.625
22.5	302	-404	1124	-1012	8.825	26.700	-93.563	781.738
23	367	-470	1084	-994	10.463	25.975	-102.388	755.038
23.5	458	-535	1154	-1059	12.413	27.663	-112.850	729.063
24	279	-369	1233	-1141	8.100	29.675	-125.263	701.400
24.5	-59	-66	1192	-1091	0.088	28.538	-133.363	671.725
25	-327	240	1234	-1141	-7.088	29.688	-133.450	643.188
25.5	-437	348	1294	-1181	-9.813	30.938	-126.363	613.500
26	-299	205	1279	-1168	-6.300	30.588	-116.550	582.563
26.5	-167	70	1228	-1136	-2.963	29.550	-110.250	551.975
27	-137	36	1263	-1172	-2.163	30.438	-107.288	522.425
27.5	-91	-3	1101	-1009	-1.100	26.375	-105.125	491.988
28	-68	-50	817	-703	-0.225	19.000	-104.025	465.613
28.5	-41	-88	475	-375	0.588	10.625	-103.800	446.613
29	117	-200	372	-271	3.963	8.038	-104.388	435.988
29.5	142	-245	594	-478	4.838	13.400	-108.350	427.950
30	55	-151	864	-736	2.575	20.000	-113.188	414.550
30.5	-57	-66	1220	-1113	0.113	29.163	-115.763	394.550
31	-146	80	1561	-1456	-2.450	37.713	-115.875	365.388
31.5	-180	52	1805	-1716	-3.275	44.013	-113.425	327.675
32	-41	-79	1930	-1818	0.475	46.850	-110.150	283.663
32.5	-53	-53	1931	-1838	0.000	47.113	-110.625	236.813
33	-626	517	1982	-1909	-14.288	48.638	-110.625	189.700
33.5	-1116	1010	1974	-1888	-26.575	48.275	-96.338	141.063
34	-1401	1301	1933	-1851	-33.775	47.300	-69.763	92.788
34.5	-1488	1391	1864	-1775	-35.988	45.488	-35.988	45.488
Reference Point (35 m)							0.000	0.000

C305-IM143030

Serial number probe: 1035333



5-3-13 10:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	891	-1127	-511	540	25.223	-13.141	979.125	-577.150
1	845	-1063	-337	368	23.848	-8.816	953.903	-564.009
1.5	578	-816	-206	244	17.423	-5.629	930.055	-555.193
2	514	-748	-206	240	15.773	-5.579	912.633	-549.564
2.5	638	-866	-91	177	18.798	-3.354	896.860	-543.985
3	615	-842	-113	148	18.210	-3.266	878.063	-540.631
3.5	585	-825	-174	199	17.623	-4.666	859.853	-537.365
4	526	-753	-152	170	15.985	-4.029	842.230	-532.699
4.5	461	-688	-148	165	14.360	-3.916	826.245	-528.670
5	358	-576	-145	177	11.673	-4.029	811.885	-524.754
5.5	328	-563	-171	207	11.135	-4.729	800.213	-520.725
6	361	-596	-201	232	11.960	-5.416	789.078	-515.996
6.5	344	-554	-221	259	11.223	-6.004	777.118	-510.580
7	336	-568	-231	271	11.298	-6.279	765.895	-504.576
7.5	356	-587	-236	278	11.785	-6.429	754.598	-498.298
8	334	-554	-272	283	11.098	-6.941	742.813	-491.869
8.5	279	-520	-366	428	9.985	-9.929	731.715	-484.928
9	250	-479	-502	532	9.110	-12.929	721.730	-474.999
9.5	225	-460	-547	572	8.560	-13.991	712.620	-462.070
10	208	-456	-595	652	8.298	-15.591	704.060	-448.079
10.5	260	-483	-653	692	9.285	-16.816	695.763	-432.488
11	302	-528	-695	724	10.373	-17.741	686.478	-415.671
11.5	275	-507	-530	583	9.773	-13.916	676.105	-397.930
12	291	-507	-399	432	9.973	-10.391	666.333	-384.014
12.5	312	-539	-402	441	10.635	-10.541	656.380	-373.623
13	351	-597	-448	487	11.848	-11.691	645.725	-363.081
13.5	409	-630	-461	481	12.985	-11.779	633.878	-351.390
14	476	-706	-482	513	14.773	-12.441	620.893	-339.611
14.5	359	-596	-395	441	11.935	-10.454	606.120	-327.170
15	243	-460	-309	347	8.785	-8.204	594.185	-316.716
15.5	205	-444	-184	228	8.110	-5.154	585.400	-308.513
16	242	-494	-176	217	9.198	-4.916	577.290	-303.359
16.5	297	-510	-224	265	10.085	-6.116	568.093	-298.443
17	335	-573	-270	302	11.348	-7.154	558.008	-292.326
17.5	344	-572	-208	248	11.448	-5.704	546.660	-285.173
18	319	-531	-270	294	10.623	-7.054	535.213	-279.469
18.5	322	-566	-363	386	11.098	-9.366	524.590	-272.415
19	354	-597	-418	431	11.885	-10.616	513.493	-263.049
19.5	352	-578	-497	515	11.623	-12.654	501.608	-252.433
20	481	-709	-549	569	14.873	-13.979	489.985	-239.779
20.5	699	-931	-556	606	20.373	-14.529	475.113	-225.800
21	763	-995	-508	525	21.973	-12.916	454.740	-211.271
21.5	764	-1007	-478	497	22.135	-12.191	432.768	-198.355
22	767	-1001	-386	415	22.098	-10.016	410.633	-186.164
22.5	758	-983	-376	395	21.760	-9.641	388.535	-176.148
23	757	-996	-410	463	21.910	-10.916	366.775	-166.506
23.5	865	-1092	-357	381	24.460	-9.229	344.865	-155.590
24	893	-1127	-255	272	25.248	-6.591	320.405	-146.361
24.5	907	-1145	-188	230	25.648	-5.229	295.158	-139.770
25	943	-1169	-223	265	26.398	-6.104	269.510	-134.541
25.5	1000	-1237	-286	303	27.960	-7.366	243.113	-128.438
26	1046	-1273	-334	335	28.985	-8.366	215.153	-121.071
26.5	810	-1040	-180	232	23.123	-5.154	186.168	-112.705
27	593	-817	-145	159	17.623	-3.804	163.045	-107.551
27.5	512	-756	-146	185	15.848	-4.141	145.423	-103.748
28	537	-773	-197	224	16.373	-5.266	129.575	-99.606
28.5	520	-752	-225	262	15.898	-6.091	113.203	-94.340
29	519	-759	-258	297	15.973	-6.941	97.305	-88.249
29.5	275	-501	-177	212	9.698	-4.866	81.333	-81.308
30	129	-351	-121	141	5.998	-3.279	71.635	-76.441
30.5	198	-425	-99	132	7.785	-2.891	65.638	-73.163
31	262	-507	-117	133	9.610	-3.129	57.853	-70.271
31.5	279	-506	-98	114	9.810	-2.654	48.243	-67.143
32	251	-491	-57	86	9.273	-1.791	38.433	-64.489
32.5	73	-309	74	-14	4.773	1.096	29.160	-62.698
33	-73	-184	-5	74	1.385	-0.991	24.388	-63.794
33.5	-19	-205	-343	376	2.323	-8.991	23.003	-62.803
34	33	-269	-574	627	3.773	-15.016	20.680	-53.811
34.5	134	-354	-686	732	6.098	-17.729	16.908	-38.795
35	323	-542	-825	860	10.810	-21.066	10.810	-21.066
Reference Point (35.5 m)							0.000	0.000

C305-IM143030

Serial number probe: D11244

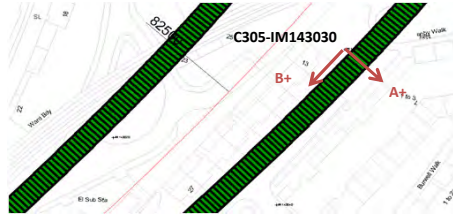


6-3-13 12:15

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	931	-1088	-489	568	25.238	-13.213	983.200	-576.513
1	880	-1025	-317	386	23.813	-8.788	957.963	-563.300
1.5	622	-780	-187	271	17.525	-5.725	934.150	-554.513
2	557	-712	-179	265	15.863	-5.550	916.625	-548.788
2.5	674	-829	-71	203	18.788	-3.425	900.763	-543.238
3	659	-805	-94	170	18.300	-3.300	881.975	-539.813
3.5	627	-790	-150	227	17.713	-4.713	863.675	-536.513
4	564	-719	-132	197	16.038	-4.113	845.963	-531.800
4.5	500	-650	-125	191	14.375	-3.950	829.925	-527.688
5	392	-545	-124	195	11.713	-3.988	815.550	-523.738
5.5	370	-528	-148	228	11.225	-4.700	803.838	-519.750
6	403	-559	-178	260	12.025	-5.475	792.613	-515.050
6.5	379	-522	-202	283	11.263	-6.063	780.588	-509.575
7	375	-538	-210	298	11.413	-6.350	769.325	-503.513
7.5	392	-549	-214	304	11.763	-6.475	757.913	-497.163
8	371	-520	-248	311	11.138	-6.988	746.150	-490.688
8.5	321	-480	-341	448	10.013	-9.863	735.013	-483.700
9	292	-439	-483	558	9.138	-13.013	725.000	-473.838
9.5	268	-430	-521	590	8.725	-13.888	715.863	-460.825
10	248	-422	-576	670	8.375	-15.575	707.138	-446.938
10.5	304	-452	-629	713	9.450	-16.775	698.763	-431.363
11	343	-489	-668	748	10.400	-17.700	689.313	-414.588
11.5	309	-477	-506	608	9.825	-13.925	678.913	-396.888
12	327	-473	-372	451	10.000	-10.288	669.088	-382.963
12.5	356	-508	-383	469	10.800	-10.650	659.088	-372.675
13	392	-560	-421	507	11.900	-11.600	648.288	-362.025
13.5	449	-595	-437	506	13.050	-11.788	636.388	-350.425
14	516	-671	-458	531	14.838	-12.363	623.338	-338.638
14.5	398	-566	-368	464	12.050	-10.400	608.500	-326.275
15	278	-424	-280	372	8.775	-8.150	596.450	-315.875
15.5	248	-409	-163	250	8.213	-5.163	587.675	-307.725
16	286	-457	-154	237	9.288	-4.888	579.463	-302.563
16.5	335	-478	-204	288	10.163	-6.150	570.175	-297.675
17	374	-542	-248	329	11.450	-7.213	560.013	-291.525
17.5	379	-539	-183	268	11.475	-5.638	548.563	-284.313
18	356	-500	-247	316	10.700	-7.038	537.088	-278.675
18.5	360	-529	-339	407	11.113	-9.325	526.388	-271.638
19	398	-564	-394	459	12.025	-10.663	515.275	-262.313
19.5	392	-544	-474	533	11.700	-12.588	503.250	-251.650
20	515	-675	-525	591	14.875	-13.950	491.550	-239.063
20.5	736	-891	-537	625	20.338	-14.525	476.675	-225.113
21	797	-955	-484	548	21.900	-12.900	456.338	-210.588
21.5	808	-973	-459	523	22.263	-12.275	434.438	-197.688
22	809	-963	-363	436	22.150	-9.988	412.175	-185.413
22.5	801	-953	-350	418	21.925	-9.600	390.025	-175.425
23	792	-961	-386	483	21.913	-10.863	368.100	-165.825
23.5	908	-1059	-329	407	24.588	-9.200	346.188	-154.963
24	929	-1088	-227	295	25.213	-6.525	321.600	-145.763
24.5	944	-1108	-164	256	25.650	-5.250	296.388	-139.238
25	982	-1134	-200	289	26.450	-6.113	270.738	-133.988
25.5	1043	-1201	-262	321	28.050	-7.288	244.288	-127.875
26	1082	-1242	-306	361	29.050	-8.338	216.238	-120.588
26.5	849	-1010	-160	260	23.238	-5.250	187.188	-112.250
27	635	-785	-116	186	17.750	-3.775	163.950	-107.000
27.5	556	-720	-124	206	15.950	-4.125	146.200	-103.225
28	573	-735	-176	250	16.350	-5.325	130.250	-99.100
28.5	564	-715	-204	280	15.988	-6.050	113.900	-93.775
29	560	-723	-239	319	16.038	-6.975	97.913	-87.725
29.5	309	-469	-149	236	9.725	-4.813	81.875	-80.750
30	167	-314	-94	165	6.013	-3.238	72.150	-75.938
30.5	234	-388	-76	153	7.775	-2.863	66.138	-72.700
31	299	-468	-89	160	9.588	-3.113	58.363	-69.838
31.5	322	-470	-74	139	9.900	-2.663	48.775	-66.725
32	293	-452	-29	105	9.313	-1.675	38.875	-64.063
32.5	114	-277	101	12	4.888	1.113	29.563	-62.388
33	-37	-150	21	93	1.413	-0.900	24.675	-63.500
33.5	23	-174	-324	399	2.463	-9.038	23.263	-62.600
34	69	-235	-547	649	3.800	-14.950	20.800	-53.563
34.5	170	-323	-658	751	6.163	-17.613	17.000	-38.613
35	359	-508	-797	883	10.838	-21.000	10.838	-21.000
Reference Point (35.5 m)							0.000	0.000

C305-IM143030

Serial number probe: 1035333

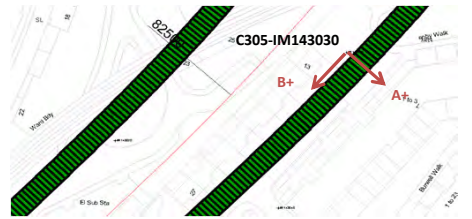


5-3-13 12:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	886	-1134	-517	540	25.248	-13.216	979.800	-577.550
1	847	-1061	-331	371	23.848	-8.779	954.553	-564.334
1.5	589	-817	-213	243	17.573	-5.704	930.705	-555.555
2	521	-737	-206	246	15.723	-5.654	913.133	-549.851
2.5	628	-866	-87	181	18.673	-3.354	897.410	-544.198
3	626	-845	-113	148	18.385	-3.266	878.738	-540.844
3.5	596	-820	-175	207	17.698	-4.779	860.353	-537.578
4	528	-748	-154	168	15.948	-4.029	842.655	-532.799
4.5	449	-681	-151	161	14.123	-3.904	826.708	-528.770
5	354	-582	-145	176	11.698	-4.016	812.585	-524.866
5.5	333	-561	-177	210	11.173	-4.841	800.888	-520.850
6	360	-591	-200	232	11.885	-5.404	789.715	-516.009
6.5	337	-558	-232	259	11.185	-6.141	777.830	-510.605
7	341	-580	-238	273	11.510	-6.391	766.645	-504.464
7.5	348	-579	-241	272	11.585	-6.416	755.135	-498.073
8	332	-553	-273	282	11.060	-6.941	743.550	-491.656
8.5	285	-520	-372	428	10.060	-10.004	732.490	-484.715
9	258	-469	-505	538	9.085	-13.041	722.430	-474.711
9.5	240	-461	-535	562	8.760	-13.716	713.345	-461.670
10	217	-458	-601	650	8.435	-15.641	704.585	-447.954
10.5	262	-486	-656	688	9.348	-16.804	696.150	-432.313
11	295	-522	-690	725	10.210	-17.691	686.803	-415.509
11.5	275	-512	-531	586	9.835	-13.966	676.593	-397.818
12	291	-506	-397	422	9.960	-10.241	666.758	-383.851
12.5	314	-541	-406	451	10.685	-10.716	656.798	-373.610
13	351	-598	-442	488	11.860	-11.629	646.113	-362.894
13.5	404	-636	-462	489	12.998	-11.891	634.253	-351.265
14	470	-703	-480	507	14.660	-12.341	621.255	-339.374
14.5	359	-605	-393	442	12.048	-10.441	606.595	-327.033
15	239	-457	-310	349	8.698	-8.241	594.548	-316.591
15.5	204	-442	-180	217	8.073	-4.966	585.850	-308.350
16	246	-495	-180	207	9.260	-4.841	577.778	-303.384
16.5	296	-510	-237	268	10.073	-6.316	568.518	-298.543
17	338	-578	-266	305	11.448	-7.141	558.445	-292.226
17.5	343	-580	-205	241	11.535	-5.579	546.988	-285.085
18	315	-534	-278	293	10.610	-7.141	535.463	-279.506
18.5	321	-560	-364	377	11.010	-9.266	524.853	-272.365
19	350	-601	-426	432	11.885	-10.729	513.843	-263.099
19.5	351	-582	-492	512	11.660	-12.554	501.958	-252.370
20	483	-706	-549	574	14.860	-14.041	490.298	-239.816
20.5	699	-930	-551	593	20.360	-14.304	475.438	-225.775
21	770	-984	-514	524	21.923	-12.979	455.078	-211.471
21.5	764	-1017	-486	497	22.260	-12.291	433.155	-198.493
22	766	-993	-393	415	21.985	-10.104	410.895	-186.201
22.5	769	-986	-380	401	21.935	-9.766	388.910	-176.098
23	761	-1003	-411	453	22.048	-10.804	366.975	-166.331
23.5	873	-1097	-346	378	24.623	-9.054	344.928	-155.528
24	881	-1128	-249	276	25.110	-6.566	320.305	-146.474
24.5	904	-1138	-195	238	25.523	-5.416	295.195	-139.908
25	940	-1166	-220	270	26.323	-6.129	269.673	-134.491
25.5	1004	-1227	-284	293	27.885	-7.216	243.350	-128.363
26	1049	-1272	-321	343	29.010	-8.304	215.465	-121.146
26.5	806	-1036	-182	229	23.023	-5.141	186.455	-112.843
27	591	-824	-137	163	17.685	-3.754	163.433	-107.701
27.5	527	-764	-151	188	16.135	-4.241	145.748	-103.948
28	530	-765	-205	223	16.185	-5.354	129.613	-99.706
28.5	525	-750	-219	256	15.935	-5.941	113.428	-94.353
29	523	-769	-262	292	16.148	-6.929	97.493	-88.411
29.5	273	-503	-171	212	9.698	-4.791	81.345	-81.483
30	126	-356	-116	154	6.023	-3.379	71.648	-76.691
30.5	193	-421	-107	134	7.673	-3.016	65.625	-73.313
31	257	-508	-118	145	9.560	-3.291	57.953	-70.296
31.5	289	-501	-95	121	9.873	-2.704	48.393	-67.005
32	241	-491	-52	84	9.148	-1.704	38.520	-64.301
32.5	77	-311	78	-9	4.848	1.084	29.373	-62.598
33	-71	-185	-6	63	1.423	-0.866	24.525	-63.681
33.5	-18	-203	-351	383	2.310	-9.179	23.103	-62.815
34	34	-272	-576	627	3.823	-15.041	20.793	-53.636
34.5	125	-359	-683	724	6.048	-17.591	16.970	-38.595
35	331	-543	-826	854	10.923	-21.004	10.923	-21.004
Reference Point (35.5 m)							0.000	0.000

C305-IM143030

Serial number probe: D11244



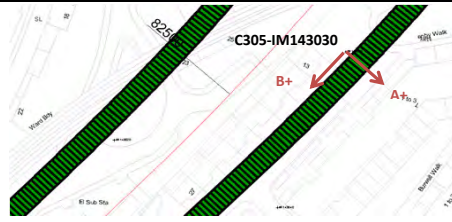
6-3-13 13:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	930	-1092	-494	567	25.275	-13.263	983.625	-576.600
1	883	-1027	-314	390	23.875	-8.800	958.350	-563.338
1.5	622	-781	-187	270	17.538	-5.713	934.475	-554.538
2	561	-709	-182	264	15.875	-5.575	916.938	-548.825
2.5	672	-825	-68	199	18.713	-3.338	901.063	-543.250
3	660	-806	-92	172	18.325	-3.300	882.350	-539.913
3.5	630	-791	-151	226	17.763	-4.713	864.025	-536.613
4	563	-717	-129	196	16.000	-4.063	846.263	-531.900
4.5	495	-649	-128	190	14.300	-3.975	830.263	-527.838
5	392	-546	-127	194	11.725	-4.013	815.963	-523.863
5.5	370	-527	-148	231	11.213	-4.738	804.238	-519.850
6	400	-563	-178	258	12.038	-5.450	793.025	-515.113
6.5	375	-521	-202	283	11.200	-6.063	780.988	-509.663
7	375	-539	-214	300	11.425	-6.425	769.788	-503.600
7.5	394	-548	-214	302	11.775	-6.450	758.363	-497.175
8	369	-518	-245	310	11.088	-6.938	746.588	-490.725
8.5	318	-480	-342	446	9.975	-9.850	735.500	-483.788
9	290	-439	-485	560	9.113	-13.063	725.525	-473.938
9.5	272	-430	-516	592	8.775	-13.850	716.413	-460.875
10	249	-419	-580	669	8.350	-15.613	707.638	-447.025
10.5	306	-453	-629	713	9.488	-16.775	699.288	-431.413
11	339	-486	-668	750	10.313	-17.725	689.800	-414.638
11.5	309	-478	-503	607	9.838	-13.875	679.488	-396.913
12	330	-475	-372	447	10.063	-10.238	669.650	-383.038
12.5	358	-509	-385	469	10.838	-10.675	659.588	-372.800
13	392	-557	-420	508	11.863	-11.600	648.750	-362.125
13.5	446	-600	-433	509	13.075	-11.775	636.888	-350.525
14	514	-673	-453	528	14.838	-12.263	623.813	-338.750
14.5	394	-568	-366	459	12.025	-10.313	608.975	-326.488
15	275	-428	-281	372	8.788	-8.163	596.950	-316.175
15.5	249	-403	-157	246	8.150	-5.038	588.163	-308.013
16	290	-457	-152	235	9.338	-4.838	580.013	-302.975
16.5	336	-482	-207	288	10.225	-6.188	570.675	-298.138
17	372	-539	-248	329	11.388	-7.213	560.450	-291.950
17.5	380	-541	-186	265	11.513	-5.638	549.063	-284.738
18	352	-504	-247	316	10.700	-7.038	537.550	-279.100
18.5	362	-527	-337	406	11.113	-9.288	526.850	-272.063
19	395	-568	-395	460	12.038	-10.688	515.738	-262.775
19.5	392	-542	-469	537	11.675	-12.575	503.700	-252.088
20	521	-678	-522	594	14.988	-13.950	492.025	-239.513
20.5	734	-897	-533	621	20.388	-14.425	477.038	-225.563
21	802	-952	-486	549	21.925	-12.938	456.650	-211.138
21.5	810	-979	-458	524	22.363	-12.275	434.725	-198.200
22	804	-959	-363	440	22.038	-10.038	412.363	-185.925
22.5	801	-952	-350	419	21.913	-9.613	390.325	-175.888
23	795	-961	-385	479	21.950	-10.800	368.413	-166.275
23.5	912	-1058	-329	406	24.625	-9.188	346.463	-155.475
24	924	-1088	-228	301	25.150	-6.613	321.838	-146.288
24.5	950	-1106	-167	259	25.700	-5.325	296.688	-139.675
25	979	-1133	-202	289	26.400	-6.138	270.988	-134.350
25.5	1047	-1196	-256	323	28.038	-7.238	244.588	-128.213
26	1086	-1242	-302	361	29.100	-8.288	216.550	-120.975
26.5	850	-1007	-157	257	23.213	-5.175	187.450	-112.688
27	635	-785	-113	185	17.750	-3.725	164.238	-107.513
27.5	560	-725	-126	205	16.063	-4.138	146.488	-103.788
28	571	-736	-176	251	16.338	-5.338	130.425	-99.650
28.5	565	-712	-200	284	15.963	-6.050	114.088	-94.313
29	555	-728	-244	320	16.038	-7.050	98.125	-88.263
29.5	310	-468	-149	239	9.725	-4.850	82.088	-81.213
30	166	-317	-96	170	6.038	-3.325	72.363	-76.363
30.5	237	-391	-76	158	7.850	-2.925	66.325	-73.038
31	299	-469	-87	165	9.600	-3.150	58.475	-70.113
31.5	325	-470	-77	140	9.938	-2.713	48.875	-66.963
32	287	-456	-27	108	9.288	-1.688	38.938	-64.250
32.5	114	-278	95	15	4.900	1.000	29.650	-62.563
33	-36	-150	21	88	1.425	-0.838	24.750	-63.563
33.5	23	-174	-322	401	2.463	-9.038	23.325	-62.725
34	71	-237	-548	652	3.850	-15.000	20.863	-53.688
34.5	169	-325	-659	754	6.175	-17.663	17.013	-38.688
35	363	-504	-799	883	10.838	-21.025	10.838	-21.025
Reference Point (35.5 m)							0.000	0.000



C305-IM143030

Serial number probe: 1035333

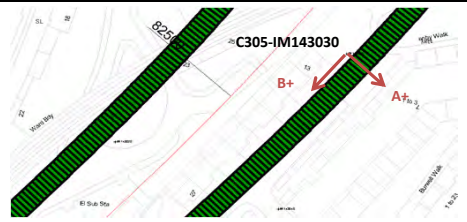


5-3-13 13:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	892	-1120	-516	547	25.148	-13.291	979.813	-578.413
1	840	-1061	-340	370	23.760	-8.879	954.665	-565.121
1.5	576	-819	-214	249	17.435	-5.791	930.905	-556.243
2	520	-744	-204	248	15.798	-5.654	913.470	-550.451
2.5	635	-866	-90	180	18.760	-3.379	897.673	-544.798
3	621	-849	-117	150	18.373	-3.341	878.913	-541.419
3.5	580	-821	-174	204	17.510	-4.729	860.540	-538.078
4	523	-753	-149	174	15.948	-4.041	843.030	-533.349
4.5	463	-681	-149	174	14.298	-4.041	827.083	-529.308
5	354	-582	-144	177	11.698	-4.016	812.785	-525.266
5.5	331	-558	-166	204	11.110	-4.629	801.088	-521.250
6	367	-593	-199	243	11.998	-5.529	789.978	-516.621
6.5	343	-549	-235	271	11.148	-6.329	777.980	-511.093
7	338	-572	-240	276	11.373	-6.454	766.833	-504.764
7.5	355	-587	-242	284	11.773	-6.579	755.460	-498.310
8	335	-551	-262	283	11.073	-6.816	743.688	-491.731
8.5	276	-516	-367	417	9.898	-9.804	732.615	-484.915
9	249	-470	-510	532	8.985	-13.029	722.718	-475.111
9.5	224	-462	-538	570	8.573	-13.854	713.733	-462.083
10	215	-460	-604	644	8.435	-15.604	705.160	-448.229
10.5	257	-485	-644	692	9.273	-16.704	696.725	-432.625
11	296	-526	-698	724	10.273	-17.779	687.453	-415.921
11.5	266	-516	-536	581	9.773	-13.966	677.180	-398.143
12	285	-511	-396	430	9.948	-10.329	667.408	-384.176
12.5	315	-545	-404	438	10.748	-10.529	657.460	-373.848
13	360	-597	-449	492	11.960	-11.766	646.713	-363.319
13.5	413	-640	-458	493	13.160	-11.891	634.753	-351.553
14	478	-708	-485	507	14.823	-12.404	621.593	-339.661
14.5	354	-607	-398	444	12.010	-10.529	606.770	-327.258
15	247	-459	-301	351	8.823	-8.154	594.760	-316.729
15.5	218	-442	-178	233	8.248	-5.141	585.938	-308.575
16	252	-489	-179	206	9.260	-4.816	577.690	-303.434
16.5	297	-520	-237	267	10.210	-6.304	568.430	-298.618
17	332	-576	-280	305	11.348	-7.316	558.220	-292.314
17.5	340	-577	-212	247	11.460	-5.741	546.873	-284.998
18	318	-533	-274	296	10.635	-7.129	535.413	-279.256
18.5	325	-564	-363	388	11.110	-9.391	524.778	-272.128
19	361	-604	-415	441	12.060	-10.704	513.668	-262.736
19.5	346	-575	-489	519	11.510	-12.604	501.608	-252.033
20	476	-716	-546	563	14.898	-13.866	490.098	-239.429
20.5	692	-932	-562	599	20.298	-14.516	475.200	-225.563
21	784	-991	-501	532	21.935	-12.916	454.903	-211.046
21.5	773	-1019	-478	507	22.398	-12.316	432.968	-198.130
22	767	-992	-386	405	21.985	-9.891	410.570	-185.814
22.5	765	-978	-371	397	21.785	-9.604	388.585	-175.923
23	756	-1000	-415	456	21.948	-10.891	366.800	-166.319
23.5	867	-1094	-357	378	24.510	-9.191	344.853	-155.428
24	881	-1121	-250	271	25.023	-6.516	320.343	-146.236
24.5	908	-1147	-180	234	25.685	-5.179	295.320	-139.720
25	941	-1168	-227	269	26.360	-6.204	269.635	-134.541
25.5	1005	-1231	-287	296	27.948	-7.291	243.275	-128.338
26	1044	-1271	-321	331	28.935	-8.154	215.328	-121.046
26.5	808	-1036	-177	237	23.048	-5.179	186.393	-112.893
27	600	-820	-139	158	17.748	-3.716	163.345	-107.714
27.5	515	-757	-145	191	15.898	-4.204	145.598	-103.998
28	538	-770	-196	236	16.348	-5.404	129.700	-99.794
28.5	523	-750	-222	260	15.910	-6.029	113.353	-94.390
29	520	-768	-267	298	16.098	-7.066	97.443	-88.361
29.5	267	-500	-168	218	9.585	-4.829	81.345	-81.295
30	134	-355	-127	140	6.110	-3.341	71.760	-76.466
30.5	198	-429	-104	128	7.835	-2.904	65.650	-73.125
31	265	-510	-116	139	9.685	-3.191	57.815	-70.221
31.5	281	-505	-102	121	9.823	-2.791	48.130	-67.030
32	243	-484	-50	81	9.085	-1.641	38.308	-64.239
32.5	81	-310	78	-7	4.885	1.059	29.223	-62.598
33	-69	-184	-8	61	1.435	-0.866	24.338	-63.656
33.5	-23	-206	-346	382	2.285	-9.104	22.903	-62.790
34	39	-270	-572	625	3.860	-14.966	20.618	-53.686
34.5	125	-362	-685	734	6.085	-17.741	16.758	-38.720
35	316	-538	-815	863	10.673	-20.979	10.673	-20.979
Reference Point (35.5 m)							0.000	0.000

**C305-IM143030**

Serial number probe: D11244



**6-3-13 13:45**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	934	-1088	-491	570	25.275	-13.263	983.675	-577.088
1	882	-1026	-318	390	23.850	-8.850	958.400	-563.825
1.5	618	-779	-190	269	17.463	-5.738	934.550	-554.975
2	556	-713	-183	265	15.863	-5.600	917.088	-549.238
2.5	678	-827	-70	201	18.813	-3.388	901.225	-543.638
3	658	-809	-92	173	18.338	-3.313	882.413	-540.250
3.5	625	-791	-153	230	17.700	-4.788	864.075	-536.938
4	568	-719	-129	194	16.088	-4.038	846.375	-532.150
4.5	500	-646	-126	192	14.325	-3.975	830.288	-528.113
5	389	-544	-126	194	11.663	-4.000	815.963	-524.138
5.5	371	-528	-148	231	11.238	-4.738	804.300	-520.138
6	401	-564	-177	262	12.063	-5.488	793.063	-515.400
6.5	376	-520	-206	288	11.200	-6.175	781.000	-509.913
7	374	-540	-215	297	11.425	-6.400	769.800	-503.738
7.5	395	-550	-216	304	11.813	-6.500	758.375	-497.338
8	371	-517	-243	305	11.100	-6.850	746.563	-490.838
8.5	319	-484	-341	446	10.038	-9.838	735.463	-483.988
9	292	-434	-485	556	9.075	-13.013	725.425	-474.150
9.5	269	-430	-516	594	8.738	-13.875	716.350	-461.138
10	251	-423	-577	667	8.425	-15.550	707.613	-447.263
10.5	302	-455	-625	716	9.463	-16.763	699.188	-431.713
11	341	-485	-672	750	10.325	-17.775	689.725	-414.950
11.5	310	-476	-506	604	9.825	-13.875	679.400	-397.175
12	330	-474	-370	453	10.050	-10.288	669.575	-383.300
12.5	356	-512	-380	466	10.850	-10.575	659.525	-373.013
13	395	-560	-421	510	11.938	-11.638	648.675	-362.438
13.5	448	-600	-437	511	13.100	-11.850	636.738	-350.800
14	513	-673	-455	533	14.825	-12.350	623.638	-338.950
14.5	397	-568	-372	462	12.063	-10.425	608.813	-326.600
15	281	-426	-283	375	8.838	-8.225	596.750	-316.175
15.5	254	-407	-159	250	8.263	-5.113	587.913	-307.950
16	286	-456	-154	232	9.275	-4.825	579.650	-302.838
16.5	332	-479	-207	293	10.138	-6.250	570.375	-298.013
17	372	-542	-252	328	11.425	-7.250	560.238	-291.763
17.5	383	-539	-188	271	11.525	-5.738	548.813	-284.513
18	354	-502	-248	320	10.700	-7.100	537.288	-278.775
18.5	365	-529	-338	407	11.175	-9.313	526.588	-271.675
19	401	-563	-393	459	12.050	-10.650	515.413	-262.363
19.5	387	-541	-468	536	11.600	-12.550	503.363	-251.713
20	521	-678	-523	591	14.988	-13.925	491.763	-239.163
20.5	734	-895	-536	621	20.363	-14.463	476.775	-225.238
21	801	-953	-482	549	21.925	-12.888	456.413	-210.775
21.5	813	-978	-458	526	22.388	-12.300	434.488	-197.888
22	808	-961	-360	434	22.113	-9.925	412.100	-185.588
22.5	801	-947	-351	419	21.850	-9.625	389.988	-175.663
23	791	-966	-386	483	21.963	-10.863	368.138	-166.038
23.5	911	-1062	-328	406	24.663	-9.175	346.175	-155.175
24	926	-1090	-225	300	25.200	-6.563	321.513	-146.000
24.5	949	-1108	-161	261	25.713	-5.275	296.313	-139.438
25	983	-1129	-205	292	26.400	-6.213	270.600	-134.163
25.5	1042	-1201	-257	324	28.038	-7.263	244.200	-127.950
26	1081	-1241	-301	356	29.025	-8.213	216.163	-120.688
26.5	844	-1006	-156	257	23.125	-5.163	187.138	-112.475
27	637	-788	-116	181	17.813	-3.713	164.013	-107.313
27.5	556	-720	-126	208	15.950	-4.175	146.200	-103.600
28	571	-734	-176	253	16.313	-5.363	130.250	-99.425
28.5	564	-713	-199	284	15.963	-6.038	113.938	-94.063
29	555	-727	-243	318	16.025	-7.013	97.975	-88.025
29.5	312	-468	-147	239	9.750	-4.825	81.950	-81.013
30	167	-315	-97	167	6.025	-3.300	72.200	-76.188
30.5	232	-391	-75	155	7.788	-2.875	66.175	-72.888
31	301	-469	-88	165	9.625	-3.163	58.388	-70.013
31.5	326	-470	-75	144	9.950	-2.738	48.763	-66.850
32	288	-452	-27	105	9.250	-1.650	38.813	-64.113
32.5	115	-275	98	14	4.875	1.050	29.563	-62.463
33	-35	-151	18	89	1.450	-0.888	24.688	-63.513
33.5	22	-173	-322	399	2.438	-9.013	23.238	-62.625
34	73	-237	-549	649	3.875	-14.975	20.800	-53.613
34.5	164	-323	-659	755	6.088	-17.675	16.925	-38.638
35	361	-506	-797	880	10.838	-20.963	10.838	-20.963
Reference Point (35.5 m)							0.000	0.000

**C305-IM143040**

Serial number probe: 1035333

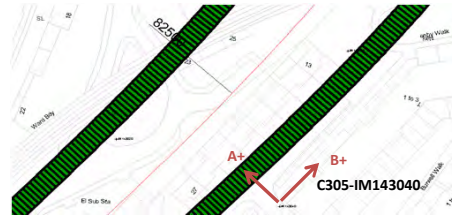


**25-3-13 12:00**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	475	-677	-714	781	14.398	-18.691	1225.728	-1586.909
1	460	-645	-547	605	13.810	-14.404	1211.330	-1568.218
1.5	464	-686	-472	519	14.373	-12.391	1197.520	-1553.814
2	501	-688	-478	551	14.860	-12.866	1183.148	-1541.423
2.5	396	-584	-543	599	12.248	-14.279	1168.288	-1528.556
3	325	-526	-650	714	10.635	-17.054	1156.040	-1514.278
3.5	292	-494	-654	741	9.823	-17.441	1145.405	-1497.224
4	227	-416	-667	728	8.035	-17.441	1135.583	-1479.783
4.5	163	-349	-669	742	6.398	-17.641	1127.548	-1462.341
5	205	-409	-714	764	7.673	-18.479	1121.150	-1444.700
5.5	342	-568	-647	696	11.373	-16.791	1113.478	-1426.221
6	406	-605	-707	772	12.635	-18.491	1102.105	-1409.430
6.5	461	-660	-762	832	14.010	-19.929	1089.470	-1390.939
7	567	-785	-850	904	16.898	-21.929	1075.460	-1371.010
7.5	627	-824	-909	974	18.135	-23.541	1058.563	-1349.081
8	630	-830	-939	996	18.248	-24.191	1040.428	-1325.540
8.5	590	-785	-868	933	17.185	-22.516	1022.180	-1301.349
9	544	-741	-860	926	16.060	-22.329	1004.995	-1278.833
9.5	510	-713	-833	898	15.285	-21.641	988.935	-1256.504
10	471	-682	-884	921	14.410	-22.566	973.650	-1234.863
10.5	432	-640	-860	923	13.398	-22.291	959.240	-1212.296
11	430	-628	-837	877	13.223	-21.429	945.843	-1190.005
11.5	534	-736	-811	850	15.873	-20.766	932.620	-1168.576
12	617	-828	-838	908	18.060	-21.829	916.748	-1147.810
12.5	688	-913	-820	865	20.010	-21.066	898.688	-1125.981
13	766	-966	-754	804	21.648	-19.479	878.678	-1104.915
13.5	820	-1012	-747	788	22.898	-19.191	857.030	-1085.436
14	797	-1028	-782	826	22.810	-20.104	834.133	-1066.245
14.5	800	-998	-771	831	22.473	-20.029	811.323	-1046.141
15	799	-1007	-777	830	22.573	-20.091	788.850	-1026.113
15.5	756	-960	-709	784	21.448	-18.666	766.278	-1006.021
16	720	-919	-638	712	20.485	-16.879	744.830	-987.355
16.5	745	-951	-619	699	21.198	-16.479	724.345	-970.476
17	749	-958	-602	670	21.335	-15.904	703.148	-953.998
17.5	741	-957	-606	668	21.223	-15.929	681.813	-938.094
18	729	-941	-654	721	20.873	-17.191	660.590	-922.165
18.5	698	-905	-697	762	20.035	-18.241	639.718	-904.974
19	681	-888	-728	806	19.610	-19.179	619.683	-886.733
19.5	621	-833	-772	856	18.173	-20.354	600.073	-867.554
20	547	-753	-918	972	16.248	-23.629	581.900	-847.200
20.5	565	-775	-967	1010	16.748	-24.716	565.653	-823.571
21	561	-787	-1058	1089	16.848	-26.841	548.905	-798.855
21.5	646	-858	-1177	1229	18.798	-30.079	532.058	-772.014
22	638	-851	-1374	1416	18.610	-34.879	513.260	-741.935
22.5	522	-742	-1483	1525	15.798	-37.604	494.650	-707.056
23	421	-628	-1440	1507	13.110	-36.841	478.853	-669.453
23.5	325	-554	-1455	1504	10.985	-36.991	465.743	-632.611
24	363	-585	-1461	1515	11.848	-37.204	454.758	-595.620
24.5	348	-568	-1469	1542	11.448	-37.641	442.910	-558.416
25	365	-581	-1477	1545	11.823	-37.779	431.463	-520.775
25.5	342	-544	-1514	1560	11.073	-38.429	419.640	-482.996
26	321	-551	-1577	1643	10.898	-40.254	408.568	-444.568
26.5	527	-743	-1357	1430	15.873	-34.841	397.670	-404.314
27	731	-956	-1160	1218	21.085	-29.729	381.798	-369.473
27.5	815	-1038	-996	1042	23.160	-25.479	360.713	-339.744
28	879	-1088	-921	983	24.585	-23.804	337.553	-314.265
28.5	920	-1131	-936	980	25.635	-23.954	312.968	-290.461
29	907	-1126	-907	947	25.410	-23.179	287.333	-266.508
29.5	987	-1196	-795	866	27.285	-20.766	261.923	-243.329
30	1006	-1216	-880	962	27.773	-23.029	234.638	-222.563
30.5	999	-1230	-897	951	27.860	-23.104	206.865	-199.534
31	1044	-1265	-898	944	28.860	-23.029	179.005	-176.430
31.5	1051	-1270	-916	960	29.010	-23.454	150.145	-153.401
32	911	-1130	-871	928	25.510	-22.491	121.135	-129.948
32.5	777	-983	-828	860	21.998	-21.104	95.625	-107.456
33	688	-914	-819	844	20.023	-20.791	73.628	-86.353
33.5	630	-845	-864	893	18.435	-21.966	53.605	-65.561
34	551	-766	-871	906	16.460	-22.216	35.170	-43.595
34.5	634	-863	-833	877	18.710	-21.379	18.710	-21.379
Reference Point (35 m)							0.000	0.000

**C305-IM143040**

Serial number probe: D11244

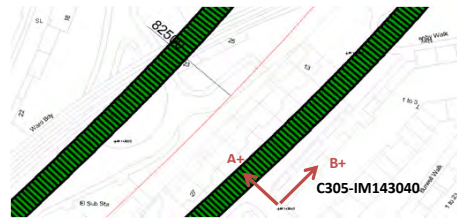


**26-3-13 10:00**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	518	-645	-693	801	14.538	-18.675	1229.800	-1585.338
1	494	-606	-524	627	13.750	-14.388	1215.263	-1566.663
1.5	505	-653	-448	544	14.475	-12.400	1201.513	-1552.275
2	544	-658	-450	572	15.025	-12.775	1187.038	-1539.875
2.5	438	-553	-517	621	12.388	-14.225	1172.013	-1527.100
3	363	-486	-621	740	10.613	-17.013	1159.625	-1512.875
3.5	334	-464	-635	759	9.975	-17.425	1149.013	-1495.863
4	268	-384	-640	749	8.150	-17.363	1139.038	-1478.438
4.5	198	-318	-642	766	6.450	-17.600	1130.888	-1461.075
5	243	-378	-694	791	7.763	-18.563	1124.438	-1443.475
5.5	386	-528	-625	724	11.425	-16.863	1116.675	-1424.913
6	448	-565	-686	792	12.663	-18.475	1105.250	-1408.050
6.5	496	-621	-734	854	13.963	-19.850	1092.588	-1389.575
7	608	-752	-826	930	17.000	-21.950	1078.625	-1369.725
7.5	664	-790	-881	993	18.175	-23.425	1061.625	-1347.775
8	666	-800	-912	1021	18.325	-24.163	1043.450	-1324.350
8.5	634	-751	-849	951	17.313	-22.500	1025.125	-1300.188
9	582	-710	-833	947	16.150	-22.250	1007.813	-1277.688
9.5	546	-677	-814	920	15.288	-21.675	991.663	-1255.438
10	512	-649	-859	940	14.513	-22.488	976.375	-1233.763
10.5	467	-602	-841	947	13.363	-22.350	961.863	-1211.275
11	467	-594	-810	904	13.263	-21.425	948.500	-1188.925
11.5	573	-704	-790	878	15.963	-20.850	935.238	-1167.500
12	661	-788	-818	927	18.113	-21.813	919.275	-1146.650
12.5	730	-879	-797	885	20.113	-21.025	901.163	-1124.838
13	803	-933	-734	824	21.700	-19.475	881.050	-1103.813
13.5	855	-982	-722	813	22.963	-19.188	859.350	-1084.338
14	841	-989	-758	852	22.875	-20.125	836.388	-1065.150
14.5	840	-963	-743	849	22.538	-19.900	813.513	-1045.025
15	833	-974	-754	849	22.588	-20.038	790.975	-1025.125
15.5	793	-928	-681	808	21.513	-18.613	768.388	-1005.088
16	762	-882	-615	736	20.550	-16.888	746.875	-986.475
16.5	780	-917	-593	720	21.213	-16.413	726.325	-969.588
17	792	-928	-576	689	21.500	-15.813	705.113	-953.175
17.5	785	-917	-584	686	21.275	-15.875	683.613	-937.363
18	772	-901	-633	739	20.913	-17.150	662.338	-921.488
18.5	734	-868	-673	790	20.025	-18.288	641.425	-904.338
19	715	-857	-705	825	19.650	-19.125	621.400	-886.050
19.5	663	-797	-747	881	18.250	-20.350	601.750	-866.925
20	584	-718	-896	993	16.275	-23.613	583.500	-846.575
20.5	599	-740	-944	1031	16.738	-24.688	567.225	-822.963
21	601	-749	-1029	1114	16.875	-26.788	550.488	-798.275
21.5	689	-820	-1152	1248	18.863	-30.000	533.613	-771.488
22	677	-812	-1352	1442	18.613	-34.925	514.750	-741.488
22.5	559	-708	-1454	1549	15.838	-37.538	496.138	-706.563
23	465	-592	-1417	1525	13.213	-36.775	480.300	-669.025
23.5	367	-516	-1431	1527	11.038	-36.975	467.088	-632.250
24	402	-545	-1442	1537	11.838	-37.238	456.050	-595.275
24.5	390	-536	-1444	1565	11.575	-37.613	444.213	-558.038
25	399	-550	-1451	1566	11.863	-37.713	432.638	-520.425
25.5	386	-512	-1487	1587	11.225	-38.425	420.775	-482.713
26	360	-519	-1552	1667	10.988	-40.238	409.550	-444.288
26.5	563	-705	-1338	1449	15.850	-34.838	398.563	-404.050
27	771	-921	-1136	1245	21.150	-29.763	382.713	-369.213
27.5	852	-1001	-969	1070	23.163	-25.488	361.563	-339.450
28	923	-1057	-901	1003	24.750	-23.800	338.400	-313.963
28.5	954	-1098	-913	999	25.650	-23.900	313.650	-290.163
29	943	-1096	-880	965	25.488	-23.063	288.000	-266.263
29.5	1027	-1162	-775	887	27.363	-20.775	262.513	-243.200
30	1047	-1181	-861	989	27.850	-23.125	235.150	-222.425
30.5	1036	-1190	-875	972	27.825	-23.088	207.300	-199.300
31	1087	-1231	-875	963	28.975	-22.975	179.475	-176.213
31.5	1090	-1230	-897	979	29.000	-23.450	150.500	-153.238
32	952	-1095	-846	952	25.588	-22.475	121.500	-129.788
32.5	813	-952	-802	884	22.063	-21.075	95.913	-107.313
33	723	-878	-792	864	20.013	-20.700	73.850	-86.238
33.5	672	-813	-842	916	18.563	-21.975	53.838	-65.538
34	595	-734	-844	930	16.613	-22.175	35.275	-43.563
34.5	668	-825	-813	898	18.663	-21.388	18.663	-21.388
Reference Point (35 m)							0.000	0.000

**C305-IM143040**

Serial number probe: 1035333



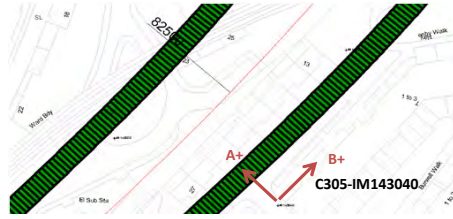
**25-3-13 13:00**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	482	-693	-720	783	14.685	-18.791	1245.228	-1591.646
1	455	-652	-542	608	13.835	-14.379	1230.543	-1572.855
1.5	463	-703	-447	516	14.573	-12.041	1216.708	-1558.476
2	508	-709	-487	563	15.210	-13.129	1202.135	-1546.435
2.5	389	-600	-550	603	12.360	-14.416	1186.925	-1533.306
3	318	-524	-660	713	10.523	-17.166	1174.565	-1518.890
3.5	298	-505	-680	731	10.035	-17.641	1164.043	-1501.724
4	226	-437	-682	744	8.285	-17.829	1154.008	-1484.083
4.5	160	-367	-669	736	6.585	-17.566	1145.723	-1466.254
5	206	-431	-706	769	7.960	-18.441	1139.138	-1448.688
5.5	350	-574	-659	728	11.548	-17.341	1131.178	-1430.246
6	404	-610	-704	780	12.673	-18.554	1119.630	-1412.905
6.5	467	-664	-757	821	14.135	-19.729	1106.958	-1394.351
7	569	-789	-857	903	16.973	-22.004	1092.823	-1374.623
7.5	625	-837	-921	961	18.273	-23.529	1075.850	-1352.619
8	631	-840	-934	1005	18.385	-24.241	1057.578	-1329.090
8.5	593	-797	-907	953	17.373	-23.254	1039.193	-1304.849
9	549	-761	-850	916	16.373	-22.079	1021.820	-1281.595
9.5	506	-723	-835	890	15.360	-21.566	1005.448	-1259.516
10	471	-698	-892	932	14.610	-22.804	990.088	-1237.950
10.5	426	-641	-874	928	13.335	-22.529	975.478	-1215.146
11	432	-642	-862	870	13.423	-21.654	962.143	-1192.618
11.5	541	-752	-805	862	16.160	-20.841	948.720	-1170.964
12	628	-840	-825	892	18.348	-21.466	932.560	-1150.123
12.5	707	-925	-816	868	20.398	-21.054	914.213	-1128.656
13	776	-974	-750	812	21.873	-19.529	893.815	-1107.603
13.5	824	-1033	-754	796	23.210	-19.379	871.943	-1088.074
14	812	-1048	-779	844	23.248	-20.291	848.733	-1068.695
14.5	819	-1010	-756	837	22.860	-19.916	825.485	-1048.404
15	810	-1018	-773	833	22.848	-20.079	802.625	-1028.488
15.5	767	-973	-709	789	21.748	-18.729	779.778	-1008.409
16	735	-935	-655	735	20.873	-17.379	758.030	-989.680
16.5	757	-977	-641	691	21.673	-16.654	737.158	-972.301
17	774	-979	-613	674	21.910	-16.091	715.485	-955.648
17.5	760	-963	-601	659	21.535	-15.754	693.575	-939.556
18	740	-946	-667	724	21.073	-17.391	672.040	-923.803
18.5	708	-910	-712	783	20.223	-18.691	650.968	-906.411
19	681	-908	-744	805	19.860	-19.366	630.745	-887.720
19.5	630	-843	-796	861	18.410	-20.716	610.885	-868.354
20	564	-765	-918	983	16.610	-23.766	592.475	-847.638
20.5	573	-790	-957	1005	17.035	-24.529	575.865	-823.871
21	579	-791	-1019	1081	17.123	-26.254	558.830	-799.343
21.5	659	-854	-1199	1227	18.910	-30.329	541.708	-773.089
22	661	-860	-1373	1413	19.010	-34.829	522.798	-742.760
22.5	539	-754	-1465	1522	16.160	-37.341	503.788	-707.931
23	443	-641	-1460	1511	13.548	-37.141	487.628	-670.590
23.5	353	-558	-1452	1524	11.385	-37.204	474.080	-633.449
24	379	-579	-1460	1531	11.973	-37.391	462.695	-596.245
24.5	366	-570	-1481	1538	11.698	-37.741	450.723	-558.854
25	374	-567	-1472	1527	12.010	-37.491	439.025	-521.113
25.5	375	-557	-1498	1574	11.648	-38.404	427.015	-483.621
26	347	-553	-1568	1655	11.248	-40.291	415.368	-445.218
26.5	552	-744	-1351	1425	16.198	-34.704	404.120	-404.926
27	753	-967	-1145	1225	21.498	-29.629	387.923	-370.223
27.5	831	-1044	-967	1056	23.435	-25.291	366.425	-340.594
28	899	-1101	-921	1003	24.998	-24.054	342.990	-315.303
28.5	936	-1135	-931	1005	25.885	-24.204	317.993	-291.249
29	933	-1140	-887	970	25.910	-23.216	292.108	-267.045
29.5	1006	-1207	-809	863	27.660	-20.904	266.198	-243.829
30	1029	-1230	-891	949	28.235	-23.004	238.538	-222.925
30.5	1019	-1227	-899	954	28.073	-23.166	210.303	-199.921
31	1066	-1275	-901	963	29.260	-23.304	182.230	-176.755
31.5	1073	-1267	-912	961	29.248	-23.416	152.970	-153.451
32	935	-1136	-883	943	25.885	-22.829	123.723	-130.035
32.5	800	-992	-843	875	22.398	-21.479	97.838	-107.206
33	712	-920	-813	858	20.398	-20.891	75.440	-85.728
33.5	662	-860	-830	903	19.023	-21.666	55.043	-64.836
34	589	-779	-850	901	17.098	-21.891	36.020	-43.170
34.5	647	-867	-819	883	18.923	-21.279	18.923	-21.279
Reference Point (35 m)							0.000	0.000



**C305-IM143040**

Serial number probe: D11244

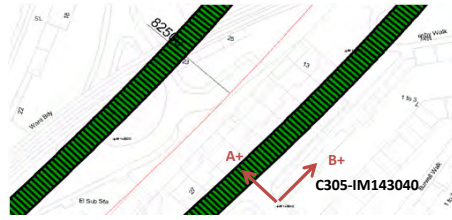


**26-3-13 11:00**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	516	-655	-697	801	14.638	-18.725	1247.463	-1590.375
1	496	-617	-512	630	13.913	-14.275	1232.825	-1571.650
1.5	506	-663	-428	537	14.613	-12.063	1218.913	-1557.375
2	544	-671	-458	586	15.188	-13.050	1204.300	-1545.313
2.5	432	-566	-524	622	12.475	-14.325	1189.113	-1532.263
3	360	-496	-632	740	10.700	-17.150	1176.638	-1517.938
3.5	332	-470	-654	755	10.025	-17.613	1165.938	-1500.788
4	266	-395	-652	763	8.263	-17.688	1155.913	-1483.175
4.5	196	-330	-652	758	6.575	-17.625	1147.650	-1465.488
5	250	-391	-684	794	8.013	-18.475	1141.075	-1447.863
5.5	388	-540	-640	747	11.600	-17.338	1133.063	-1429.388
6	446	-675	-687	797	12.763	-18.550	1121.463	-1412.050
6.5	500	-629	-730	837	14.113	-19.588	1108.700	-1393.500
7	612	-753	-830	930	17.063	-22.000	1094.588	-1373.913
7.5	669	-800	-894	987	18.363	-23.513	1077.525	-1351.913
8	665	-805	-906	1022	18.375	-24.100	1059.163	-1328.400
8.5	629	-759	-886	981	17.350	-23.338	1040.788	-1304.300
9	584	-719	-833	937	16.288	-22.125	1023.438	-1280.963
9.5	548	-687	-809	916	15.438	-21.563	1007.150	-1258.838
10	516	-658	-864	961	14.675	-22.813	991.713	-1237.275
10.5	471	-611	-855	950	13.525	-22.563	977.038	-1214.463
11	466	-609	-832	894	13.438	-21.575	963.513	-1191.900
11.5	581	-714	-785	885	16.188	-20.875	950.075	-1170.325
12	663	-801	-808	916	18.300	-21.550	933.888	-1149.450
12.5	740	-889	-786	890	20.363	-20.950	915.588	-1127.900
13	812	-943	-732	831	21.938	-19.538	895.225	-1106.950
13.5	861	-992	-733	818	23.163	-19.388	873.288	-1087.413
14	847	-1008	-760	863	23.188	-20.288	850.125	-1068.025
14.5	852	-977	-737	855	22.863	-19.900	826.938	-1047.738
15	842	-987	-755	860	22.863	-20.188	804.075	-1027.838
15.5	804	-944	-684	812	21.850	-18.700	781.213	-1007.650
16	773	-898	-628	755	20.888	-17.288	759.363	-988.950
16.5	790	-936	-610	720	21.575	-16.625	738.475	-971.663
17	806	-943	-584	699	21.863	-16.038	716.900	-955.038
17.5	798	-931	-584	686	21.613	-15.875	695.038	-939.000
18	781	-914	-647	749	21.188	-17.450	673.425	-923.125
18.5	743	-880	-689	802	20.288	-18.638	652.238	-905.675
19	725	-867	-724	826	19.900	-19.375	631.950	-887.038
19.5	671	-803	-777	885	18.425	-20.775	612.050	-867.663
20	601	-728	-895	1001	16.613	-23.700	593.625	-846.888
20.5	618	-749	-932	1029	17.088	-24.513	577.013	-823.188
21	621	-758	-1000	1111	17.238	-26.388	559.925	-798.675
21.5	703	-824	-1171	1256	19.088	-30.338	542.688	-772.288
22	695	-819	-1352	1440	18.925	-34.900	523.600	-741.950
22.5	580	-712	-1446	1544	16.150	-37.375	504.675	-707.050
23	478	-600	-1429	1529	13.475	-36.975	488.525	-669.675
23.5	386	-523	-1426	1542	11.363	-37.100	475.050	-632.700
24	419	-551	-1433	1547	12.125	-37.250	463.688	-595.600
24.5	405	-540	-1452	1562	11.813	-37.675	451.563	-558.350
25	420	-556	-1450	1552	12.200	-37.525	439.750	-520.675
25.5	409	-522	-1480	1590	11.638	-38.375	427.550	-483.150
26	389	-522	-1537	1673	11.388	-40.125	415.913	-444.775
26.5	586	-711	-1325	1454	16.213	-34.738	404.525	-404.650
27	792	-929	-1121	1252	21.513	-29.663	388.313	-369.913
27.5	877	-1008	-946	1076	23.563	-25.275	366.800	-340.250
28	941	-1060	-900	1023	25.013	-24.038	343.238	-314.975
28.5	974	-1099	-913	1033	25.913	-24.325	318.225	-290.938
29	967	-1101	-870	988	25.850	-23.225	292.313	-266.613
29.5	1046	-1167	-786	888	27.663	-20.925	266.463	-243.388
30	1069	-1190	-865	974	28.238	-22.988	238.800	-222.463
30.5	1061	-1194	-870	976	28.188	-23.075	210.563	-199.475
31	1109	-1236	-881	983	29.313	-23.300	182.375	-176.400
31.5	1115	-1234	-888	989	29.363	-23.463	153.063	-153.100
32	971	-1104	-860	964	25.938	-22.800	123.700	-129.638
32.5	837	-958	-812	893	22.438	-21.313	97.763	-106.838
33	745	-879	-787	877	20.300	-20.800	75.325	-85.525
33.5	699	-818	-812	925	18.963	-21.713	55.025	-64.725
34	624	-740	-821	924	17.050	-21.813	36.063	-43.013
34.5	692	-829	-789	907	19.013	-21.200	19.013	-21.200
Reference Point (35 m)							0.000	0.000

**C305-IM143040**

Serial number probe: 1035333

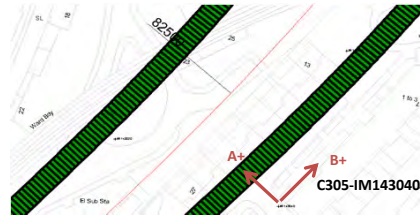


**25-3-13 14:00**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	466	-705	-710	763	14.635	-18.416	1240.728	-1590.396
1	448	-663	-552	607	13.885	-14.491	1226.093	-1571.980
1.5	463	-712	-454	515	14.685	-12.116	1212.208	-1557.489
2	495	-720	-481	549	15.185	-12.879	1197.523	-1545.373
2.5	382	-602	-538	611	12.298	-14.366	1182.338	-1532.494
3	316	-549	-644	718	10.810	-17.029	1170.040	-1518.128
3.5	287	-517	-657	724	10.048	-17.266	1159.230	-1501.099
4	214	-448	-661	744	8.273	-17.566	1149.163	-1483.833
4.5	146	-375	-681	735	6.510	-17.704	1140.910	-1466.266
5	189	-435	-714	789	7.798	-18.791	1134.400	-1448.563
5.5	331	-592	-647	717	11.535	-17.054	1126.603	-1429.771
6	393	-625	-695	770	12.723	-18.316	1115.068	-1412.718
6.5	455	-674	-749	825	14.110	-19.679	1102.345	-1394.401
7	567	-805	-846	894	17.148	-21.754	1088.235	-1374.723
7.5	621	-841	-915	961	18.273	-23.454	1071.088	-1352.969
8	615	-844	-926	992	18.235	-23.979	1052.815	-1329.515
8.5	585	-801	-894	956	17.323	-23.129	1034.580	-1305.536
9	530	-761	-860	905	16.135	-22.066	1017.258	-1282.408
9.5	497	-732	-836	890	15.360	-21.579	1001.123	-1260.341
10	458	-706	-896	944	14.548	-23.004	985.763	-1238.763
10.5	415	-662	-877	907	13.460	-22.304	971.215	-1215.759
11	413	-655	-855	895	13.348	-21.879	957.755	-1193.455
11.5	526	-766	-819	856	16.148	-20.941	944.408	-1171.576
12	613	-847	-834	900	18.248	-21.679	928.260	-1150.635
12.5	694	-933	-799	871	20.335	-20.879	910.013	-1128.956
13	759	-985	-737	805	21.798	-19.279	889.678	-1108.078
13.5	816	-1042	-745	797	23.223	-19.279	867.880	-1088.799
14	802	-1040	-774	838	23.023	-20.154	844.658	-1069.520
14.5	800	-1024	-763	838	22.798	-20.016	821.635	-1049.366
15	788	-1029	-785	837	22.710	-20.279	798.838	-1029.350
15.5	744	-990	-719	779	21.673	-18.729	776.128	-1009.071
16	715	-946	-647	726	20.760	-17.166	754.455	-990.343
16.5	733	-985	-635	692	21.473	-16.591	733.695	-973.176
17	756	-985	-607	668	21.760	-15.941	712.223	-956.585
17.5	747	-980	-619	675	21.585	-16.179	690.463	-940.644
18	735	-951	-666	720	21.073	-17.329	668.878	-924.465
18.5	694	-914	-723	757	20.098	-18.504	647.805	-907.136
19	675	-912	-742	803	19.835	-19.316	627.708	-888.633
19.5	620	-843	-802	868	18.285	-20.879	607.873	-869.316
20	550	-776	-930	988	16.573	-23.979	589.588	-848.438
20.5	565	-786	-974	1034	16.885	-25.104	573.015	-824.459
21	575	-799	-1049	1116	17.173	-27.066	556.130	-799.355
21.5	645	-865	-1199	1243	18.873	-30.529	538.958	-772.289
22	641	-865	-1393	1411	18.823	-35.054	520.085	-741.760
22.5	513	-766	-1488	1511	15.985	-37.491	501.263	-706.706
23	428	-637	-1457	1494	13.310	-36.891	485.278	-669.215
23.5	329	-563	-1457	1514	11.148	-37.141	471.968	-632.324
24	364	-592	-1452	1520	11.948	-37.154	460.820	-595.183
24.5	350	-579	-1471	1528	11.610	-37.491	448.873	-558.029
25	373	-602	-1480	1537	12.185	-37.716	437.263	-520.538
25.5	344	-572	-1510	1570	11.448	-38.504	425.078	-482.821
26	322	-570	-1572	1642	11.148	-40.179	413.630	-444.318
26.5	531	-753	-1347	1415	16.048	-34.529	402.483	-404.139
27	738	-975	-1142	1221	21.410	-29.541	386.435	-369.610
27.5	822	-1058	-982	1051	23.498	-25.416	365.025	-340.069
28	888	-1103	-920	995	24.885	-23.941	341.528	-314.653
28.5	921	-1141	-932	1000	25.773	-24.154	316.643	-290.711
29	913	-1144	-893	956	25.710	-23.116	290.870	-266.558
29.5	996	-1207	-808	858	27.535	-20.829	265.160	-243.441
30	1007	-1238	-879	945	28.060	-22.804	237.625	-222.613
30.5	1007	-1241	-896	950	28.098	-23.079	209.565	-199.809
31	1061	-1275	-901	971	29.198	-23.404	181.468	-176.730
31.5	1057	-1282	-909	966	29.235	-23.441	152.270	-153.326
32	919	-1151	-871	934	25.873	-22.566	123.035	-129.885
32.5	790	-1000	-810	873	22.373	-21.041	97.163	-107.319
33	698	-929	-811	855	20.335	-20.829	74.790	-86.278
33.5	646	-867	-850	901	18.910	-21.891	54.455	-65.449
34	562	-781	-863	917	16.785	-22.254	35.545	-43.558
34.5	635	-866	-832	872	18.760	-21.304	18.760	-21.304
Reference Point (35 m)							0.000	0.000

**C305-IM143040**

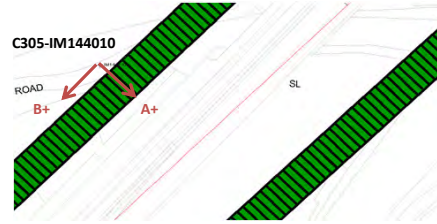
Serial number probe: D11244



**26-3-13 11:45**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	505	-666	-692	780	14.638	-18.400	1243.800	-1588.738
1	481	-626	-526	630	13.838	-14.450	1229.163	-1570.338
1.5	496	-674	-426	541	14.625	-12.088	1215.325	-1555.888
2	531	-679	-451	573	15.125	-12.800	1200.700	-1543.800
2.5	421	-573	-513	630	12.425	-14.288	1185.575	-1531.000
3	349	-509	-618	738	10.725	-16.950	1173.150	-1516.713
3.5	320	-483	-639	751	10.038	-17.375	1162.425	-1499.763
4	252	-407	-638	772	8.238	-17.625	1152.388	-1482.388
4.5	184	-340	-658	763	6.550	-17.763	1144.150	-1464.763
5	233	-400	-689	806	7.913	-18.688	1137.600	-1447.000
5.5	376	-552	-623	738	11.600	-17.013	1129.688	-1428.313
6	435	-584	-677	787	12.738	-18.300	1118.088	-1411.300
6.5	488	-633	-725	848	14.013	-19.663	1105.350	-1393.000
7	600	-765	-826	920	17.063	-21.825	1091.338	-1373.338
7.5	666	-809	-885	988	18.313	-23.413	1074.275	-1351.513
8	654	-814	-901	1013	18.350	-23.925	1055.963	-1328.100
8.5	623	-767	-873	979	17.375	-23.150	1037.613	-1304.175
9	573	-728	-831	934	16.263	-22.063	1020.238	-1281.025
9.5	538	-698	-818	916	15.450	-21.675	1003.975	-1258.963
10	500	-666	-867	967	14.575	-22.925	986.525	-1237.288
10.5	458	-623	-857	928	13.513	-22.313	973.950	-1214.363
11	458	-615	-827	918	13.413	-21.813	960.438	-1192.050
11.5	567	-725	-796	875	16.150	-20.888	947.025	-1170.238
12	657	-811	-806	921	18.350	-21.588	930.875	-1149.350
12.5	730	-903	-773	890	20.413	-20.788	912.525	-1127.763
13	802	-953	-712	834	21.938	-19.325	892.113	-1106.975
13.5	850	-1006	-719	821	23.200	-19.250	870.175	-1087.650
14	835	-1007	-751	864	23.025	-20.188	846.975	-1068.400
14.5	837	-984	-745	858	22.763	-20.038	823.950	-1048.213
15	824	-995	-763	857	22.738	-20.250	801.188	-1028.175
15.5	787	-951	-691	797	21.725	-18.600	778.450	-1007.925
16	759	-905	-620	744	20.800	-17.050	756.725	-989.325
16.5	775	-944	-616	713	21.488	-16.613	735.925	-972.275
17	798	-954	-583	696	21.900	-15.988	714.438	-955.663
17.5	783	-939	-590	693	21.525	-16.038	692.538	-939.675
18	768	-921	-648	747	21.113	-17.438	671.013	-923.638
18.5	730	-885	-696	779	20.188	-18.438	649.900	-906.200
19	715	-878	-718	829	19.913	-19.338	629.713	-887.763
19.5	663	-814	-772	887	18.463	-20.738	609.800	-868.425
20	583	-739	-901	1010	16.525	-23.888	591.338	-847.688
20.5	600	-757	-951	1053	16.963	-25.050	574.813	-823.800
21	610	-763	-1025	1133	17.163	-26.975	557.850	-798.750
21.5	689	-832	-1173	1261	19.013	-30.425	540.688	-771.775
22	679	-830	-1365	1436	18.863	-35.013	521.675	-741.350
22.5	558	-726	-1462	1531	16.050	-37.413	502.813	-706.338
23	462	-603	-1430	1520	13.313	-36.875	486.763	-668.925
23.5	372	-530	-1432	1535	11.275	-37.088	473.450	-632.050
24	408	-554	-1431	1541	12.025	-37.150	462.175	-594.963
24.5	393	-545	-1451	1555	11.725	-37.575	450.150	-557.813
25	407	-562	-1450	1555	12.113	-37.563	438.425	-520.238
25.5	389	-532	-1486	1587	11.513	-38.413	426.313	-482.675
26	366	-534	-1547	1668	11.250	-40.188	414.800	-444.263
26.5	573	-720	-1323	1444	16.163	-34.588	403.550	-404.075
27	780	-937	-1122	1244	21.463	-29.575	387.388	-369.488
27.5	863	-1018	-953	1068	23.513	-25.263	365.925	-339.913
28	926	-1069	-902	1016	24.938	-23.975	342.413	-314.650
28.5	960	-1111	-908	1024	25.888	-24.150	317.475	-290.675
29	953	-1111	-866	985	25.800	-23.138	291.588	-266.525
29.5	1031	-1178	-781	886	27.613	-20.838	265.788	-243.388
30	1051	-1200	-861	973	28.138	-22.925	238.175	-222.550
30.5	1045	-1206	-868	977	28.138	-23.063	210.038	-199.625
31	1095	-1246	-877	989	29.263	-23.325	181.900	-176.563
31.5	1100	-1247	-885	993	29.338	-23.475	152.638	-153.238
32	959	-1115	-843	963	25.925	-22.575	123.300	-129.763
32.5	824	-966	-791	894	22.375	-21.063	97.375	-107.188
33	731	-890	-781	882	20.263	-20.788	75.000	-86.125
33.5	683	-831	-824	925	18.925	-21.863	54.738	-65.338
34	605	-747	-834	934	16.900	-22.100	35.813	-43.475
34.5	676	-837	-812	898	18.913	-21.375	18.913	-21.375
Reference Point (35 m)							0.000	0.000

C305-IM144010



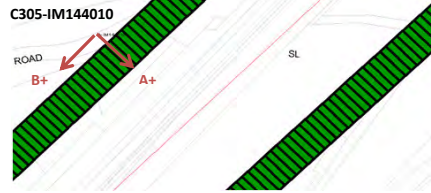
Serial number probe: D11217

7-10-13 10:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	553	-343	579	-685	11.200	15.800	370.875	1492.913
1	764	-532	528	-670	16.200	14.975	359.675	1477.113
1.5	728	-505	600	-713	15.413	16.413	343.475	1462.138
2	766	-555	498	-604	16.513	13.775	328.063	1445.725
2.5	634	-426	163	-296	13.250	5.738	311.550	1431.950
3	615	-377	43	-142	12.400	2.313	298.300	1426.213
3.5	702	-531	-25	-79	15.413	0.675	285.900	1423.900
4	685	-440	44	-142	14.063	2.325	270.488	1423.225
4.5	527	-315	113	-225	10.525	4.225	256.425	1420.900
5	424	-210	129	-263	7.925	4.900	245.900	1416.675
5.5	303	-88	209	-340	4.888	6.863	237.975	1411.775
6	280	-89	312	-441	4.613	9.413	233.088	1404.913
6.5	297	-54	328	-445	4.388	9.663	228.475	1395.500
7	341	-159	337	-445	6.250	9.775	224.088	1385.838
7.5	512	-291	374	-497	10.038	10.888	217.838	1376.063
8	622	-418	366	-488	13.000	10.675	207.800	1365.175
8.5	727	-513	410	-517	15.500	11.588	194.800	1354.500
9	806	-574	472	-577	17.250	13.113	179.300	1342.913
9.5	982	-750	564	-683	21.650	15.588	162.050	1329.800
10	874	-678	578	-678	19.400	15.700	140.400	1314.213
10.5	752	-537	700	-817	16.113	18.963	121.000	1298.513
11	783	-546	700	-807	16.613	18.838	104.888	1279.550
11.5	648	-447	697	-805	13.688	18.775	88.275	1260.713
12	589	-381	783	-880	12.125	20.788	74.588	1241.938
12.5	559	-331	896	-1005	11.125	23.763	62.463	1221.150
13	497	-288	928	-1034	9.813	24.525	51.338	1197.388
13.5	535	-319	1021	-1149	10.675	27.125	41.525	1172.863
14	572	-344	1202	-1299	11.450	31.263	30.850	1145.738
14.5	470	-238	1278	-1382	8.850	33.250	19.400	1114.475
15	419	-208	1352	-1450	7.838	35.025	10.550	1081.225
15.5	405	-203	1441	-1551	7.600	37.400	2.713	1046.200
16	291	-64	1305	-1387	4.438	33.650	-4.887	1008.800
16.5	318	-108	1362	-1467	5.325	35.363	-9.325	975.150
17	354	-131	1416	-1530	6.063	36.825	-14.650	939.788
17.5	334	-121	1320	-1441	5.688	34.513	-20.713	902.963
18	298	-99	1307	-1414	4.963	34.013	-26.400	868.450
18.5	204	7	1319	-1438	2.463	34.463	-31.363	834.438
19	-168	383	1283	-1390	-6.888	33.413	-33.825	799.975
19.5	-233	447	1135	-1251	-8.500	29.825	-26.938	766.563
20	-286	483	978	-1079	-9.613	25.713	-18.438	736.738
20.5	-340	553	858	-967	-11.163	22.813	-8.825	711.025
21	-398	598	762	-875	-12.450	20.463	2.338	688.213
21.5	-427	614	617	-728	-13.013	16.813	14.788	667.750
22	-778	987	755	-861	-22.063	20.200	27.800	650.938
22.5	-642	828	906	-1022	-18.375	24.100	49.863	630.738
23	-508	723	1055	-1139	-15.388	27.425	68.238	606.638
23.5	-266	464	1097	-1170	-9.125	28.338	83.625	579.213
24	140	57	1074	-1159	1.038	27.913	92.750	550.875
24.5	558	-314	1087	-1180	10.900	28.338	91.713	522.963
25	1044	-833	1019	-1117	23.463	26.700	80.813	494.625
25.5	1049	-818	984	-1092	23.338	25.950	57.350	467.925
26	1015	-799	965	-1061	22.675	25.325	34.013	441.975
26.5	989	-742	959	-1053	21.638	25.150	11.338	416.650
27	974	-756	966	-1063	21.625	25.363	-10.300	391.500
27.5	956	-709	926	-1050	20.813	24.700	-31.925	366.138
28	523	-312	1056	-1146	10.438	27.525	-52.738	341.438
28.5	498	-289	961	-1082	9.838	25.538	-63.175	313.913
29	378	-142	937	-1054	6.500	24.888	-73.013	288.375
29.5	195	20	916	-1035	2.188	24.388	-79.513	263.488
30	15	188	916	-1030	-2.163	24.325	-81.700	239.100
30.5	-83	290	899	-1010	-4.663	23.863	-79.538	214.775
31	-361	575	759	-902	-11.700	20.763	-74.875	190.913
31.5	-406	598	955	-1077	-12.550	25.400	-63.175	170.150
32	-417	630	1076	-1190	-13.088	28.325	-50.625	144.750
32.5	-415	620	1219	-1333	-12.938	31.900	-37.538	116.425
33	-404	613	1445	-1537	-12.713	37.275	-24.600	84.525
33.5	-370	581	1850	-1930	-11.888	47.250	-11.888	47.250
Reference Point (34 m)							0.000	0.000

C305-IM144010

Serial number probe: D1244



8-10-13 10:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	405	-503	720	-569	11.350	16.113	376.625	1510.075
1	607	-689	673	-553	16.200	15.325	365.275	1493.963
1.5	576	-667	736	-589	15.538	16.563	349.075	1478.638
2	608	-711	633	-489	16.488	14.025	333.538	1462.075
2.5	484	-589	306	-174	13.413	6.000	317.050	1448.050
3	458	-541	180	-26	12.488	2.575	303.638	1442.050
3.5	547	-690	115	37	15.463	0.975	291.150	1439.475
4	533	-599	182	-24	14.150	2.575	275.688	1438.500
4.5	379	-477	250	-108	10.700	4.475	261.538	1435.925
5	266	-367	268	-148	7.913	5.200	250.838	1431.450
5.5	153	-250	349	-218	5.038	7.088	242.925	1426.250
6	124	-244	449	-318	4.600	9.588	237.888	1419.163
6.5	141	-216	465	-325	4.463	9.875	233.288	1409.575
7	192	-317	479	-329	6.363	10.100	228.825	1399.700
7.5	358	-449	518	-376	10.088	11.175	222.463	1389.600
8	472	-578	505	-364	13.125	10.863	212.375	1378.425
8.5	572	-675	551	-396	15.588	11.838	199.250	1367.563
9	656	-739	608	-460	17.438	13.350	183.663	1355.725
9.5	827	-914	707	-563	21.763	15.875	166.225	1342.375
10	726	-833	720	-561	19.488	16.013	144.463	1326.500
10.5	598	-696	842	-697	16.175	19.238	124.975	1310.488
11	629	-710	841	-687	16.738	19.100	108.800	1291.250
11.5	497	-608	840	-687	13.813	19.088	92.063	1272.150
12	439	-539	922	-764	12.225	21.075	78.250	1253.063
12.5	408	-494	1035	-883	11.275	23.975	66.025	1231.988
13	339	-451	1070	-910	9.875	24.750	54.750	1208.013
13.5	379	-480	1166	-1024	10.738	27.375	44.875	1183.263
14	416	-509	1340	-1179	11.563	31.488	34.138	1155.888
14.5	312	-403	1422	-1264	8.938	33.575	22.575	1124.400
15	264	-363	1491	-1329	7.838	35.250	13.638	1090.825
15.5	250	-362	1582	-1428	7.650	37.625	5.800	1055.575
16	138	-228	1446	-1268	4.575	33.925	-1.850	1017.950
16.5	165	-263	1505	-1348	5.350	35.663	-6.425	984.025
17	186	-294	1553	-1405	6.125	36.975	-11.775	948.363
17.5	192	-284	1465	-1322	5.825	34.838	-17.900	911.388
18	144	-255	1442	-1289	4.988	34.138	-23.725	876.550
18.5	54	-153	1456	-1320	2.588	34.700	-28.713	842.413
19	-321	224	1419	-1270	-6.813	33.613	-31.300	807.713
19.5	-391	282	1278	-1130	-8.413	30.100	-24.488	774.100
20	-436	325	1117	-963	-9.513	26.000	-16.075	744.000
20.5	-488	388	999	-845	-10.950	23.050	-6.563	718.000
21	-546	443	903	-755	-12.363	20.725	4.387	694.950
21.5	-576	459	759	-609	-12.938	17.100	16.750	674.225
22	-933	828	895	-737	-22.013	20.400	29.688	657.125
22.5	-795	664	1047	-907	-18.238	24.425	51.700	636.725
23	-666	565	1197	-1023	-15.388	27.750	69.938	612.300
23.5	-420	301	1232	-1052	-9.013	28.550	85.325	584.550
24	-9	-107	1209	-1043	1.225	28.150	94.338	556.000
24.5	406	-473	1223	-1055	10.988	28.475	93.113	527.850
25	887	-993	1163	-1001	23.500	27.050	82.125	499.375
25.5	898	-980	1122	-967	23.475	26.113	58.625	472.325
26	861	-955	1108	-943	22.700	25.638	35.150	446.213
26.5	835	-905	1104	-937	21.750	25.513	12.450	420.575
27	817	-919	1110	-938	21.700	25.600	-9.300	395.063
27.5	804	-871	1069	-930	20.938	24.988	-31.000	369.463
28	365	-469	1197	-1025	10.425	27.775	-51.938	344.475
28.5	343	-448	1102	-966	9.888	25.850	-62.363	316.700
29	220	-304	1073	-930	6.550	25.038	-72.250	290.850
29.5	40	-137	1061	-919	2.213	24.750	-78.800	265.813
30	-142	30	1054	-911	-2.150	24.563	-81.013	241.063
30.5	-231	133	1034	-887	-4.550	24.013	-78.863	216.500
31	-512	417	904	-781	-11.613	21.063	-74.313	192.488
31.5	-560	442	1096	-954	-12.525	25.625	-62.700	171.425
32	-568	466	1215	-1067	-12.925	28.525	-50.175	145.800
32.5	-567	464	1364	-1211	-12.888	32.188	-37.250	117.275
33	-552	451	1584	-1422	-12.538	37.575	-24.363	85.088
33.5	-524	422	1987	-1814	-11.825	47.513	-11.825	47.513
Reference Point (34 m)							0.000	0.000



C305-IM144010

Serial number probe:

DI1217

C305-IM144010

ROAD

B+

A+

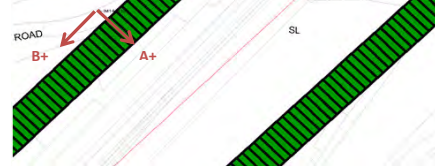
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7-10-13 11:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	561	-334	553	-693	11.188	15.575	374.350	1465.113
1	759	-528	515	-678	16.088	14.913	363.163	1449.538
1.5	725	-508	561	-703	15.413	15.800	347.075	1434.625
2	760	-546	469	-588	16.325	13.213	331.663	1418.825
2.5	645	-419	151	-274	13.300	5.313	315.338	1405.613
3	605	-383	36	-155	12.350	2.388	302.038	1400.300
3.5	697	-530	-38	-82	15.338	0.550	289.688	1397.913
4	690	-435	38	-143	14.063	2.263	274.350	1397.363
4.5	531	-324	81	-218	10.688	3.738	260.288	1395.100
5	424	-205	135	-262	7.863	4.963	249.600	1391.363
5.5	317	-92	204	-337	5.113	6.763	241.738	1386.400
6	283	-80	298	-423	4.538	9.013	236.625	1379.638
6.5	310	-55	315	-454	4.563	9.613	232.088	1370.625
7	355	-150	311	-432	6.313	9.288	227.525	1361.013
7.5	521	-294	354	-486	10.188	10.500	221.213	1351.725
8	626	-421	343	-489	13.088	10.400	211.025	1341.225
8.5	728	-506	404	-510	15.425	11.425	197.938	1330.825
9	802	-575	444	-581	17.213	12.813	182.513	1319.400
9.5	964	-755	524	-675	21.488	14.988	165.300	1306.588
10	876	-664	569	-687	19.250	15.700	143.813	1291.600
10.5	756	-528	684	-815	16.050	18.738	124.563	1275.900
11	784	-551	673	-795	16.688	18.350	108.513	1257.163
11.5	649	-436	669	-795	13.563	18.300	91.825	1238.813
12	592	-380	747	-869	12.150	20.200	78.263	1220.513
12.5	551	-334	874	-1000	11.063	23.425	66.113	1200.313
13	495	-291	900	-1004	9.825	23.800	55.050	1176.888
13.5	532	-313	998	-1137	10.563	26.688	45.225	1153.088
14	573	-350	1164	-1299	11.538	30.788	34.663	1126.400
14.5	467	-236	1259	-1371	8.788	32.875	23.125	1095.613
15	431	-206	1334	-1447	7.963	34.763	14.338	1062.738
15.5	411	-206	1403	-1539	7.713	36.775	6.375	1027.975
16	304	-66	1263	-1374	4.625	32.963	-1.338	991.200
16.5	326	-102	1330	-1467	5.350	34.963	-5.963	958.238
17	347	-131	1385	-1504	5.975	36.113	-11.313	923.275
17.5	343	-127	1281	-1438	5.875	33.988	-17.288	887.163
18	298	-94	1255	-1406	4.900	33.263	-23.163	853.175
18.5	212	9	1293	-1433	2.538	34.075	-28.063	819.913
19	-159	394	1243	-1379	-6.913	32.775	-30.600	785.838
19.5	-219	452	1105	-1240	-8.388	29.313	-23.688	753.063
20	-258	482	944	-1077	-9.250	25.263	-15.300	723.750
20.5	-318	547	837	-939	-10.813	22.200	-6.050	698.488
21	-376	599	746	-867	-12.188	20.163	4.763	676.288
21.5	-395	621	599	-722	-12.700	16.513	16.950	656.125
22	-753	994	721	-858	-21.838	19.738	29.650	639.613
22.5	-605	831	892	-1006	-17.950	23.725	51.488	619.875
23	-482	720	1012	-1150	-15.025	27.025	69.438	596.150
23.5	-245	464	1043	-1171	-8.863	27.675	84.463	569.125
24	167	47	1041	-1161	1.500	27.625	93.325	541.450
24.5	570	-314	1045	-1175	11.050	27.750	91.825	513.925
25	1029	-823	991	-1112	23.150	26.288	80.775	486.175
25.5	1040	-823	944	-1092	23.288	25.450	57.625	459.888
26	1003	-784	932	-1048	22.338	24.750	34.338	434.438
26.5	968	-740	939	-1050	21.350	24.863	12.000	409.688
27	958	-758	943	-1044	21.450	24.838	-9.350	384.825
27.5	949	-712	907	-1046	20.763	24.413	-30.800	359.988
28	514	-302	1021	-1145	10.200	27.075	-51.563	335.575
28.5	491	-278	934	-1064	9.613	24.975	-61.763	308.500
29	377	-138	904	-1030	6.438	24.175	-71.375	283.525
29.5	190	35	917	-1022	1.938	24.238	-77.813	259.350
30	19	191	890	-1021	-2.150	23.888	-79.750	235.113
30.5	-54	294	863	-992	-4.350	23.188	-77.600	211.225
31	-345	580	740	-891	-11.563	20.388	-73.250	188.038
31.5	-384	610	923	-1037	-12.425	24.500	-61.688	167.650
32	-393	621	1071	-1188	-12.675	28.238	-49.263	143.150
32.5	-395	621	1195	-1332	-12.700	31.588	-36.588	114.913
33	-382	604	1393	-1548	-12.325	36.763	-23.888	83.325
33.5	-344	581	1787	-1938	-11.563	46.563	-11.563	46.563
Reference Point (34 m)							0.000	0.000

C305-IM144010

C305-IM144010



Serial number probe: D1244

8-10-13 11:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	415	-501	694	-567	11.450	15.763	380.313	1482.038
1	606	-686	648	-562	16.150	15.125	368.863	1466.275
1.5	574	-665	706	-579	15.488	16.063	352.713	1451.150
2	606	-708	616	-475	16.425	13.638	337.225	1435.088
2.5	486	-585	292	-159	13.388	5.638	320.800	1421.450
3	456	-539	172	-35	12.438	2.588	307.413	1415.813
3.5	550	-688	105	34	15.475	0.888	294.975	1413.225
4	537	-599	182	-28	14.200	2.625	279.500	1412.338
4.5	378	-478	218	-104	10.700	4.025	265.300	1409.713
5	272	-365	269	-145	7.963	5.175	254.600	1405.688
5.5	163	-248	341	-210	5.138	6.888	246.638	1400.513
6	137	-239	443	-309	4.700	9.400	241.500	1393.625
6.5	151	-218	450	-329	4.613	9.738	236.800	1384.225
7	201	-306	457	-317	6.338	9.675	232.188	1374.488
7.5	364	-448	497	-362	10.150	10.738	225.850	1364.813
8	473	-577	485	-363	13.125	10.600	215.700	1354.075
8.5	572	-671	537	-393	15.538	11.625	202.575	1343.475
9	650	-736	591	-459	17.325	13.125	187.038	1331.850
9.5	812	-921	667	-558	21.663	15.313	169.713	1318.725
10	720	-828	707	-568	19.350	15.938	148.050	1303.413
10.5	596	-688	819	-690	16.050	18.863	128.700	1287.475
11	624	-709	812	-678	16.663	18.625	112.650	1268.613
11.5	495	-601	811	-677	13.700	18.600	95.988	1249.988
12	442	-534	886	-752	12.200	20.475	82.288	1231.388
12.5	405	-491	1009	-875	11.200	23.550	70.088	1210.913
13	347	-444	1033	-891	9.888	24.050	58.888	1187.363
13.5	380	-475	1140	-1018	10.688	26.975	49.000	1163.313
14	420	-509	1310	-1179	11.613	31.113	38.313	1136.338
14.5	316	-403	1393	-1253	8.988	33.075	26.700	1105.225
15	276	-361	1474	-1325	7.963	34.988	17.713	1072.150
15.5	258	-359	1536	-1426	7.713	37.025	9.750	1037.163
16	144	-228	1404	-1261	4.650	33.313	2.038	1000.138
16.5	179	-263	1475	-1350	5.525	35.313	-2.612	966.825
17	200	-292	1518	-1390	6.150	36.350	-8.137	931.513
17.5	190	-283	1426	-1317	5.913	34.288	-14.288	895.163
18	150	-252	1402	-1286	5.025	33.600	-20.200	860.875
18.5	63	-146	1427	-1310	2.613	34.213	-25.225	827.275
19	-308	227	1385	-1260	-6.688	33.063	-27.838	793.063
19.5	-374	285	1243	-1114	-8.238	29.463	-21.150	760.000
20	-415	327	1090	-955	-9.275	25.563	-12.913	730.538
20.5	-465	391	972	-820	-10.700	22.400	-3.637	704.975
21	-523	446	883	-742	-12.113	20.313	7.063	682.575
21.5	-550	461	734	-598	-12.638	16.650	19.175	662.263
22	-899	831	862	-733	-21.625	19.938	31.813	645.613
22.5	-759	668	1039	-891	-17.838	24.125	53.438	625.675
23	-636	564	1157	-1028	-15.000	27.313	71.275	601.550
23.5	-397	299	1189	-1055	-8.700	28.050	86.275	574.238
24	21	-106	1180	-1034	1.588	27.675	94.975	546.188
24.5	410	-480	1180	-1061	11.125	28.013	93.388	518.513
25	877	-988	1127	-990	23.313	26.463	82.263	490.500
25.5	880	-981	1082	-966	23.263	25.600	58.950	464.038
26	848	-946	1079	-935	22.425	25.175	35.688	438.438
26.5	821	-904	1077	-935	21.563	25.150	13.263	413.263
27	802	-914	1079	-925	21.450	25.050	-8.300	388.113
27.5	789	-867	1054	-921	20.700	24.688	-29.750	363.063
28	362	-466	1160	-1021	10.350	27.263	-50.450	338.375
28.5	343	-442	1067	-949	9.813	25.200	-60.800	311.113
29	225	-300	1042	-917	6.563	24.488	-70.613	285.913
29.5	44	-132	1055	-909	2.200	24.550	-77.175	261.425
30	-132	36	1032	-904	-2.100	24.200	-79.375	236.875
30.5	-214	140	1001	-868	-4.425	23.363	-77.275	212.675
31	-491	420	884	-771	-11.388	20.688	-72.850	189.313
31.5	-542	447	1066	-924	-12.363	24.875	-61.463	168.625
32	-543	467	1205	-1065	-12.625	28.375	-49.100	143.750
32.5	-545	468	1329	-1205	-12.663	31.675	-36.475	115.375
33	-533	451	1535	-1422	-12.300	36.963	-23.813	83.700
33.5	-496	425	1922	-1817	-11.513	46.738	-11.513	46.738
Reference Point (34 m)							0.000	0.000

C305-IM144010

C305-IM144010



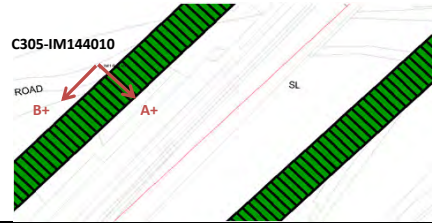
Serial number probe: D11217

7-10-13 12:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	554	-352	594	-686	11.325	16.000	377.600	1501.800
1	755	-547	536	-684	16.275	15.250	366.275	1485.800
1.5	735	-531	592	-705	15.825	16.213	350.000	1470.550
2	760	-571	494	-581	16.638	13.438	334.175	1454.338
2.5	634	-443	170	-283	13.463	5.663	317.538	1440.900
3	607	-402	47	-151	12.613	2.475	304.075	1435.238
3.5	702	-548	-24	-68	15.625	0.550	291.463	1432.763
4	689	-457	69	-125	14.325	2.425	275.838	1432.213
4.5	524	-331	103	-222	10.688	4.063	261.513	1429.788
5	423	-213	146	-262	7.950	5.100	250.825	1425.725
5.5	302	-95	225	-335	4.963	7.000	242.875	1420.625
6	275	-86	319	-421	4.513	9.250	237.913	1413.625
6.5	296	-84	334	-449	4.750	9.788	233.400	1404.375
7	342	-152	348	-443	6.175	9.888	228.650	1394.588
7.5	509	-305	378	-495	10.175	10.913	222.475	1384.700
8	629	-437	362	-473	13.325	10.438	212.300	1373.788
8.5	721	-531	416	-518	15.650	11.675	196.975	1363.350
9	806	-595	466	-585	17.513	13.138	183.325	1351.675
9.5	971	-785	565	-694	21.950	15.738	165.813	1338.538
10	884	-685	595	-689	19.613	16.050	143.863	1322.800
10.5	759	-542	709	-804	16.263	18.913	124.250	1306.750
11	779	-565	712	-802	16.800	18.925	107.988	1287.838
11.5	655	-456	712	-809	13.888	19.013	91.188	1268.913
12	586	-388	767	-879	12.175	20.575	77.300	1249.900
12.5	560	-346	911	-997	11.325	23.850	65.125	1229.325
13	493	-305	929	-1036	9.975	24.563	53.800	1205.475
13.5	530	-346	1034	-1168	10.950	27.525	43.825	1180.913
14	563	-375	1218	-1331	11.725	31.863	32.875	1153.388
14.5	463	-252	1297	-1407	8.938	33.800	21.150	1121.525
15	419	-215	1363	-1495	7.925	35.725	12.213	1087.725
15.5	401	-214	1447	-1568	7.688	37.688	4.287	1052.000
16	282	-83	1316	-1398	4.563	33.925	-3.400	1014.313
16.5	319	-113	1373	-1491	5.400	35.800	-7.963	980.388
17	346	-145	1417	-1532	6.138	36.863	-13.363	944.588
17.5	332	-136	1341	-1457	5.850	34.975	-19.500	907.725
18	297	-101	1305	-1421	4.975	34.075	-25.350	872.750
18.5	199	-1	1321	-1441	2.500	34.525	-30.325	838.675
19	-175	381	1288	-1398	-6.950	33.575	-32.825	804.150
19.5	-245	434	1144	-1254	-8.488	29.975	-25.875	770.575
20	-289	482	984	-1078	-9.638	25.775	-17.388	740.600
20.5	-345	546	856	-963	-11.138	22.738	-7.750	714.825
21	-407	602	760	-863	-12.613	20.288	3.387	692.088
21.5	-422	619	622	-722	-13.013	16.800	16.000	671.800
22	-782	990	768	-852	-22.150	20.250	29.013	655.000
22.5	-645	831	906	-1015	-18.450	24.013	51.163	634.750
23	-508	723	1049	-1166	-15.388	27.688	69.613	610.738
23.5	-268	447	1098	-1194	-8.938	28.650	85.000	583.050
24	162	33	1080	-1176	1.613	28.200	93.938	554.400
24.5	567	-347	1092	-1188	11.425	28.500	92.325	526.200
25	1042	-855	1037	-1118	23.713	26.938	80.900	497.700
25.5	1039	-852	985	-1102	23.638	26.088	57.188	470.763
26	1007	-816	972	-1069	22.788	25.513	33.550	444.675
26.5	979	-774	953	-1062	21.913	25.188	10.763	419.163
27	967	-771	983	-1062	21.725	25.563	-11.150	393.975
27.5	949	-734	935	-1054	21.038	24.863	-32.875	368.413
28	503	-322	1075	-1162	10.313	27.963	-53.913	343.550
28.5	488	-298	978	-1054	9.825	25.400	-64.225	315.588
29	366	-151	952	-1041	6.463	24.913	-74.050	290.188
29.5	178	15	948	-1039	2.038	24.838	-80.513	265.275
30	3	193	926	-1023	-2.375	24.363	-82.550	240.438
30.5	-92	283	906	-1003	-4.688	23.863	-80.175	216.075
31	-363	596	790	-894	-11.988	21.050	-75.488	192.213
31.5	-419	601	971	-1063	-12.750	25.425	-63.500	171.163
32	-416	636	1104	-1176	-13.150	28.500	-50.750	145.738
32.5	-419	625	1245	-1340	-13.050	32.313	-37.600	117.238
33	-404	604	1446	-1556	-12.600	37.525	-24.550	84.925
33.5	-371	585	1846	-1946	-11.950	47.400	-11.950	47.400
Reference Point (34 m)							0.000	0.000

C305-IM144010

Serial number probe: D1244

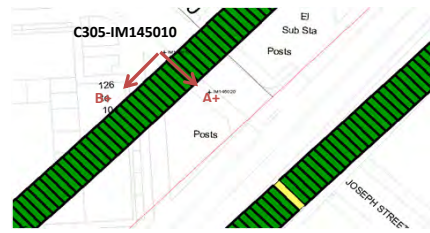


8-10-13 12:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	407	-518	730	-565	11.563	16.188	383.313	1518.963
1	607	-705	675	-562	16.400	15.463	371.750	1502.775
1.5	576	-686	730	-587	15.775	16.463	355.350	1487.313
2	609	-729	633	-465	16.725	13.725	339.575	1470.850
2.5	485	-604	310	-163	13.613	5.913	322.850	1457.125
3	453	-557	182	-35	12.625	2.713	309.238	1451.213
3.5	553	-703	122	48	15.700	0.925	296.613	1448.500
4	532	-614	208	-10	14.325	2.725	280.913	1447.575
4.5	375	-494	245	-100	10.863	4.313	266.588	1444.850
5	264	-378	285	-137	8.025	5.275	255.725	1440.538
5.5	153	-260	369	-214	5.163	7.288	247.700	1435.263
6	127	-252	463	-299	4.738	9.525	242.538	1427.975
6.5	142	-242	471	-325	4.800	9.950	237.800	1418.450
7	194	-314	482	-323	6.350	10.063	233.000	1408.500
7.5	357	-464	518	-377	10.263	11.188	226.650	1398.438
8	470	-594	504	-358	13.300	10.775	216.388	1387.250
8.5	573	-690	551	-398	15.788	11.863	203.088	1376.475
9	653	-757	610	-471	17.625	13.513	187.300	1364.613
9.5	824	-950	704	-575	22.175	15.988	169.675	1351.100
10	728	-844	738	-575	19.650	16.413	147.500	1335.113
10.5	600	-707	852	-690	16.338	19.275	127.850	1318.700
11	625	-728	846	-682	16.913	19.100	111.513	1299.425
11.5	496	-620	853	-692	13.950	19.313	94.600	1280.325
12	439	-552	909	-759	12.388	20.850	80.650	1261.013
12.5	404	-507	1050	-881	11.388	24.138	68.263	1240.163
13	343	-466	1069	-911	10.113	24.750	56.875	1216.025
13.5	376	-502	1173	-1042	10.975	27.688	46.763	1191.275
14	414	-532	1361	-1214	11.825	32.188	35.788	1163.588
14.5	311	-418	1443	-1292	9.113	34.188	23.963	1131.400
15	261	-378	1507	-1370	7.988	35.963	14.850	1097.213
15.5	246	-369	1589	-1442	7.688	37.888	6.863	1061.250
16	133	-238	1456	-1276	4.638	34.150	-0.825	1023.363
16.5	167	-275	1516	-1368	5.525	36.050	-5.462	989.213
17	190	-304	1563	-1412	6.175	37.188	-10.988	953.163
17.5	178	-295	1485	-1334	5.913	35.238	-17.163	915.975
18	139	-263	1448	-1296	5.025	34.300	-23.075	880.738
18.5	49	-155	1466	-1323	2.550	34.863	-28.100	846.438
19	-332	221	1428	-1274	-6.913	33.775	-30.650	811.575
19.5	-400	278	1286	-1132	-8.475	30.225	-23.738	777.800
20	-438	325	1125	-962	-9.538	26.088	-15.263	747.575
20.5	-493	387	999	-844	-11.000	23.038	-5.725	721.488
21	-554	444	906	-745	-12.475	20.638	5.275	698.450
21.5	-578	460	768	-602	-12.975	17.125	17.750	677.813
22	-940	834	902	-737	-22.175	20.488	30.725	660.688
22.5	-797	669	1051	-900	-18.325	24.388	52.900	640.200
23	-664	562	1195	-1040	-15.325	27.938	71.225	615.813
23.5	-421	293	1232	-1072	-8.925	28.800	86.550	587.875
24	10	-122	1226	-1056	1.650	28.625	95.475	559.075
24.5	408	-501	1229	-1072	11.363	28.763	93.825	530.550
25	891	-1010	1173	-1002	23.763	27.188	82.463	501.788
25.5	887	-1009	1131	-978	23.700	26.363	58.700	474.600
26	858	-970	1108	-949	22.850	25.713	35.000	448.238
26.5	828	-928	1094	-946	21.950	25.500	12.150	422.525
27	812	-937	1117	-940	21.863	25.713	-9.800	397.025
27.5	800	-889	1081	-932	21.113	25.163	-31.663	371.313
28	354	-482	1209	-1038	10.450	28.088	-52.775	346.150
28.5	335	-455	1118	-936	9.875	25.675	-63.225	318.063
29	212	-312	1091	-922	6.550	25.163	-73.100	292.388
29.5	27	-142	1083	-913	2.113	24.950	-79.650	267.225
30	-148	27	1072	-904	-2.188	24.700	-81.763	242.275
30.5	-239	124	1043	-881	-4.538	24.050	-79.575	217.575
31	-518	434	924	-775	-11.900	21.238	-75.038	193.625
31.5	-567	447	1114	-938	-12.675	25.650	-63.138	172.288
32	-573	472	1240	-1059	-13.063	28.738	-50.463	146.638
32.5	-574	467	1382	-1216	-13.013	32.475	-37.400	117.900
33	-554	450	1590	-1434	-12.550	37.800	-24.388	85.425
33.5	-526	421	1990	-1820	-11.838	47.625	-11.838	47.625
Reference Point (34 m)							0.000	0.000

C305-IM145010

Serial number probe: D11217



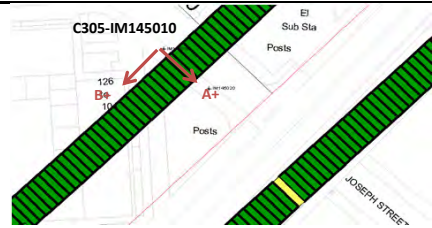
11-11-13 15:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-460	652	220	-351	-13.900	7.138	-569.500	1067.163
1	-262	469	-20	-91	-9.138	0.888	-555.600	1060.025
1.5	-54	259	-93	29	-3.913	-1.525	-546.463	1059.138
2	2	188	-100	0	-2.325	-1.250	-542.550	1060.663
2.5	13	183	10	-129	-2.125	1.738	-540.225	1061.913
3	28	176	-15	-99	-1.850	1.050	-538.100	1060.175
3.5	8	204	-129	19	-2.450	-1.850	-536.250	1059.125
4	-16	205	-145	13	-2.763	-1.975	-533.800	1060.975
4.5	75	103	2	-58	-0.350	0.750	-531.038	1062.950
5	115	61	-93	-1	0.675	-1.150	-530.688	1062.200
5.5	80	93	-133	36	-0.163	-2.113	-531.363	1063.350
6	54	126	-125	32	-0.900	-1.963	-531.200	1065.463
6.5	23	179	-151	41	-1.950	-2.400	-530.300	1067.425
7	-13	205	-151	40	-2.725	-2.388	-528.350	1069.825
7.5	-66	265	-96	37	-4.138	-1.663	-525.625	1072.213
8	-174	376	-167	65	-6.875	-2.900	-521.488	1073.875
8.5	-253	452	-153	39	-8.813	-2.400	-514.613	1076.775
9	-330	519	-103	4	-10.613	-1.338	-505.800	1079.175
9.5	-394	592	-2	-104	-12.325	1.275	-495.188	1080.513
10	-524	725	89	-222	-15.613	3.888	-482.863	1079.238
10.5	-661	865	268	-385	-19.075	8.163	-467.250	1075.350
11	-551	743	466	-576	-16.175	13.025	-448.175	1067.188
11.5	-411	604	731	-854	-12.688	19.813	-432.000	1054.163
12	-213	423	884	-1004	-7.950	23.600	-419.313	1034.350
12.5	104	73	872	-1013	0.388	23.563	-411.363	1010.750
13	400	-201	1010	-1145	7.513	26.938	-411.750	987.188
13.5	398	-196	1135	-1241	7.425	29.700	-419.263	960.250
14	337	-144	1166	-1292	6.013	30.725	-426.688	930.550
14.5	246	-49	1246	-1361	3.688	32.588	-432.700	899.825
15	110	76	1360	-1480	0.425	35.500	-436.388	867.238
15.5	-29	223	1402	-1533	-3.150	36.688	-436.813	831.738
16	-170	359	1322	-1450	-6.613	34.650	-433.663	795.050
16.5	-307	508	1201	-1294	-10.188	31.188	-427.050	760.400
17	-395	585	1081	-1202	-12.250	28.538	-416.863	729.213
17.5	-465	659	1047	-1184	-14.050	27.888	-404.613	700.675
18	-519	724	993	-1133	-15.538	26.575	-390.563	672.788
18.5	-575	780	922	-1048	-16.938	24.625	-375.025	646.213
19	-645	842	902	-1030	-18.588	24.150	-358.088	621.588
19.5	-747	922	876	-1002	-20.863	23.475	-339.500	597.438
20	-545	753	843	-975	-16.225	22.725	-318.638	573.963
20.5	-390	578	839	-970	-12.100	22.613	-302.413	551.238
21	-297	496	855	-990	-9.913	23.063	-290.313	528.625
21.5	-214	393	910	-1045	-7.588	24.438	-280.400	505.563
22	-38	249	968	-1078	-3.588	25.575	-272.813	481.125
22.5	83	88	998	-1118	-0.063	26.450	-269.225	455.550
23	-70	267	1001	-1131	-4.213	26.650	-269.163	429.100
23.5	-312	508	1022	-1151	-10.250	27.163	-264.950	402.450
24	-538	733	1142	-1258	-15.888	30.000	-254.700	375.288
24.5	-663	851	1099	-1235	-18.925	29.175	-238.813	345.288
25	-748	928	956	-1109	-20.950	25.813	-219.888	316.113
25.5	-773	968	880	-1005	-21.763	23.563	-198.938	290.300
26	-848	1050	911	-1017	-23.725	24.100	-177.175	266.738
26.5	-887	1075	879	-995	-24.525	23.425	-153.450	242.638
27	-804	997	790	-917	-22.513	21.338	-128.925	219.213
27.5	-703	902	607	-730	-20.063	16.713	-106.413	197.875
28	-650	840	476	-593	-18.625	13.363	-86.350	181.163
28.5	-498	679	711	-845	-14.713	19.450	-67.725	167.800
29	-555	746	1164	-1292	-16.263	30.700	-53.013	148.350
29.5	-422	617	1082	-1224	-12.988	28.825	-36.750	117.650
30	-416	605	1053	-1165	-12.763	27.725	-23.763	88.825
30.5	-168	369	1201	-1307	-6.713	31.350	-11.000	61.100
31	-79	264	1130	-1250	-4.288	29.750	-4.288	29.750
Reference Point (31.5 m)							0.000	0.000



C305-IM145010

Serial number probe: D11244

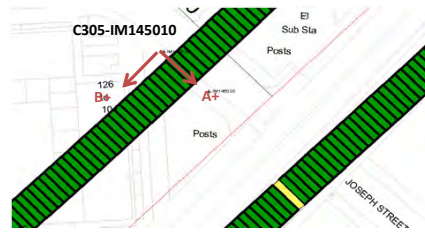


12-11-13 11:35

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-608	492	356	-235	-13.750	7.388	-563.900	1082.700
1	-419	314	123	31	-9.163	1.150	-550.150	1075.313
1.5	-209	102	46	147	-3.888	-1.263	-540.988	1074.163
2	-147	30	38	116	-2.213	-0.975	-537.100	1075.425
2.5	-142	26	149	-4	-2.100	1.913	-534.888	1076.400
3	-130	12	123	20	-1.775	1.288	-532.788	1074.488
3.5	-149	40	14	139	-2.363	-1.563	-531.013	1073.200
4	-168	50	-9	137	-2.725	-1.825	-528.650	1074.763
4.5	-79	-54	141	58	-0.313	1.038	-525.925	1076.588
5	-38	-103	43	121	0.813	-0.975	-525.613	1075.550
5.5	-69	-69	11	151	0.000	-1.750	-526.425	1076.525
6	-94	-39	13	157	-0.688	-1.800	-526.425	1078.275
6.5	-134	24	-6	156	-1.975	-2.025	-525.738	1080.075
7	-163	46	-6	156	-2.613	-2.025	-523.763	1082.100
7.5	-221	101	46	152	-4.025	-1.325	-521.150	1084.125
8	-322	214	-24	180	-6.700	-2.550	-517.125	1085.450
8.5	-403	291	-16	163	-8.675	-2.238	-510.425	1088.000
9	-481	364	39	119	-10.563	-1.000	-501.750	1090.238
9.5	-551	430	143	16	-12.263	1.588	-491.188	1091.238
10	-673	560	232	-98	-15.413	4.125	-478.925	1089.650
10.5	-814	706	410	-263	-19.000	8.413	-463.513	1085.525
11	-708	584	604	-455	-16.150	13.238	-444.513	1077.113
11.5	-559	445	871	-738	-12.550	20.113	-428.363	1063.875
12	-362	259	1024	-883	-7.763	23.838	-415.813	1043.763
12.5	-50	-83	1014	-891	0.413	23.813	-408.050	1019.925
13	245	-365	1152	-1022	7.625	27.175	-408.463	996.113
13.5	247	-360	1275	-1126	7.588	30.013	-416.088	968.938
14	185	-304	1303	-1167	6.113	30.875	-423.675	938.925
14.5	92	-207	1385	-1242	3.738	32.838	-429.788	908.050
15	-40	-86	1498	-1355	0.575	35.663	-433.525	875.213
15.5	-179	65	1547	-1414	-3.050	37.013	-434.100	839.550
16	-321	198	1467	-1335	-6.488	35.025	-431.050	802.538
16.5	-464	351	1343	-1177	-10.188	31.500	-424.563	767.513
17	-550	430	1224	-1083	-12.250	28.838	-414.375	736.013
17.5	-623	499	1188	-1061	-14.025	28.113	-402.125	707.175
18	-675	564	1128	-1008	-15.488	26.700	-388.100	679.063
18.5	-731	616	1061	-933	-16.838	24.925	-372.613	652.363
19	-800	685	1045	-908	-18.563	24.413	-355.775	627.438
19.5	-895	766	1014	-885	-20.763	23.738	-337.213	603.025
20	-703	591	982	-855	-16.175	22.963	-316.450	579.288
20.5	-541	416	982	-847	-11.963	22.863	-300.275	556.325
21	-451	338	998	-866	-9.863	23.300	-288.313	533.463
21.5	-367	232	1048	-923	-7.488	24.638	-278.450	510.163
22	-196	89	1105	-960	-3.563	25.813	-270.963	485.525
22.5	-74	-71	1137	-1000	-0.038	26.713	-267.400	459.713
23	-221	102	1141	-1015	-4.038	26.950	-267.363	433.000
23.5	-466	346	1163	-1033	-10.150	27.450	-263.325	406.050
24	-691	570	1280	-1134	-15.763	30.175	-253.175	378.600
24.5	-815	687	1241	-1115	-18.775	29.450	-237.413	348.425
25	-899	772	1096	-985	-20.888	26.013	-218.638	318.975
25.5	-921	809	1022	-888	-21.625	23.875	-197.750	292.963
26	-1006	893	1049	-900	-23.738	24.363	-176.125	269.088
26.5	-1040	912	1024	-879	-24.400	23.788	-152.388	244.725
27	-953	835	926	-792	-22.350	21.475	-127.988	220.938
27.5	-852	740	747	-606	-19.900	16.913	-105.638	199.463
28	-798	677	617	-470	-18.438	13.588	-85.738	182.550
28.5	-647	524	849	-723	-14.638	19.650	-67.300	168.963
29	-706	584	1308	-1169	-16.125	30.963	-52.663	149.313
29.5	-580	460	1219	-1103	-13.000	29.025	-36.538	118.350
30	-565	443	1189	-1042	-12.600	27.888	-23.538	89.325
30.5	-324	212	1336	-1185	-6.700	31.513	-10.938	61.438
31	-232	107	1265	-1129	-4.238	29.925	-4.238	29.925
Reference Point (31.5 m)							0.000	0.000

C305-IM145010

Serial number probe: D11217

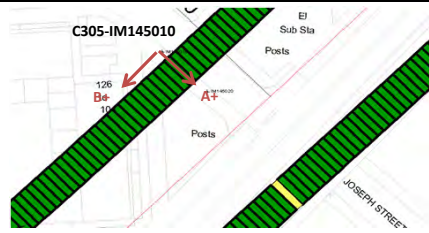


11-11-13 16:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-451	653	230	-365	-13.800	7.438	-567.650	1064.488
1	-259	476	-20	-84	-9.188	0.800	-553.850	1057.050
1.5	-50	274	-103	23	-4.050	-1.575	-544.663	1056.250
2	15	200	-116	18	-2.313	-1.675	-540.613	1057.825
2.5	13	195	19	-115	-2.275	1.675	-538.300	1059.500
3	26	179	-11	-93	-1.913	1.025	-536.025	1057.825
3.5	11	202	-108	13	-2.388	-1.513	-534.113	1056.800
4	-2	214	-107	23	-2.700	-1.625	-531.725	1058.313
4.5	85	108	-5	-73	-0.288	0.850	-529.025	1059.938
5	127	66	-92	7	0.763	-1.238	-528.738	1059.088
5.5	91	96	-117	29	-0.063	-1.825	-529.500	1060.325
6	74	133	-124	32	-0.738	-1.950	-529.438	1062.150
6.5	32	193	-164	48	-2.013	-2.650	-528.700	1064.100
7	-4	209	-160	43	-2.663	-2.538	-526.688	1066.750
7.5	-59	262	-108	42	-4.013	-1.875	-524.025	1069.288
8	-157	375	-146	58	-6.650	-2.550	-520.013	1071.163
8.5	-242	461	-151	40	-8.788	-2.388	-513.363	1073.713
9	-324	538	-100	-8	-10.775	-1.150	-504.575	1076.100
9.5	-380	605	15	-92	-12.313	1.338	-493.800	1077.250
10	-511	724	89	-212	-15.438	3.763	-481.488	1075.913
10.5	-656	876	258	-385	-19.150	8.038	-466.050	1072.150
11	-542	759	450	-580	-16.263	12.875	-446.900	1064.113
11.5	-391	619	746	-869	-12.625	20.188	-430.638	1051.238
12	-198	428	887	-999	-7.825	23.575	-418.013	1031.050
12.5	122	79	880	-1002	0.538	23.525	-410.188	1007.475
13	418	-200	1031	-1131	7.725	27.025	-410.725	983.950
13.5	416	-190	1136	-1233	7.575	29.613	-418.450	956.925
14	345	-134	1187	-1276	5.988	30.788	-426.025	927.313
14.5	262	-35	1250	-1351	3.713	32.513	-432.013	896.525
15	116	79	1360	-1465	0.463	35.313	-435.725	864.013
15.5	-19	233	1399	-1516	-3.150	36.438	-436.188	828.700
16	-157	365	1320	-1455	-6.525	34.688	-433.038	792.263
16.5	-303	518	1205	-1292	-10.263	31.213	-426.513	757.575
17	-392	595	1083	-1204	-12.338	28.588	-416.250	726.363
17.5	-453	671	1046	-1172	-14.050	27.725	-403.913	697.775
18	-516	726	987	-1111	-15.525	26.225	-389.863	670.050
18.5	-572	792	916	-1048	-17.050	24.550	-374.338	643.825
19	-639	853	899	-1032	-18.650	24.138	-357.288	619.275
19.5	-720	930	856	-1002	-20.625	23.225	-338.638	595.138
20	-541	762	830	-961	-16.288	22.388	-318.013	571.913
20.5	-375	587	829	-955	-12.025	22.300	-301.725	549.525
21	-283	505	867	-985	-9.850	23.150	-289.700	527.225
21.5	-205	410	913	-1040	-7.688	24.413	-279.850	504.075
22	-32	260	951	-1084	-3.650	25.438	-272.163	479.663
22.5	92	94	1001	-1116	-0.025	26.463	-268.513	454.225
23	-52	268	997	-1112	-4.000	26.363	-268.488	427.763
23.5	-293	517	1051	-1141	-10.125	27.400	-264.488	401.400
24	-523	739	1134	-1237	-15.775	29.638	-254.363	374.000
24.5	-648	866	1092	-1194	-18.925	28.575	-238.588	344.363
25	-738	939	967	-1109	-20.963	25.950	-219.663	315.788
25.5	-759	971	877	-999	-21.625	23.450	-198.700	289.838
26	-838	1062	906	-1017	-23.750	24.038	-177.075	266.388
26.5	-874	1079	874	-1003	-24.413	23.463	-153.325	242.350
27	-786	1002	802	-908	-22.350	21.375	-128.913	218.888
27.5	-686	906	616	-714	-19.900	16.625	-106.563	197.513
28	-637	849	478	-580	-18.575	13.225	-86.663	180.888
28.5	-478	699	719	-847	-14.713	19.575	-68.088	167.663
29	-542	762	1175	-1279	-16.300	30.675	-53.375	148.088
29.5	-412	626	1091	-1219	-12.975	28.875	-37.075	117.413
30	-391	622	1051	-1168	-12.663	27.738	-24.100	88.538
30.5	-174	391	1184	-1292	-7.063	30.950	-11.438	60.800
31	-72	278	1140	-1248	-4.375	29.850	-4.375	29.850
Reference Point (31.5 m)							0.000	0.000

C305-IM145010

Serial number probe: D11244

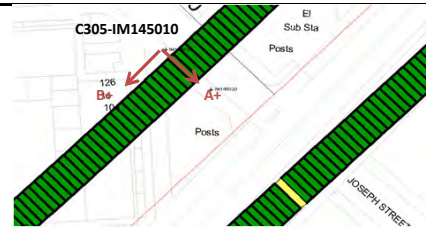


12-11-13 12:46

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-600	500	370	-248	-13.750	7.725	-561.900	1080.538
1	-412	319	123	32	-9.138	1.138	-548.150	1072.813
1.5	-203	107	44	144	-3.875	-1.250	-539.013	1071.675
2	-139	37	26	132	-2.200	-1.325	-535.138	1072.925
2.5	-133	29	152	4	-2.025	1.850	-532.938	1074.250
3	-121	21	125	34	-1.775	1.138	-530.913	1072.400
3.5	-139	46	33	140	-2.313	-1.338	-529.138	1071.263
4	-156	57	31	141	-2.663	-1.375	-526.825	1072.600
4.5	-69	-48	136	43	-0.263	1.163	-524.163	1073.975
5	-26	-98	42	123	0.900	-1.013	-523.900	1072.813
5.5	-57	-63	26	153	0.075	-1.588	-524.800	1073.825
6	-84	-33	9	152	-0.638	-1.788	-524.875	1075.413
6.5	-125	31	-17	164	-1.950	-2.263	-524.238	1077.200
7	-153	50	-17	160	-2.538	-2.213	-522.288	1079.463
7.5	-210	109	39	159	-3.988	-1.500	-519.750	1081.675
8	-312	216	-8	176	-6.600	-2.300	-515.763	1083.175
8.5	-397	296	-5	162	-8.663	-2.088	-509.163	1085.475
9	-471	372	39	117	-10.538	-0.975	-500.500	1087.563
9.5	-539	438	160	21	-12.213	1.738	-489.963	1088.538
10	-664	567	234	-97	-15.388	4.138	-477.750	1086.800
10.5	-804	713	400	-264	-18.963	8.300	-462.363	1082.663
11	-700	593	595	-457	-16.163	13.150	-443.400	1074.363
11.5	-551	454	887	-743	-12.563	20.375	-427.238	1061.213
12	-351	266	1023	-881	-7.713	23.800	-414.675	1040.838
12.5	-35	-75	1015	-887	0.500	23.775	-406.963	1017.038
13	263	-357	1172	-1016	7.750	27.350	-407.463	993.263
13.5	257	-357	1274	-1120	7.675	29.925	-415.213	965.913
14	188	-293	1327	-1161	6.013	31.100	-422.888	935.988
14.5	106	-198	1396	-1236	3.800	32.900	-428.900	904.888
15	-35	-77	1500	-1344	0.525	35.550	-432.700	871.988
15.5	-170	74	1545	-1397	-3.050	36.775	-433.225	836.438
16	-312	209	1465	-1332	-6.513	34.963	-430.175	799.663
16.5	-455	360	1343	-1174	-10.188	31.463	-423.663	764.700
17	-540	437	1219	-1079	-12.213	28.725	-413.475	733.238
17.5	-609	508	1189	-1055	-13.963	28.050	-401.263	704.513
18	-669	572	1130	-998	-15.513	26.600	-387.300	676.463
18.5	-720	627	1058	-931	-16.838	24.863	-371.788	649.863
19	-790	690	1037	-905	-18.500	24.275	-354.950	625.000
19.5	-880	777	998	-880	-20.713	23.475	-336.450	600.725
20	-693	600	976	-846	-16.163	22.775	-315.738	577.250
20.5	-527	424	968	-833	-11.888	22.513	-299.575	554.475
21	-437	346	1004	-861	-9.788	23.313	-287.688	531.963
21.5	-355	244	1049	-920	-7.488	24.613	-277.900	508.650
22	-183	95	1094	-957	-3.475	25.638	-270.413	484.038
22.5	-64	-65	1139	-994	0.013	26.663	-266.938	458.400
23	-208	108	1138	-987	-3.950	26.563	-266.950	431.738
23.5	-446	357	1186	-1019	-10.038	27.563	-263.000	405.175
24	-677	581	1269	-1122	-15.725	29.888	-252.963	377.613
24.5	-804	703	1238	-1071	-18.838	28.863	-237.238	347.725
25	-889	778	1101	-983	-20.838	26.050	-218.400	318.863
25.5	-911	815	1017	-880	-21.575	23.713	-197.563	292.813
26	-994	904	1052	-897	-23.725	24.363	-175.988	269.100
26.5	-1028	920	1021	-878	-24.350	23.738	-152.263	244.738
27	-940	845	935	-787	-22.313	21.525	-127.913	221.000
27.5	-838	747	750	-598	-19.813	16.850	-105.600	199.475
28	-786	687	612	-463	-18.413	13.438	-85.788	182.625
28.5	-633	534	854	-729	-14.588	19.788	-67.375	169.188
29	-691	595	1314	-1165	-16.075	30.988	-52.788	149.400
29.5	-569	471	1234	-1095	-13.000	29.113	-36.713	118.413
30	-550	456	1185	-1042	-12.575	27.838	-23.713	89.300
30.5	-320	227	1329	-1178	-6.838	31.338	-11.138	61.463
31	-220	124	1276	-1134	-4.300	30.125	-4.300	30.125
Reference Point (31.5 m)							0.000	0.000

C305-IM145010

Serial number probe: D11217

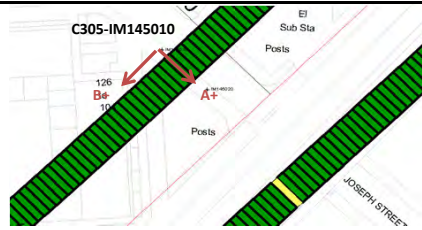


11-11-13 17:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-487	625	193	-407	-13.900	7.500	-565.288	1067.000
1	-300	430	-50	-129	-9.125	0.988	-551.388	1059.500
1.5	-85	217	-130	-14	-3.775	-1.450	-542.263	1058.513
2	-27	164	-146	-17	-2.388	-1.613	-538.488	1059.963
2.5	-17	145	-22	-159	-2.025	1.713	-536.100	1061.575
3	-1	132	-50	-123	-1.663	0.913	-534.075	1059.863
3.5	-30	154	-134	-11	-2.300	-1.538	-532.413	1058.950
4	-53	171	-140	-8	-2.800	-1.650	-530.113	1060.488
4.5	49	72	-35	-115	-0.288	1.000	-527.313	1062.138
5	83	18	-142	-32	0.813	-1.375	-527.025	1061.138
5.5	46	57	-156	-5	-0.138	-1.888	-527.838	1062.513
6	23	82	-166	-5	-0.738	-2.013	-527.700	1064.400
6.5	-19	151	-199	7	-2.125	-2.575	-526.963	1066.413
7	-52	164	-194	-5	-2.700	-2.363	-524.838	1068.988
7.5	-101	234	-129	3	-4.188	-1.650	-522.138	1071.350
8	-198	333	-180	20	-6.638	-2.500	-517.950	1073.000
8.5	-296	408	-183	11	-8.800	-2.425	-511.313	1075.500
9	-355	487	-135	-35	-10.525	-1.250	-502.513	1077.925
9.5	-421	552	-12	-147	-12.163	1.688	-491.988	1079.175
10	-549	691	52	-258	-15.500	3.875	-479.825	1077.488
10.5	-691	825	222	-430	-18.950	8.150	-464.325	1073.613
11	-588	703	423	-616	-16.138	12.988	-445.375	1065.463
11.5	-436	577	711	-898	-12.663	20.113	-429.238	1052.475
12	-235	392	839	-1040	-7.838	23.488	-416.575	1032.363
12.5	83	44	849	-1044	0.488	23.663	-408.738	1008.875
13	370	-244	1000	-1167	7.675	27.088	-409.225	985.213
13.5	372	-244	1103	-1272	7.700	29.688	-416.900	958.125
14	303	-173	1153	-1316	5.950	30.863	-424.600	928.438
14.5	217	-85	1223	-1385	3.775	32.600	-430.550	897.575
15	77	41	1325	-1494	0.450	35.238	-434.325	864.975
15.5	-54	188	1378	-1560	-3.025	36.725	-434.775	829.738
16	-194	324	1286	-1490	-6.475	34.700	-431.750	793.013
16.5	-338	468	1170	-1337	-10.075	31.338	-425.275	758.313
17	-433	555	1046	-1231	-12.350	28.463	-415.200	726.975
17.5	-496	623	1013	-1219	-13.988	27.900	-402.850	698.513
18	-555	690	966	-1157	-15.563	26.538	-388.863	670.613
18.5	-609	744	880	-1089	-16.913	24.613	-373.300	644.075
19	-673	815	866	-1064	-18.600	24.125	-356.388	619.463
19.5	-767	892	821	-1044	-20.738	23.313	-337.788	595.338
20	-588	716	791	-1006	-16.300	22.463	-317.050	572.025
20.5	-414	532	788	-989	-11.825	22.213	-300.750	549.563
21	-321	457	832	-1023	-9.725	23.188	-288.925	527.350
21.5	-243	356	869	-1080	-7.488	24.363	-279.200	504.163
22	-70	203	909	-1114	-3.413	25.288	-271.713	479.800
22.5	56	62	968	-1153	-0.075	26.513	-268.300	454.513
23	-97	218	969	-1147	-3.938	26.450	-268.225	428.000
23.5	-333	474	1002	-1186	-10.088	27.350	-264.288	401.550
24	-559	706	1096	-1275	-15.813	29.638	-254.200	374.200
24.5	-691	818	1056	-1226	-18.863	28.525	-238.388	344.563
25	-769	895	927	-1134	-20.800	25.763	-219.525	316.038
25.5	-806	928	843	-1035	-21.675	23.475	-198.725	290.275
26	-886	1012	877	-1050	-23.725	24.088	-177.050	266.800
26.5	-912	1047	850	-1035	-24.488	23.563	-153.325	242.713
27	-824	968	768	-939	-22.400	21.338	-128.838	219.150
27.5	-735	863	585	-763	-19.975	16.850	-106.438	197.813
28	-684	805	438	-626	-18.613	13.300	-86.463	180.963
28.5	-527	642	679	-891	-14.613	19.625	-67.850	167.663
29	-587	711	1139	-1312	-16.225	30.638	-53.238	148.038
29.5	-452	576	1064	-1252	-12.850	28.950	-37.013	117.400
30	-449	576	1016	-1199	-12.813	27.688	-24.163	88.450
30.5	-217	346	1147	-1329	-7.038	30.950	-11.350	60.763
31	-110	235	1101	-1284	-4.313	29.813	-4.313	29.813
Reference Point (31.5 m)							0.000	0.000

**C305-IM145010**

Serial number probe: D11244



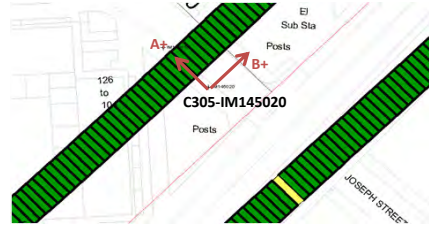
12-11-13 14:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-637	461	338	-291	-13.725	7.863	-559.475	1082.550
1	-457	274	86	-10	-9.138	1.200	-545.750	1074.688
1.5	-243	59	8	103	-3.775	-1.188	-536.613	1073.488
2	-177	-2	-12	98	-2.188	-1.375	-532.838	1074.675
2.5	-175	-12	117	-39	-2.038	1.950	-530.650	1076.050
3	-158	-23	88	0	-1.688	1.100	-528.613	1074.100
3.5	-184	0	1	104	-2.300	-1.288	-526.925	1073.000
4	-202	16	-3	106	-2.725	-1.363	-524.625	1074.288
4.5	-110	-92	102	5	-0.225	1.213	-521.900	1075.650
5	-68	-146	3	88	0.975	-1.063	-521.675	1074.438
5.5	-102	-106	-10	119	0.050	-1.613	-522.650	1075.500
6	-126	-82	-21	119	-0.550	-1.750	-522.700	1077.113
6.5	-168	-13	-53	130	-1.938	-2.288	-522.150	1078.863
7	-199	2	-55	121	-2.513	-2.200	-520.213	1081.150
7.5	-255	69	9	117	-4.050	-1.350	-517.700	1083.350
8	-350	172	-39	138	-6.525	-2.213	-513.650	1084.700
8.5	-443	250	-40	125	-8.663	-2.063	-507.125	1086.913
9	-509	323	6	82	-10.400	-0.950	-498.463	1088.975
9.5	-577	391	122	-21	-12.100	1.788	-488.063	1089.925
10	-700	527	194	-133	-15.338	4.088	-475.963	1088.138
10.5	-843	666	367	-305	-18.863	8.400	-460.625	1084.050
11	-744	545	561	-491	-16.113	13.150	-441.763	1075.650
11.5	-593	413	848	-783	-12.575	20.388	-425.650	1062.500
12	-394	226	984	-917	-7.750	23.763	-413.075	1042.113
12.5	-72	-116	984	-926	0.550	23.875	-405.325	1018.350
13	223	-399	1134	-1051	7.775	27.313	-405.875	994.475
13.5	217	-403	1238	-1158	7.750	29.950	-413.650	967.163
14	145	-336	1292	-1195	6.013	31.088	-421.400	937.213
14.5	70	-239	1365	-1269	3.863	32.925	-427.413	906.125
15	-73	-121	1470	-1377	0.600	35.588	-431.275	873.200
15.5	-211	31	1513	-1434	-3.025	36.838	-431.875	837.613
16	-352	161	1432	-1365	-6.413	34.963	-428.850	800.775
16.5	-497	313	1312	-1211	-10.125	31.538	-422.438	765.813
17	-585	395	1182	-1112	-12.250	28.675	-412.313	734.275
17.5	-649	464	1149	-1095	-13.913	28.050	-400.063	705.600
18	-714	533	1100	-1038	-15.588	26.725	-386.150	677.550
18.5	-762	587	1024	-967	-16.863	24.888	-370.563	650.825
19	-826	651	1007	-947	-18.463	24.425	-353.700	625.938
19.5	-918	736	961	-923	-20.675	23.550	-335.238	601.513
20	-737	554	937	-885	-16.138	22.775	-314.563	577.963
20.5	-571	378	930	-874	-11.863	22.550	-298.425	555.188
21	-476	300	966	-898	-9.700	23.300	-286.563	532.638
21.5	-393	196	1015	-963	-7.363	24.725	-276.863	509.338
22	-223	48	1054	-995	-3.388	25.613	-269.500	484.613
22.5	-103	-104	1103	-1036	0.013	26.738	-266.113	459.000
23	-245	64	1106	-1023	-3.863	26.613	-266.125	432.263
23.5	-485	316	1146	-1060	-10.013	27.575	-262.263	405.650
24	-716	542	1236	-1157	-15.725	29.913	-252.250	378.075
24.5	-840	656	1199	-1112	-18.700	28.888	-236.525	348.163
25	-926	732	1067	-1019	-20.725	26.075	-217.825	319.275
25.5	-953	774	980	-921	-21.588	23.763	-197.100	293.200
26	-1036	858	1015	-933	-23.675	24.350	-175.513	269.438
26.5	-1064	881	984	-914	-24.313	23.725	-151.838	245.088
27	-978	803	902	-820	-22.263	21.525	-127.525	221.363
27.5	-882	698	720	-640	-19.750	17.000	-105.263	199.838
28	-832	639	578	-506	-18.388	13.550	-85.513	182.838
28.5	-678	488	816	-765	-14.575	19.763	-67.125	169.288
29	-736	546	1282	-1198	-16.025	31.000	-52.550	149.525
29.5	-606	422	1202	-1132	-12.850	29.175	-36.525	118.525
30	-596	411	1152	-1080	-12.588	27.900	-23.675	89.350
30.5	-364	186	1291	-1212	-6.875	31.288	-11.088	61.450
31	-257	80	1246	-1167	-4.213	30.163	-4.213	30.163
Reference Point (31.5 m)							0.000	0.000



**C305-IM145020**

Serial number probe: D11217

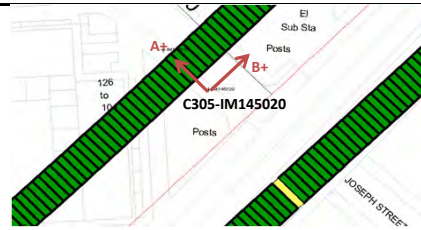


6-11-13 13:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-598	735	-531	340	-16.663	-10.888	-1609.850	708.613
1	-597	730	-527	330	-16.588	-10.713	-1593.188	719.500
1.5	-782	919	-25	-184	-21.263	1.988	-1576.600	730.213
2	-893	1007	255	-410	-23.750	8.313	-1555.338	728.225
2.5	-894	1018	238	-430	-23.900	8.350	-1531.588	719.913
3	-787	907	179	-344	-21.175	6.538	-1507.688	711.563
3.5	-697	836	147	-312	-19.163	5.738	-1486.513	705.025
4	-708	823	117	-294	-19.138	5.138	-1467.350	699.288
4.5	-681	820	145	-334	-18.763	5.988	-1448.213	694.150
5	-509	640	203	-355	-14.363	6.975	-1429.450	688.163
5.5	-613	750	373	-557	-17.038	11.625	-1415.088	681.188
6	-623	762	411	-575	-17.313	12.325	-1398.050	669.563
6.5	-663	798	450	-618	-18.263	13.350	-1380.738	657.238
7	-691	821	475	-642	-18.900	13.963	-1362.475	643.888
7.5	-693	826	458	-633	-18.988	13.638	-1343.575	629.925
8	-813	940	419	-576	-21.913	12.438	-1324.588	616.288
8.5	-908	1032	406	-570	-24.250	12.200	-1302.675	603.850
9	-890	1021	388	-540	-23.888	11.600	-1278.425	591.650
9.5	-856	981	381	-543	-22.963	11.550	-1254.538	580.050
10	-845	959	385	-561	-22.550	11.625	-1231.575	568.500
10.5	-854	989	392	-557	-23.038	11.863	-1209.025	556.675
11	-881	1022	362	-527	-23.788	11.113	-1185.988	544.813
11.5	-895	1028	369	-540	-24.038	11.363	-1162.200	533.700
12	-870	982	374	-531	-23.150	11.313	-1138.163	522.338
12.5	-882	1011	364	-535	-23.663	11.238	-1115.013	511.025
13	-912	1028	369	-546	-24.250	11.438	-1091.350	499.788
13.5	-892	1026	396	-555	-23.975	11.888	-1067.100	488.350
14	-893	1008	441	-592	-23.763	12.913	-1043.125	476.463
14.5	-891	1017	479	-649	-23.850	14.100	-1019.363	463.550
15	-901	1044	492	-664	-24.313	14.450	-995.513	449.450
15.5	-961	1084	477	-640	-25.563	13.963	-971.200	435.000
16	-1032	1157	423	-587	-27.363	12.625	-945.638	421.038
16.5	-1041	1164	410	-589	-27.563	12.488	-918.275	408.413
17	-1004	1140	497	-658	-26.800	14.438	-890.713	395.925
17.5	-1000	1131	543	-714	-26.638	15.713	-863.913	381.488
18	-1024	1166	549	-713	-27.375	15.775	-837.275	365.775
18.5	-1074	1199	546	-715	-28.413	15.763	-809.900	350.000
19	-1091	1214	520	-695	-28.813	15.188	-781.488	334.238
19.5	-1078	1212	526	-690	-28.625	15.200	-752.675	319.050
20	-1024	1154	561	-732	-27.225	16.163	-724.050	303.850
20.5	-1023	1158	492	-669	-27.263	14.513	-696.825	287.688
21	-982	1079	376	-538	-25.513	11.425	-669.563	273.175
21.5	-959	1094	324	-494	-25.663	10.225	-644.050	261.750
22	-992	1103	297	-488	-26.188	9.813	-618.388	251.525
22.5	-988	1136	204	-388	-26.550	7.400	-592.200	241.713
23	-1083	1195	9	-168	-28.475	2.213	-565.650	234.313
23.5	-1088	1226	-64	-91	-28.925	0.338	-537.175	232.100
24	-1021	1142	-51	-96	-27.038	0.563	-508.250	231.763
24.5	-1019	1140	-59	-97	-26.988	0.475	-481.213	231.200
25	-1018	1146	-64	-38	-27.050	-0.325	-454.225	230.725
25.5	-1013	1120	-55	-101	-26.663	0.575	-427.175	231.050
26	-1119	1247	19	-183	-29.575	2.525	-400.513	230.475
26.5	-1164	1296	137	-295	-30.750	5.400	-370.938	227.950
27	-1234	1356	286	-431	-32.375	8.963	-340.188	222.550
27.5	-1295	1425	503	-688	-34.000	14.888	-307.813	213.588
28	-1316	1451	807	-1010	-34.588	22.713	-273.813	198.700
28.5	-1373	1508	1129	-1291	-36.013	30.250	-239.225	175.988
29	-1443	1555	1016	-1182	-37.475	27.475	-203.213	145.738
29.5	-1558	1706	926	-1071	-40.800	24.963	-165.738	118.263
30	-1651	1764	1105	-1268	-42.688	29.663	-124.938	93.300
30.5	-1618	1732	1132	-1310	-41.875	30.525	-82.250	63.638
31	-1558	1672	1245	-1404	-40.375	33.113	-40.375	33.113
Reference Point (31.5 m)							0.000	0.000

**C305-IM145020**

Serial number probe: D11244

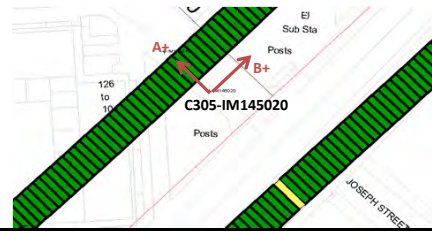


**7-11-13 10:00**

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-756	567	-386	457	-16.538	-10.538	-1604.825	725.413
1	-756	562	-391	453	-16.475	-10.550	-1588.288	735.950
1.5	-937	759	109	-68	-21.200	2.213	-1571.813	746.500
2	-1045	854	395	-292	-23.738	8.588	-1550.613	744.288
2.5	-1051	865	379	-304	-23.950	8.538	-1526.875	735.700
3	-946	752	319	-223	-21.225	6.775	-1502.925	727.163
3.5	-856	667	293	-188	-19.038	6.013	-1481.700	720.388
4	-856	660	254	-179	-18.950	5.413	-1462.663	714.375
4.5	-840	651	291	-209	-18.638	6.250	-1443.713	708.963
5	-661	474	348	-242	-14.188	7.375	-1425.075	702.713
5.5	-772	585	512	-432	-16.963	11.800	-1410.888	695.338
6	-782	603	552	-461	-17.313	12.663	-1393.925	683.538
6.5	-815	629	587	-506	-18.050	13.663	-1376.613	670.875
7	-848	660	613	-520	-18.850	14.163	-1358.563	657.213
7.5	-850	669	596	-511	-18.988	13.838	-1339.713	643.050
8	-967	777	560	-461	-21.800	12.763	-1320.725	629.213
8.5	-1062	874	541	-447	-24.200	12.350	-1298.925	616.450
9	-1048	862	523	-428	-23.875	11.888	-1274.725	604.100
9.5	-1008	824	515	-420	-22.900	11.688	-1250.850	592.213
10	-1003	798	521	-444	-22.513	12.063	-1227.950	580.525
10.5	-1001	820	532	-435	-22.763	12.088	-1205.438	568.463
11	-1037	856	504	-409	-23.663	11.413	-1182.675	556.375
11.5	-1048	860	512	-420	-23.850	11.650	-1159.013	544.963
12	-1028	831	516	-418	-23.238	11.675	-1135.163	533.313
12.5	-1037	854	506	-417	-23.638	11.538	-1111.925	521.638
13	-1067	867	511	-425	-24.175	11.700	-1088.288	510.100
13.5	-1042	872	530	-437	-23.925	12.088	-1064.113	498.400
14	-1040	848	579	-480	-23.600	13.238	-1040.188	486.313
14.5	-1049	864	621	-531	-23.913	14.400	-1016.588	473.075
15	-1054	875	635	-543	-24.113	14.725	-992.675	458.675
15.5	-1114	932	615	-525	-25.675	14.250	-968.563	443.950
16	-1189	991	568	-470	-27.250	12.975	-942.988	429.700
16.5	-1188	1008	553	-465	-27.450	12.725	-915.738	416.725
17	-1160	974	642	-544	-26.675	14.825	-888.288	404.000
17.5	-1149	970	679	-591	-26.488	15.875	-861.613	389.175
18	-1182	997	694	-592	-27.238	16.075	-835.125	373.300
18.5	-1226	1043	684	-594	-28.363	15.975	-807.888	357.225
19	-1250	1049	660	-577	-28.738	15.463	-779.525	341.250
19.5	-1237	1055	660	-575	-28.650	15.438	-750.788	325.788
20	-1180	995	701	-620	-27.188	16.513	-722.138	310.350
20.5	-1178	989	638	-552	-27.088	14.875	-694.950	293.838
21	-1116	927	519	-415	-25.538	11.675	-667.863	278.963
21.5	-1113	928	460	-378	-25.513	10.475	-642.325	267.288
22	-1140	952	440	-371	-26.150	10.138	-616.813	256.813
22.5	-1144	967	342	-262	-26.388	7.550	-590.663	246.675
23	-1237	1040	149	-55	-28.463	2.550	-564.275	239.125
23.5	-1247	1058	74	29	-28.813	0.563	-535.813	236.575
24	-1172	990	92	16	-27.025	0.950	-507.000	236.013
24.5	-1171	982	87	17	-26.913	0.875	-479.975	235.063
25	-1169	983	70	74	-26.900	-0.050	-453.063	234.188
25.5	-1163	964	81	22	-26.588	0.738	-426.163	234.238
26	-1266	1092	159	-67	-29.475	2.825	-399.575	233.500
26.5	-1312	1135	281	-180	-30.588	5.763	-370.100	230.675
27	-1385	1193	430	-310	-32.225	9.250	-339.513	224.913
27.5	-1444	1266	645	-564	-33.875	15.113	-307.288	215.663
28	-1472	1289	948	-887	-34.513	22.938	-273.413	200.550
28.5	-1522	1343	1269	-1167	-35.813	30.450	-238.900	177.613
29	-1595	1404	1160	-1056	-37.488	27.700	-203.088	147.163
29.5	-1708	1542	1066	-959	-40.625	25.313	-165.600	119.463
30	-1807	1613	1239	-1156	-42.750	29.938	-124.975	94.150
30.5	-1767	1580	1274	-1187	-41.838	30.763	-82.225	64.213
31	-1710	1521	1391	-1285	-40.388	33.450	-40.388	33.450
<b>Reference Point (31.5 m)</b>							0.000	0.000

**C305-IM145020**

Serial number probe: D11217

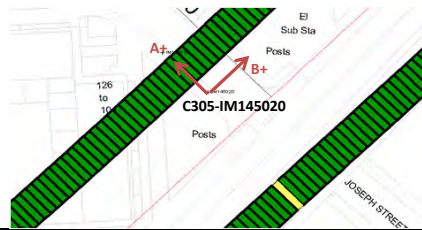


6-11-13 14:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-574	772	-516	382	-16.825	-11.225	-1638.200	744.050
1	-753	953	12	-140	-21.325	1.900	-1621.375	755.275
1.5	-842	1059	289	-385	-23.763	8.425	-1600.050	753.375
2	-861	1064	258	-381	-24.063	7.988	-1576.288	744.950
2.5	-748	959	199	-301	-21.338	6.250	-1552.225	736.963
3	-671	865	191	-280	-19.200	5.888	-1530.888	730.713
3.5	-671	870	153	-263	-19.263	5.200	-1511.688	724.825
4	-641	859	174	-293	-18.750	5.838	-1492.425	719.625
4.5	-466	682	255	-331	-14.350	7.325	-1473.675	713.788
5	-577	789	383	-518	-17.075	11.263	-1459.325	706.463
5.5	-593	802	452	-529	-17.438	12.263	-1442.250	695.200
6	-627	835	466	-594	-18.275	13.250	-1424.813	682.938
6.5	-661	864	490	-606	-19.063	13.700	-1406.538	669.688
7	-661	875	479	-600	-19.200	13.488	-1387.475	655.988
7.5	-769	974	467	-533	-21.788	12.500	-1368.275	642.500
8	-879	1082	432	-534	-24.513	12.075	-1346.488	630.000
8.5	-868	1059	422	-507	-24.088	11.613	-1321.975	617.925
9	-812	1025	397	-502	-22.963	11.238	-1297.888	606.313
9.5	-816	999	423	-528	-22.688	11.888	-1274.925	595.075
10	-817	1020	410	-521	-22.963	11.638	-1252.238	583.188
10.5	-851	1058	395	-488	-23.863	11.038	-1229.275	571.550
11	-853	1068	390	-498	-24.013	11.100	-1205.413	560.513
11.5	-829	1045	400	-511	-23.425	11.388	-1181.400	549.413
12	-852	1055	403	-493	-23.838	11.200	-1157.975	538.025
12.5	-868	1062	396	-511	-24.125	11.338	-1134.138	526.825
13	-866	1076	415	-519	-24.275	11.675	-1110.013	515.488
13.5	-846	1043	467	-559	-23.613	12.825	-1085.738	503.813
14	-859	1073	506	-621	-24.150	14.088	-1062.125	490.988
14.5	-877	1074	520	-617	-24.388	14.213	-1037.975	476.900
15	-923	1127	507	-605	-25.625	13.900	-1013.588	462.688
15.5	-1007	1203	457	-563	-27.625	12.750	-987.963	448.788
16	-1002	1201	446	-553	-27.538	12.488	-960.338	436.038
16.5	-967	1166	539	-625	-26.663	14.550	-932.800	423.550
17	-963	1178	561	-669	-26.763	15.375	-906.138	409.000
17.5	-1000	1197	567	-665	-27.463	15.400	-879.375	393.625
18	-1033	1240	561	-683	-28.413	15.550	-851.913	378.225
18.5	-1068	1256	544	-656	-29.050	15.000	-823.500	362.675
19	-1054	1258	558	-651	-28.900	15.113	-794.450	347.675
19.5	-998	1194	582	-703	-27.400	16.063	-765.550	332.563
20	-993	1189	541	-624	-27.275	14.563	-738.150	316.500
20.5	-936	1130	408	-498	-25.825	11.325	-710.875	301.938
21	-924	1121	346	-463	-25.563	10.113	-685.050	290.613
21.5	-962	1145	344	-440	-26.338	9.800	-659.488	280.500
22	-955	1174	241	-344	-26.613	7.313	-633.150	270.700
22.5	-1041	1249	46	-133	-28.625	2.238	-606.538	263.388
23	-1059	1248	-46	-59	-28.838	0.163	-577.913	261.150
23.5	-986	1186	-30	-73	-27.150	0.538	-549.075	260.988
24	-980	1183	-31	-66	-27.038	0.438	-521.925	260.450
24.5	-973	1189	-58	-7	-27.025	-0.638	-494.888	260.013
25	-976	1171	-34	-52	-26.838	0.225	-467.863	260.650
25.5	-1086	1293	38	-146	-29.738	2.300	-441.025	260.425
26	-1129	1330	149	-269	-30.738	5.225	-411.288	258.125
26.5	-1195	1390	295	-400	-32.313	8.688	-380.550	252.900
27	-1258	1456	512	-646	-33.925	14.475	-348.238	244.213
27.5	-1291	1493	827	-957	-34.800	22.300	-314.313	229.738
28	-1330	1532	1155	-1258	-35.775	30.163	-279.513	207.438
28.5	-1399	1597	1087	-1133	-37.450	27.750	-243.738	177.275
29	-1530	1741	925	-1046	-40.888	24.638	-206.288	149.525
29.5	-1609	1808	1146	-1240	-42.713	29.825	-165.400	124.888
30	-1574	1786	1169	-1271	-42.000	30.500	-122.688	95.063
30.5	-1521	1720	1272	-1375	-40.513	33.088	-80.688	64.563
31	-1501	1713	1222	-1296	-40.175	31.475	-40.175	31.475
Reference Point (31.5 m)							0.000	0.000

**C305-IM145020**

Serial number probe: D11244

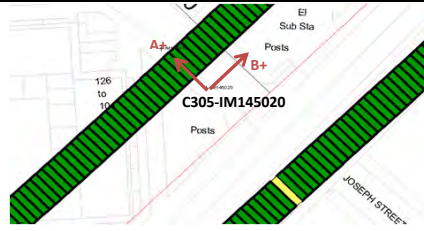


7-11-13 11:35

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-724	608	-370	494	-16.650	-10.800	-1632.388	759.338
1	-898	797	148	-25	-21.188	2.163	-1615.738	770.138
1.5	-997	897	425	-256	-23.675	8.513	-1594.550	767.975
2	-1020	909	403	-263	-24.113	8.325	-1570.875	759.463
2.5	-905	795	343	-188	-21.250	6.638	-1546.763	751.138
3	-823	710	327	-151	-19.163	5.975	-1525.513	744.500
3.5	-817	707	293	-140	-19.050	5.413	-1506.350	738.525
4	-799	699	313	-169	-18.725	6.025	-1487.300	733.113
4.5	-623	520	390	-209	-14.288	7.488	-1468.575	727.088
5	-738	622	529	-391	-17.000	11.500	-1454.288	719.600
5.5	-750	644	591	-418	-17.425	12.613	-1437.288	708.100
6	-778	671	613	-469	-18.113	13.525	-1419.863	695.488
6.5	-812	705	631	-484	-18.963	13.938	-1401.750	681.963
7	-815	709	626	-478	-19.050	13.800	-1382.788	668.025
7.5	-928	818	600	-421	-21.825	12.763	-1363.738	654.225
8	-1024	920	575	-414	-24.300	12.363	-1341.913	641.463
8.5	-1013	905	559	-392	-23.975	11.888	-1317.613	629.100
9	-973	862	543	-380	-22.938	11.538	-1293.638	617.213
9.5	-965	845	556	-401	-22.625	11.963	-1270.700	605.675
10	-964	859	557	-393	-22.788	11.675	-1248.075	593.713
10.5	-1001	896	542	-368	-23.713	11.375	-1225.288	581.838
11	-1011	906	526	-386	-23.963	11.400	-1201.575	570.463
11.5	-989	877	540	-385	-23.325	11.563	-1177.613	559.063
12	-1004	890	538	-374	-23.675	11.400	-1154.288	547.500
12.5	-1028	910	535	-387	-24.225	11.525	-1130.613	536.100
13	-1014	908	550	-396	-24.025	11.825	-1106.388	524.575
13.5	-1000	891	611	-441	-23.638	13.150	-1082.363	512.750
14	-1015	906	653	-496	-24.013	14.363	-1058.725	499.600
14.5	-1022	915	660	-503	-24.213	14.538	-1034.713	485.238
15	-1079	970	640	-488	-25.613	14.100	-1010.500	470.700
15.5	-1152	1035	595	-434	-27.338	12.863	-984.888	456.600
16	-1159	1047	580	-430	-27.575	12.625	-957.550	443.738
16.5	-1126	1013	675	-502	-26.738	14.713	-929.975	431.113
17	-1117	1011	701	-555	-26.600	15.700	-903.238	416.400
17.5	-1148	1035	712	-550	-27.288	15.775	-876.638	400.700
18	-1194	1080	704	-555	-28.425	15.738	-849.350	384.925
18.5	-1214	1093	689	-535	-28.838	15.300	-820.925	369.188
19	-1205	1100	694	-532	-28.813	15.325	-792.088	353.888
19.5	-1144	1037	718	-580	-27.263	16.225	-763.275	338.563
20	-1140	1029	675	-510	-27.113	14.813	-736.013	322.338
20.5	-1087	966	551	-382	-25.663	11.663	-708.900	307.525
21	-1076	963	490	-341	-25.488	10.388	-683.238	295.863
21.5	-1110	992	480	-328	-26.275	10.100	-657.750	285.475
22	-1106	1007	377	-229	-26.413	7.575	-631.475	275.375
22.5	-1200	1082	192	-12	-28.525	2.550	-605.063	267.800
23	-1209	1096	100	66	-28.813	0.425	-576.538	265.250
23.5	-1194	1030	114	56	-27.050	0.725	-547.725	264.825
24	-1139	1018	112	59	-26.963	0.663	-520.675	264.100
24.5	-1131	1028	88	107	-26.988	-0.238	-493.713	263.438
25	-1132	1009	109	64	-26.763	0.563	-466.725	263.675
25.5	-1231	1131	174	-26	-29.525	2.500	-439.963	263.113
26	-1283	1171	295	-140	-30.675	5.438	-410.438	260.613
26.5	-1347	1230	429	-275	-32.213	8.800	-379.763	255.175
27	-1415	1304	653	-521	-33.988	14.675	-347.550	246.375
27.5	-1438	1325	961	-846	-34.538	22.588	-313.563	231.700
28	-1484	1380	1290	-1133	-35.800	30.288	-279.025	209.113
28.5	-1559	1445	1222	-1022	-37.550	28.050	-243.225	178.825
29	-1681	1574	1071	-921	-40.688	24.900	-205.675	150.775
29.5	-1766	1651	1279	-1116	-42.713	29.938	-164.988	125.875
30	-1732	1622	1309	-1153	-41.925	30.775	-122.275	95.938
30.5	-1675	1555	1419	-1252	-40.375	33.388	-80.350	65.163
31	-1646	1552	1369	-1173	-39.975	31.775	-39.975	31.775
Reference Point (31.5 m)							0.000	0.000

C305-IM145020

Serial number probe: DI1217



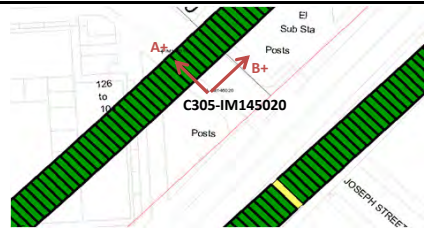
6-11-13 15:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-558	764	-501	382	-16.525	-11.038	-1635.038	750.038
1	-741	961	8	-140	-21.275	1.850	-1618.513	761.075
1.5	-846	1059	291	-385	-23.813	8.450	-1597.238	759.225
2	-864	1065	275	-381	-24.113	8.200	-1573.425	750.775
2.5	-744	960	213	-301	-21.300	6.425	-1549.313	742.575
3	-662	869	195	-280	-19.138	5.938	-1528.013	736.150
3.5	-659	863	160	-263	-19.025	5.288	-1508.875	730.213
4	-644	854	186	-293	-18.725	5.988	-1489.850	724.925
4.5	-471	686	239	-331	-14.463	7.125	-1471.125	718.938
5	-577	786	407	-518	-17.038	11.563	-1456.663	711.813
5.5	-596	802	444	-529	-17.475	12.163	-1439.625	700.250
6	-612	837	488	-594	-18.113	13.525	-1422.150	688.088
6.5	-660	865	512	-606	-19.063	13.975	-1404.038	674.563
7	-656	869	498	-600	-19.063	13.725	-1384.975	660.588
7.5	-769	986	454	-533	-21.938	12.338	-1365.913	646.863
8	-862	1086	438	-534	-24.350	12.150	-1343.975	634.525
8.5	-852	1063	413	-507	-23.938	11.500	-1319.625	622.375
9	-818	1027	407	-502	-23.063	11.363	-1295.688	610.875
9.5	-809	1003	412	-528	-22.650	11.750	-1272.625	599.513
10	-801	1025	426	-521	-22.825	11.638	-1249.975	587.763
10.5	-843	1057	398	-488	-23.750	11.075	-1227.150	575.925
11	-854	1067	400	-498	-24.013	11.225	-1203.400	564.850
11.5	-824	1031	405	-511	-23.188	11.450	-1179.388	553.625
12	-844	1055	399	-493	-23.738	11.150	-1156.200	542.175
12.5	-873	1071	413	-511	-24.300	11.550	-1132.463	531.025
13	-850	1077	433	-519	-24.088	11.900	-1108.163	519.475
13.5	-846	1055	464	-559	-23.763	12.788	-1084.075	507.575
14	-850	1070	527	-621	-24.000	14.350	-1060.313	494.788
14.5	-866	1069	541	-617	-24.188	14.475	-1036.313	480.438
15	-921	1140	507	-605	-25.763	13.900	-1012.125	465.963
15.5	-992	1196	457	-563	-27.350	12.750	-986.363	452.063
16	-997	1205	453	-553	-27.525	12.575	-959.013	439.313
16.5	-961	1177	535	-625	-26.725	14.500	-931.488	426.738
17	-959	1170	577	-669	-26.613	15.575	-904.763	412.238
17.5	-987	1201	592	-665	-27.350	15.713	-878.150	396.663
18	-1029	1245	569	-683	-28.425	15.650	-850.800	380.950
18.5	-1053	1257	556	-656	-28.875	15.150	-822.375	365.300
19	-1042	1262	561	-651	-28.800	15.150	-793.500	350.150
19.5	-986	1200	598	-703	-27.325	16.263	-764.700	335.000
20	-978	1199	539	-624	-27.213	14.538	-737.375	318.738
20.5	-928	1133	423	-498	-25.763	11.513	-710.163	304.200
21	-915	1133	366	-463	-25.600	10.363	-684.400	292.688
21.5	-953	1157	326	-440	-26.375	9.575	-658.800	282.325
22	-949	1168	229	-344	-26.463	7.163	-632.425	272.750
22.5	-1044	1242	45	-133	-28.575	2.225	-605.963	265.588
23	-1048	1259	-27	-59	-28.838	0.400	-577.388	263.363
23.5	-978	1189	-21	-73	-27.088	0.650	-548.550	262.963
24	-980	1185	-16	-66	-27.063	0.625	-521.463	262.313
24.5	-974	1191	-41	-7	-27.063	-0.425	-494.400	261.688
25	-975	1173	-23	-52	-26.850	0.363	-467.338	262.113
25.5	-1074	1296	50	-146	-29.625	2.450	-440.488	261.750
26	-1118	1333	172	-269	-30.638	5.513	-410.863	259.300
26.5	-1189	1394	321	-400	-32.288	9.013	-380.225	253.788
27	-1258	1471	532	-646	-34.113	14.725	-347.938	244.775
27.5	-1275	1485	847	-957	-34.500	22.550	-313.825	230.050
28	-1322	1548	1164	-1258	-35.875	30.275	-279.325	207.500
28.5	-1396	1610	1051	-1133	-37.575	27.300	-243.450	177.225
29	-1518	1734	953	-1046	-40.650	24.988	-205.875	149.925
29.5	-1605	1819	1132	-1240	-42.800	29.650	-165.225	124.938
30	-1571	1786	1165	-1271	-41.963	30.450	-122.425	95.288
30.5	-1514	1722	1285	-1375	-40.450	33.250	-80.463	64.838
31	-1487	1714	1231	-1296	-40.013	31.588	-40.013	31.588
Reference Point (31.5 m)							0.000	0.000



**C305-IM145020**

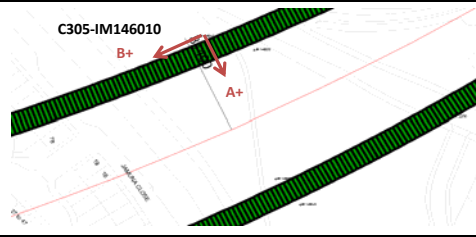
Serial number probe: D11244



7-11-13 12:46

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-716	608	-353	494	-16.550	-10.588	-1629.950	765.513
1	-897	798	146	-25	-21.188	2.138	-1613.400	776.100
1.5	-999	899	425	-256	-23.725	8.513	-1592.213	773.963
2	-1013	911	413	-263	-24.050	8.450	-1568.488	765.450
2.5	-900	796	352	-188	-21.200	6.750	-1544.438	757.000
3	-819	712	329	-151	-19.138	6.000	-1523.238	750.250
3.5	-810	709	294	-140	-18.988	5.425	-1504.100	744.250
4	-798	700	322	-169	-18.725	6.138	-1485.113	738.825
4.5	-619	520	383	-209	-14.238	7.400	-1466.388	732.688
5	-734	625	542	-391	-16.988	11.663	-1452.150	725.288
5.5	-746	646	591	-418	-17.400	12.613	-1435.163	713.625
6	-770	675	625	-469	-18.063	13.675	-1417.763	701.013
6.5	-808	708	644	-484	-18.950	14.100	-1399.700	687.338
7	-810	710	635	-478	-19.000	13.913	-1380.750	673.238
7.5	-923	823	600	-421	-21.825	12.763	-1361.750	659.325
8	-1020	923	579	-414	-24.288	12.413	-1339.925	646.563
8.5	-1008	905	559	-392	-23.913	11.888	-1315.638	634.150
9	-967	864	552	-380	-22.888	11.650	-1291.725	622.263
9.5	-959	847	560	-401	-22.575	12.013	-1268.838	610.613
10	-959	861	563	-393	-22.750	11.950	-1246.263	598.600
10.5	-998	900	544	-368	-23.725	11.400	-1223.513	586.650
11	-1004	906	542	-386	-23.875	11.600	-1199.788	575.250
11.5	-982	878	547	-385	-23.250	11.650	-1175.913	563.650
12	-998	894	539	-374	-23.650	11.413	-1152.663	552.000
12.5	-1022	912	548	-387	-24.175	11.688	-1129.013	540.588
13	-1006	911	566	-396	-23.963	12.025	-1104.838	528.900
13.5	-996	892	611	-441	-23.600	13.150	-1080.875	516.875
14	-1006	910	661	-496	-23.950	14.463	-1057.275	503.725
14.5	-1014	916	675	-503	-24.125	14.725	-1033.325	489.263
15	-1075	974	648	-488	-25.613	14.200	-1009.200	474.538
15.5	-1145	1037	604	-434	-27.275	12.975	-983.588	460.338
16	-1151	1051	588	-430	-27.525	12.725	-956.313	447.363
16.5	-1114	1016	674	-502	-26.625	14.700	-928.788	434.638
17	-1108	1012	712	-555	-26.500	15.838	-902.163	419.938
17.5	-1139	1040	729	-550	-27.238	15.988	-875.663	404.100
18	-1186	1082	716	-555	-28.350	15.888	-848.425	388.113
18.5	-1206	1098	697	-535	-28.800	15.400	-820.075	372.225
19	-1199	1103	698	-532	-28.775	15.375	-791.275	356.825
19.5	-1135	1043	733	-580	-27.225	16.413	-762.500	341.450
20	-1135	1033	675	-510	-27.100	14.813	-735.275	325.038
20.5	-1078	970	556	-382	-25.600	11.725	-708.175	310.225
21	-1071	969	498	-341	-25.500	10.488	-682.575	298.500
21.5	-1103	993	474	-328	-26.200	10.025	-657.075	288.013
22	-1100	1012	375	-229	-26.400	7.550	-630.875	277.988
22.5	-1194	1082	189	-12	-28.450	2.513	-604.475	270.438
23	-1201	1106	112	66	-28.838	0.575	-576.025	267.925
23.5	-1127	1029	126	56	-26.950	0.875	-547.188	267.350
24	-1131	1025	127	59	-26.950	0.850	-520.238	266.475
24.5	-1124	1026	102	107	-26.875	-0.063	-493.288	265.625
25	-1123	1013	120	64	-26.700	0.700	-466.413	265.688
25.5	-1227	1135	198	-26	-29.525	2.800	-439.713	264.988
26	-1276	1175	315	-140	-30.638	5.688	-410.188	262.188
26.5	-1339	1236	467	-275	-32.188	9.275	-379.550	256.500
27	-1408	1309	676	-521	-33.963	14.963	-347.363	247.225
27.5	-1430	1330	985	-846	-34.500	22.888	-313.400	232.263
28	-1477	1383	1305	-1133	-35.750	30.475	-278.900	209.375
28.5	-1554	1450	1199	-1022	-37.550	27.763	-243.150	178.900
29	-1671	1581	1098	-921	-40.650	25.238	-205.600	151.138
29.5	-1763	1658	1275	-1116	-42.763	29.888	-164.950	125.900
30	-1723	1625	1313	-1153	-41.850	30.825	-122.188	96.013
30.5	-1669	1563	1423	-1252	-40.400	33.438	-80.338	65.188
31	-1640	1555	1367	-1173	-39.938	31.750	-39.938	31.750
Reference Point (31.5 m)							0.000	0.000

C305-IM146010

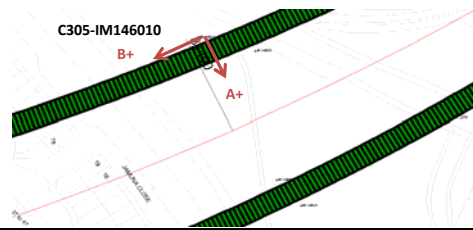


Serial number probe: D11217

25-11-13 9:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	582	-345	280	-388	11.588	8.350	339.800	298.913
1	640	-398	217	-320	12.975	6.713	328.213	290.563
1.5	394	-161	121	-215	6.938	4.200	315.238	283.850
2	105	112	-86	38	-0.088	-1.550	308.300	279.650
2.5	171	81	37	-150	1.125	2.338	308.388	281.200
3	170	64	122	-220	1.325	4.275	307.263	278.863
3.5	171	94	150	-242	0.963	4.900	305.938	274.588
4	224	30	161	-244	2.425	5.063	304.975	269.688
4.5	284	-44	200	-311	4.100	6.388	302.550	264.625
5	390	-101	239	-274	5.388	6.413	298.450	258.238
5.5	372	-130	186	-322	6.275	6.350	293.063	251.825
6	538	-311	151	-257	10.613	5.100	286.788	245.475
6.5	616	-365	134	-213	12.263	4.338	276.175	240.375
7	588	-355	129	-218	11.788	4.338	263.913	236.038
7.5	570	-343	172	-262	11.413	5.425	252.125	231.700
8	658	-425	176	-241	13.538	5.213	240.713	226.275
8.5	401	-145	156	-254	6.825	5.125	227.175	221.063
9	383	-124	162	-253	6.338	5.188	220.350	215.938
9.5	350	-136	133	-230	6.075	4.538	214.013	210.750
10	340	-108	84	-176	5.600	3.250	207.938	206.213
10.5	341	-101	-12	-68	5.525	0.700	202.338	202.963
11	448	-218	-21	-86	8.325	0.813	196.813	202.263
11.5	261	-30	-128	109	3.638	-2.963	188.488	201.450
12	386	-137	-38	-41	6.538	0.038	184.850	204.413
12.5	519	-295	143	-227	10.175	4.625	178.313	204.375
13	539	-289	264	-356	10.350	7.750	168.138	199.750
13.5	455	-228	327	-420	8.538	9.338	157.788	192.000
14	400	-174	433	-490	7.175	11.538	149.250	182.663
14.5	65	181	496	-623	-1.450	13.988	142.075	171.125
15	36	209	407	-492	-2.163	11.238	143.525	157.138
15.5	55	167	344	-443	-1.400	9.838	145.688	145.900
16	135	73	347	-440	0.775	9.838	147.088	136.063
16.5	187	46	354	-450	1.763	10.050	146.313	126.225
17	157	52	379	-431	1.313	10.125	144.550	116.175
17.5	58	185	286	-420	-1.588	8.825	143.238	106.050
18	129	87	242	-339	0.525	7.263	144.825	97.225
18.5	241	-9	211	-290	3.125	6.263	144.300	89.963
19	360	-114	169	-260	5.925	5.363	141.175	83.700
19.5	517	-288	96	-198	10.063	3.675	135.250	78.338
20	638	-425	22	-73	13.288	1.188	125.188	74.663
20.5	444	-176	244	-313	7.750	6.963	111.900	73.475
21	374	-142	213	-314	6.450	6.588	104.150	66.513
21.5	396	-144	197	-284	6.750	6.013	97.700	59.925
22	431	-196	222	-330	7.838	6.900	90.950	53.913
22.5	457	-212	235	-311	8.363	6.825	83.113	47.013
23	443	-202	240	-322	8.063	7.025	74.750	40.188
23.5	267	-55	193	-282	4.025	5.938	66.688	33.163
24	280	-42	135	-234	4.025	4.613	62.663	27.225
24.5	330	-77	165	-263	5.088	5.350	58.638	22.613
25	391	-156	258	-364	6.838	7.775	53.550	17.263
25.5	539	-318	481	-578	10.713	13.238	46.713	9.488
26	648	-437	625	-693	13.563	16.475	36.000	-3.750
26.5	236	-1	396	-480	2.963	10.950	22.438	-20.225
27	244	-28	75	-173	3.400	3.100	19.475	-31.175
27.5	85	126	-506	423	-0.513	-11.613	16.075	-34.275
28	403	-179	-541	458	7.275	-12.488	16.588	-22.663
28.5	492	-253	-461	353	9.313	-10.175	9.313	-10.175
Reference Point (29 m)							0.000	0.000

C305-IM146010



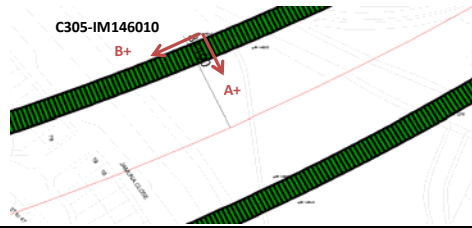
Serial number probe: D11244

26-11-13 11:56

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	434	-500	423	-272	11.675	8.688	345.838	313.263
1	482	-561	357	-202	13.038	6.988	334.163	304.575
1.5	237	-324	266	-103	7.013	4.613	321.125	297.588
2	-51	-55	55	157	0.050	-1.275	314.113	292.975
2.5	14	-88	178	-27	1.275	2.563	314.063	294.250
3	19	-102	258	-107	1.513	4.563	312.788	291.688
3.5	14	-75	289	-119	1.113	5.100	311.275	287.125
4	70	-139	303	-132	2.613	5.438	310.163	282.025
4.5	131	-212	345	-187	4.288	6.650	307.550	276.588
5	176	-262	385	-150	5.475	6.688	303.263	269.938
5.5	224	-299	329	-208	6.538	6.713	297.788	263.250
6	391	-469	297	-133	10.750	5.375	291.250	256.538
6.5	469	-526	276	-90	12.438	4.575	280.500	251.163
7	439	-520	273	-97	11.988	4.625	268.063	246.588
7.5	415	-504	309	-138	11.488	5.588	256.075	241.963
8	510	-584	313	-119	13.675	5.400	244.588	236.375
8.5	245	-313	291	-138	6.975	5.363	230.913	230.975
9	224	-292	301	-137	6.450	5.475	223.938	225.613
9.5	198	-287	272	-104	6.063	4.700	217.488	220.138
10	193	-273	223	-54	5.825	3.463	211.425	215.438
10.5	188	-259	124	52	5.588	0.900	205.600	211.975
11	300	-386	120	37	8.575	1.038	200.013	211.075
11.5	113	-188	15	233	3.763	-2.725	191.438	210.038
12	236	-305	107	78	6.763	0.363	187.675	212.763
12.5	363	-450	281	-105	10.163	4.825	180.913	212.400
13	389	-451	399	-234	10.500	7.913	170.750	207.575
13.5	301	-393	464	-296	8.675	9.500	160.250	199.663
14	245	-328	572	-366	7.163	11.725	151.575	190.163
14.5	-86	17	634	-500	-1.288	14.175	144.413	178.438
15	-114	50	541	-369	-2.050	11.375	145.700	164.263
15.5	-94	8	487	-325	-1.275	10.150	147.750	152.888
16	-13	-91	481	-322	0.975	10.038	149.025	142.738
16.5	34	-109	494	-331	1.788	10.313	148.050	132.700
17	10	-99	520	-314	1.363	10.425	146.263	122.388
17.5	-99	28	425	-295	-1.588	9.000	144.900	111.963
18	-24	-77	381	-218	0.663	7.488	146.488	102.963
18.5	86	-175	354	-178	3.263	6.650	145.825	95.475
19	202	-273	303	-141	5.938	5.550	142.563	88.825
19.5	365	-439	233	-83	10.050	3.950	136.625	83.275
20	482	-591	156	48	13.413	1.350	126.575	79.325
20.5	285	-345	381	-199	7.875	7.250	113.163	77.975
21	221	-309	355	-202	6.625	6.963	105.288	70.725
21.5	245	-309	336	-172	6.925	6.350	98.663	63.763
22	277	-364	357	-205	8.013	7.025	91.738	57.413
22.5	302	-381	370	-192	8.538	7.025	83.725	50.388
23	285	-355	374	-198	8.000	7.150	75.188	43.363
23.5	117	-207	327	-161	4.050	6.100	67.188	36.213
24	128	-209	280	-109	4.213	4.863	63.138	30.113
24.5	171	-240	300	-146	5.138	5.575	58.925	25.250
25	234	-315	401	-243	6.863	8.050	53.788	19.675
25.5	383	-473	626	-452	10.700	13.475	46.925	11.625
26	498	-591	763	-581	13.613	16.800	36.225	-1.850
26.5	88	-153	531	-366	3.013	11.213	22.613	-18.650
27	89	-184	219	-55	3.413	3.425	19.600	-29.863
27.5	-68	-26	-367	540	-0.525	-11.338	16.188	-33.288
28	245	-330	-395	574	7.188	-12.113	16.713	-21.950
28.5	344	-418	-318	469	9.525	-9.838	9.525	-9.838
Reference Point (29 m)							0.000	0.000

C305-IM146010

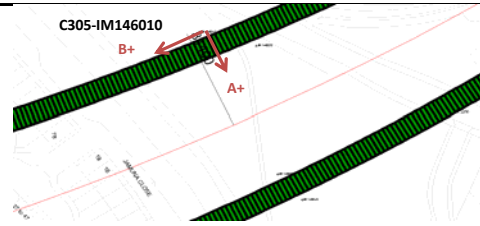
Serial number probe: D11217



25-11-13 10:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	586	-354	276	-393	11.750	8.363	344.525	300.300
1	624	-410	212	-352	12.925	7.050	332.775	291.938
1.5	382	-169	114	-247	6.888	4.513	319.850	284.888
2	103	92	-91	25	0.138	-1.450	312.963	280.375
2.5	157	57	34	-161	1.250	2.438	312.825	281.825
3	163	39	117	-234	1.550	4.388	311.575	279.388
3.5	140	66	148	-269	0.925	5.213	310.025	275.000
4	226	0	164	-273	2.825	5.463	309.100	269.788
4.5	288	-74	201	-337	4.525	6.725	306.275	264.325
5	326	-116	235	-276	5.525	6.388	301.750	257.600
5.5	375	-143	176	-344	6.475	6.500	296.225	251.213
6	532	-325	147	-261	10.713	5.100	289.750	244.713
6.5	623	-388	120	-235	12.638	4.438	279.038	239.613
7	592	-372	113	-227	12.050	4.250	266.400	235.175
7.5	566	-359	165	-260	11.438	5.313	254.350	230.925
8	659	-429	154	-254	13.600	5.100	242.913	225.613
8.5	388	-177	140	-266	7.063	5.075	229.313	220.513
9	372	-150	145	-264	6.525	5.113	222.250	215.438
9.5	336	-129	123	-240	5.813	4.538	215.725	210.325
10	336	-117	67	-195	5.663	3.275	209.913	205.788
10.5	340	-101	-20	-80	5.513	0.750	204.250	202.513
11	439	-234	-37	-79	8.413	0.525	198.738	201.763
11.5	266	-44	-160	101	3.875	-3.263	190.325	201.238
12	379	-160	-34	-42	6.738	0.100	186.450	204.500
12.5	515	-294	117	-233	10.113	4.375	179.713	204.400
13	545	-297	246	-375	10.525	7.763	169.600	200.025
13.5	451	-239	318	-439	8.625	9.463	159.075	192.263
14	395	-177	438	-498	7.150	11.700	150.450	182.800
14.5	58	152	483	-624	-1.175	13.838	143.300	171.100
15	31	196	390	-497	-2.063	11.088	144.475	157.263
15.5	59	143	325	-454	-1.050	9.738	146.538	146.175
16	128	66	332	-451	0.775	9.788	147.588	136.438
16.5	191	44	346	-469	1.838	10.188	146.813	126.650
17	154	55	392	-447	1.238	10.488	144.975	116.463
17.5	43	184	276	-423	-1.763	8.738	143.738	105.975
18	130	83	227	-344	0.588	7.138	145.500	97.238
18.5	239	-30	203	-320	3.363	6.538	144.913	90.100
19	355	-116	147	-276	5.888	5.288	141.550	83.563
19.5	518	-278	89	-205	9.950	3.675	135.663	78.275
20	638	-450	-15	-87	13.600	0.900	125.713	74.600
20.5	430	-199	225	-326	7.863	6.888	112.113	73.700
21	362	-154	208	-335	6.450	6.788	104.250	66.813
21.5	387	-158	198	-296	6.813	6.175	97.800	60.025
22	424	-215	211	-314	7.988	6.563	90.988	53.850
22.5	445	-226	216	-314	8.388	6.625	83.000	47.288
23	440	-199	226	-330	7.988	6.950	74.613	40.663
23.5	257	-62	178	-298	3.988	5.950	66.625	33.713
24	282	-55	125	-251	4.213	4.700	62.638	27.763
24.5	313	-92	148	-280	5.063	5.350	58.425	23.063
25	382	-165	261	-370	6.838	7.888	53.363	17.713
25.5	525	-318	470	-577	10.538	13.088	46.525	9.825
26	650	-440	608	-713	13.625	16.513	35.988	-3.263
26.5	237	3	371	-499	2.925	10.875	22.363	-19.775
27	245	-23	73	-182	3.350	3.188	19.438	-30.650
27.5	79	126	-528	409	-0.588	-11.713	16.088	-33.838
28	404	-172	-519	442	7.200	-12.013	16.675	-22.125
28.5	495	-263	-458	351	9.475	-10.113	9.475	-10.113
Reference Point (29 m)							0.000	0.000

C305-IM146010



Serial number probe: D1244

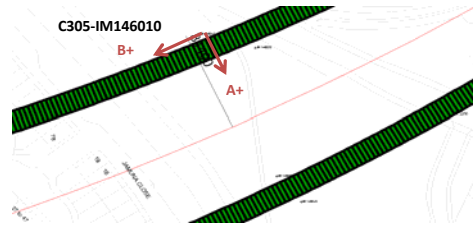
26-11-13 12:39

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	430	-508	414	-277	11.725	8.638	349.000	315.263
1	477	-572	346	-226	13.113	7.150	337.275	306.625
1.5	230	-334	261	-120	7.050	4.763	324.163	299.475
2	-57	-62	53	148	0.063	-1.188	317.113	294.713
2.5	-1	-95	172	-36	1.175	2.600	317.050	295.900
3	8	-115	260	-112	1.538	4.650	315.875	293.300
3.5	-7	-96	287	-149	1.113	5.450	314.338	288.650
4	67	-154	300	-158	2.763	5.725	313.225	283.200
4.5	128	-229	347	-213	4.463	7.000	310.463	277.475
5	171	-272	382	-163	5.538	6.813	306.000	270.475
5.5	220	-311	317	-220	6.638	6.713	300.463	263.663
6	386	-478	286	-138	10.800	5.300	293.825	256.950
6.5	462	-545	266	-109	12.588	4.688	283.025	251.650
7	432	-527	258	-114	11.988	4.650	270.438	246.963
7.5	407	-514	298	-143	11.513	5.513	258.450	242.313
8	502	-594	300	-134	13.700	5.425	246.938	236.800
8.5	239	-330	285	-150	7.113	5.438	233.238	231.375
9	212	-302	286	-148	6.425	5.425	226.125	225.938
9.5	190	-296	259	-116	6.075	4.688	219.700	220.513
10	189	-282	210	-74	5.888	3.550	213.625	215.825
10.5	184	-264	122	44	5.600	0.975	207.738	212.275
11	293	-394	108	39	8.588	0.863	202.138	211.300
11.5	110	-198	-18	223	3.850	-3.013	193.550	210.438
12	230	-314	101	74	6.800	0.338	189.700	213.450
12.5	355	-459	262	-110	10.175	4.650	182.900	213.113
13	385	-463	386	-252	10.600	7.975	172.725	208.463
13.5	299	-403	452	-321	8.775	9.663	162.125	200.488
14	242	-339	572	-375	7.263	11.838	153.350	190.825
14.5	-90	-5	630	-511	-1.063	14.263	146.088	178.988
15	-120	39	532	-378	-1.988	11.375	147.150	164.725
15.5	-101	-11	472	-337	-1.125	10.113	149.138	153.350
16	-21	-101	471	-334	1.000	10.063	150.263	143.238
16.5	31	-118	486	-347	1.863	10.413	149.263	133.175
17	9	-108	526	-320	1.463	10.575	147.400	122.763
17.5	-103	21	410	-301	-1.550	8.888	145.938	112.188
18	-31	-84	367	-231	0.663	7.475	147.488	103.300
18.5	83	-187	349	-203	3.375	6.900	146.825	95.825
19	198	-281	293	-155	5.988	5.600	143.450	88.925
19.5	360	-446	228	-88	10.075	3.950	137.463	83.325
20	479	-604	131	36	13.538	1.188	127.388	79.375
20.5	275	-351	370	-211	7.825	7.263	113.850	78.188
21	217	-319	344	-213	6.700	6.963	106.025	70.925
21.5	237	-318	331	-183	6.938	6.425	99.325	63.963
22	274	-375	350	-197	8.113	6.838	92.388	57.538
22.5	298	-391	352	-201	8.613	6.913	84.275	50.700
23	280	-363	371	-210	8.038	7.263	75.663	43.788
23.5	111	-217	321	-179	4.100	6.250	67.625	36.525
24	126	-216	270	-129	4.275	4.988	63.525	30.275
24.5	163	-247	290	-159	5.125	5.613	59.250	25.288
25	227	-322	395	-249	6.863	8.050	54.125	19.675
25.5	380	-481	617	-461	10.763	13.475	47.263	11.625
26	493	-600	748	-587	13.663	16.688	36.500	-1.850
26.5	83	-159	516	-375	3.025	11.138	22.838	-18.538
27	85	-190	209	-68	3.438	3.463	19.813	-29.675
27.5	-72	-34	-388	530	-0.475	-11.475	16.375	-33.138
28	246	-338	-383	567	7.300	-11.875	16.850	-21.663
28.5	338	-426	-316	467	9.550	-9.788	9.550	-9.788
Reference Point (29 m)							0.000	0.000



C305-IM146010

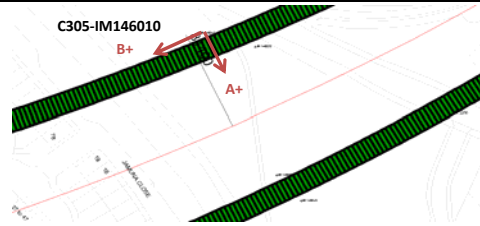
Serial number probe: D1217



25-11-13 11:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	537	-399	244	-434	11.700	8.475	346.213	302.513
1	593	-459	184	-382	13.150	7.075	334.513	294.038
1.5	341	-219	77	-277	7.000	4.425	321.363	286.963
2	54	54	-111	-6	0.000	-1.313	314.363	282.538
2.5	113	26	3	-189	1.088	2.400	314.363	283.850
3	116	6	90	-274	1.375	4.550	313.275	281.450
3.5	102	24	102	-297	0.975	4.988	311.900	276.900
4	178	-33	119	-316	2.638	5.438	310.925	271.913
4.5	246	-111	176	-366	4.463	6.775	308.288	266.475
5	288	-158	219	-324	5.575	6.788	303.825	259.700
5.5	336	-196	135	-389	6.650	6.550	298.250	252.913
6	501	-368	110	-298	10.863	5.100	291.600	246.363
6.5	577	-433	102	-259	12.625	4.513	280.738	241.263
7	551	-405	85	-271	11.950	4.450	268.113	236.750
7.5	514	-401	112	-302	11.438	5.175	256.163	232.300
8	608	-483	123	-294	13.638	5.213	244.725	227.125
8.5	352	-209	111	-298	7.013	5.113	231.088	221.913
9	322	-186	101	-301	6.350	5.025	224.075	216.800
9.5	294	-179	86	-279	5.913	4.563	217.725	211.775
10	295	-158	33	-242	5.663	3.438	211.813	207.213
10.5	296	-152	-48	-113	5.600	0.813	206.150	203.775
11	405	-282	-73	-117	8.588	0.550	200.550	202.963
11.5	224	-86	-201	71	3.875	-3.400	191.963	202.413
12	346	-202	-77	-91	6.850	0.175	188.088	205.813
12.5	469	-341	90	-271	10.125	4.513	181.238	205.638
13	500	-353	200	-415	10.663	7.688	171.113	201.125
13.5	404	-281	273	-469	8.563	9.275	160.450	193.438
14	351	-230	387	-525	7.263	11.400	151.888	184.163
14.5	22	102	456	-674	-1.000	14.125	144.625	172.763
15	-7	157	359	-534	-2.050	11.163	145.625	158.638
15.5	17	108	291	-493	-1.138	9.800	147.675	147.475
16	99	16	307	-492	1.038	9.988	148.813	137.675
16.5	152	-9	320	-500	2.013	10.250	147.775	127.688
17	124	14	353	-465	1.375	10.225	145.763	117.438
17.5	13	135	241	-451	-1.525	8.650	144.388	107.213
18	77	35	204	-391	0.525	7.438	145.913	98.563
18.5	191	-63	177	-361	3.175	6.725	145.388	91.125
19	309	-158	126	-316	5.838	5.525	142.213	84.400
19.5	471	-342	47	-246	10.163	3.663	136.375	78.875
20	593	-485	-55	-116	13.475	0.763	126.213	75.213
20.5	388	-227	201	-365	7.688	7.075	112.738	74.450
21	336	-202	172	-360	6.725	6.650	105.050	67.375
21.5	350	-205	158	-345	6.938	6.288	98.325	60.725
22	379	-255	171	-360	7.925	6.638	91.388	54.438
22.5	411	-269	182	-351	8.500	6.663	83.463	47.800
23	391	-249	198	-360	8.000	6.975	74.963	41.138
23.5	226	-99	144	-329	4.063	5.913	66.963	34.163
24	237	-95	91	-280	4.150	4.638	62.900	28.250
24.5	272	-130	125	-314	5.025	5.488	58.750	23.613
25	339	-211	216	-415	6.875	7.888	53.725	18.125
25.5	497	-361	439	-609	10.725	13.100	46.850	10.238
26	607	-480	574	-739	13.588	16.413	36.125	-2.863
26.5	198	-35	339	-524	2.913	10.788	22.538	-19.275
27	199	-82	34	-227	3.513	3.263	19.625	-30.063
27.5	37	85	-556	364	-0.600	-11.500	16.113	-33.325
28	353	-223	-553	405	7.200	-11.975	16.713	-21.825
28.5	445	-316	-482	306	9.513	-9.850	9.513	-9.850
Reference Point (29 m)							0.000	0.000

C305-IM146010



Serial number probe: D11244

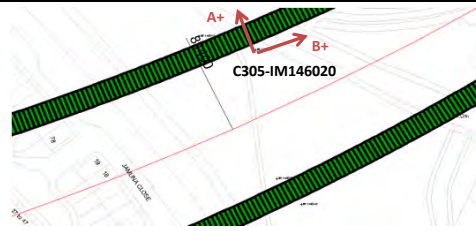
26-11-13 14:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	385	-556	380	-310	11.763	8.625	351.138	317.413
1	437	-616	316	-259	13.163	7.188	339.375	308.788
1.5	189	-381	225	-163	7.125	4.850	326.213	301.600
2	-94	-111	23	115	0.213	-1.150	319.088	296.750
2.5	-39	-135	135	-73	1.200	2.600	318.875	297.900
3	-32	-160	230	-153	1.600	4.788	317.675	295.300
3.5	-49	-142	249	-185	1.163	5.425	316.075	290.513
4	26	-195	263	-194	2.763	5.713	314.913	285.088
4.5	91	-272	314	-254	4.538	7.100	312.150	279.375
5	130	-314	352	-206	5.550	6.975	307.613	272.275
5.5	178	-357	278	-261	6.688	6.738	302.063	265.300
6	350	-522	248	-171	10.900	5.238	295.375	258.563
6.5	423	-592	234	-148	12.688	4.775	284.475	253.325
7	395	-571	220	-156	12.075	4.700	271.788	248.550
7.5	364	-561	258	-182	11.563	5.500	259.713	243.850
8	460	-637	260	-176	13.713	5.450	248.150	238.350
8.5	200	-375	249	-183	7.188	5.400	234.438	232.900
9	174	-350	248	-183	6.550	5.388	227.250	227.500
9.5	146	-343	221	-154	6.113	4.688	220.700	222.113
10	144	-321	177	-113	5.813	3.625	214.588	217.425
10.5	138	-311	92	11	5.613	1.013	208.775	213.800
11	254	-439	73	-4	8.663	0.963	203.163	212.788
11.5	69	-240	-57	190	3.863	-3.088	194.500	211.825
12	194	-361	66	38	6.938	0.350	190.638	214.913
12.5	315	-499	230	-150	10.175	4.750	183.700	214.563
13	348	-506	347	-293	10.675	8.000	173.525	209.813
13.5	253	-442	415	-357	8.688	9.650	162.850	201.813
14	199	-387	534	-410	7.325	11.800	154.163	192.163
14.5	-134	-51	594	-552	-1.038	14.325	146.838	180.363
15	-160	-4	502	-413	-1.950	11.438	147.875	166.038
15.5	-141	-53	438	-380	-1.100	10.225	149.825	154.600
16	-59	-141	440	-372	1.025	10.150	150.925	144.375
16.5	-5	-164	453	-389	1.988	10.525	149.900	134.225
17	-34	-149	489	-353	1.438	10.525	147.913	123.700
17.5	-144	-26	375	-340	-1.475	8.938	146.475	113.175
18	-72	-130	337	-274	0.725	7.638	147.950	104.238
18.5	43	-228	314	-242	3.388	6.950	147.225	96.600
19	155	-320	259	-194	5.938	5.663	143.838	89.650
19.5	320	-495	193	-131	10.188	4.050	137.900	83.988
20	436	-649	93	1	13.563	1.150	127.713	79.938
20.5	236	-390	334	-253	7.825	7.338	114.150	78.788
21	180	-358	310	-248	6.725	6.975	106.325	71.450
21.5	198	-365	301	-220	7.038	6.513	99.600	64.475
22	229	-418	312	-233	8.088	6.813	92.563	57.963
22.5	262	-431	322	-236	8.663	6.975	84.475	51.150
23	242	-403	334	-245	8.063	7.238	75.813	44.175
23.5	70	-262	290	-213	4.150	6.288	67.750	36.938
24	89	-259	234	-164	4.350	4.975	63.600	30.650
24.5	124	-286	257	-202	5.125	5.738	59.250	25.675
25	181	-364	359	-286	6.813	8.063	54.125	19.938
25.5	343	-524	579	-497	10.838	13.450	47.313	11.875
26	449	-639	708	-625	13.600	16.663	36.475	-1.575
26.5	45	-199	485	-409	3.050	11.175	22.875	-18.238
27	43	-239	170	-104	3.525	3.425	19.825	-29.413
27.5	-117	-73	-420	487	-0.550	-11.338	16.300	-32.838
28	202	-380	-413	525	7.275	-11.725	16.850	-21.500
28.5	295	-471	-349	433	9.575	-9.775	9.575	-9.775
Reference Point (29 m)							0.000	0.000

C305-IM146020

Serial number probe:

DI1217

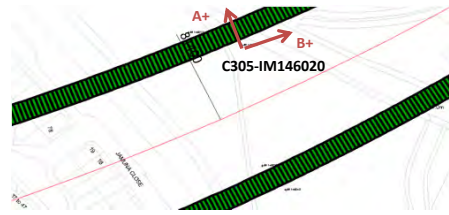


26-11-13 16:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-269	404	-247	28	-8.413	-3.438	1065.200	392.363
1	-105	228	-508	290	-4.163	-9.975	1073.613	395.800
1.5	198	-75	-685	500	3.413	-14.813	1077.775	405.775
2	147	10	-594	385	1.713	-12.238	1074.363	420.588
2.5	-145	274	-309	132	-5.238	-5.513	1072.650	432.825
3	-235	357	-182	6	-7.400	-2.350	1077.888	438.338
3.5	32	63	-190	-8	-0.388	-2.275	1085.288	440.688
4	304	-170	-109	-59	5.925	-0.625	1085.675	442.963
4.5	526	-403	6	-190	11.613	2.450	1079.750	443.588
5	863	-749	217	-377	20.150	7.425	1068.138	441.138
5.5	924	-794	324	-523	21.475	10.588	1047.988	433.713
6	978	-837	291	-483	22.688	9.675	1026.513	423.125
6.5	1093	-963	201	-368	25.700	7.113	1003.825	413.450
7	1224	-1078	194	-372	28.775	7.075	978.125	406.338
7.5	1236	-1091	184	-377	29.088	7.013	949.350	399.263
8	1183	-1067	236	-415	28.125	8.138	920.263	392.250
8.5	1319	-1188	279	-480	31.338	9.488	892.138	384.113
9	1460	-1334	297	-488	34.925	9.813	860.800	374.625
9.5	1513	-1396	328	-525	36.363	10.663	825.675	364.813
10	1410	-1254	411	-594	33.300	12.563	789.513	354.150
10.5	1166	-1043	456	-621	27.613	13.463	756.213	341.588
11	976	-829	245	-417	22.563	8.275	728.600	328.125
11.5	915	-776	11	-209	21.138	2.750	706.038	319.850
12	956	-835	275	-462	22.388	9.213	684.900	317.100
12.5	938	-823	412	-618	22.013	12.875	662.513	307.888
13	906	-764	431	-622	20.875	13.163	640.500	295.013
13.5	780	-634	383	-569	17.675	11.900	619.625	281.850
14	477	-368	521	-712	10.563	15.413	601.950	269.950
14.5	316	-164	773	-947	6.000	21.500	591.388	254.538
15	404	-267	952	-1119	8.388	25.888	585.388	233.038
15.5	537	-416	1015	-1189	11.913	27.550	577.000	207.150
16	786	-652	941	-1128	17.975	25.863	565.088	179.600
16.5	1072	-927	840	-1021	24.988	23.263	547.113	153.738
17	1355	-1233	657	-822	32.350	18.488	522.125	130.475
17.5	1503	-1373	339	-509	35.950	10.600	489.775	111.988
18	1523	-1401	159	-342	36.550	6.263	453.825	101.388
18.5	1606	-1454	24	-205	38.250	2.863	417.275	95.125
19	1722	-1593	22	-197	41.438	2.738	379.025	92.263
19.5	1814	-1694	106	-282	43.850	4.850	337.588	89.525
20	1640	-1516	294	-480	39.450	9.675	293.738	84.675
20.5	1263	-1129	632	-830	29.900	18.275	254.288	75.000
21	1105	-977	778	-965	26.025	21.788	224.388	56.725
21.5	1005	-867	743	-919	23.400	20.775	198.363	34.938
22	954	-838	581	-757	22.400	16.725	174.963	14.163
22.5	906	-758	533	-705	20.800	15.475	152.563	-2.563
23	620	-499	466	-652	13.988	13.975	131.763	-18.038
23.5	438	-297	271	-456	9.188	9.088	117.775	-32.013
24	431	-302	156	-339	9.163	6.188	108.588	-41.100
24.5	377	-236	143	-326	7.663	5.863	99.425	-47.288
25	293	-147	197	-403	5.500	7.500	91.763	-53.150
25.5	244	-110	223	-405	4.425	7.850	86.263	-60.650
26	270	-135	180	-344	5.063	6.550	81.838	-68.500
26.5	423	-290	-215	35	8.913	-3.125	76.775	-75.050
27	745	-618	-509	335	17.038	-10.550	67.863	-71.925
27.5	840	-703	-662	499	19.288	-14.513	50.825	-61.375
28	818	-692	-971	782	18.875	-21.913	31.538	-46.863
28.5	577	-436	-1090	906	12.663	-24.950	12.663	-24.950
Reference Point (29 m)							0.000	0.000

C305-IM146020

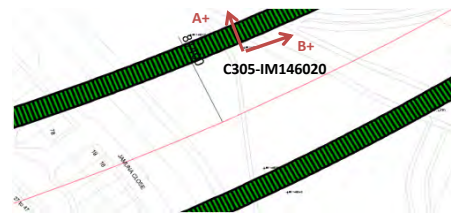
Serial number probe: D11244



27-11-13 12:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-419	251	-106	148	-8.375	-3.175	1070.700	406.825
1	-255	66	-368	416	-4.013	-9.800	1079.075	410.000
1.5	42	-240	-544	617	3.525	-14.513	1083.088	419.800
2	-11	-159	-448	509	1.850	-11.963	1079.563	434.313
2.5	-302	109	-166	257	-5.138	-5.288	1077.713	446.275
3	-382	204	-39	125	-7.325	-2.050	1082.850	451.563
3.5	-115	-89	-53	112	-0.325	-2.063	1090.175	453.613
4	148	-330	31	53	5.975	-0.275	1090.500	455.675
4.5	378	-554	145	-65	11.650	2.625	1084.525	455.950
5	707	-902	351	-261	20.113	7.650	1072.875	453.325
5.5	776	-962	459	-408	21.725	10.838	1052.763	445.675
6	821	-998	432	-363	22.738	9.938	1031.038	434.838
6.5	937	-1122	335	-250	25.738	7.313	1008.300	424.900
7	1069	-1243	337	-260	28.900	7.463	982.563	417.588
7.5	1080	-1246	322	-260	29.075	7.275	953.663	410.125
8	1036	-1230	371	-291	28.325	8.275	924.588	402.850
8.5	1170	-1354	414	-355	31.550	9.613	896.263	394.575
9	1304	-1489	441	-364	34.913	10.063	864.713	384.963
9.5	1360	-1553	472	-404	36.413	10.950	829.800	374.900
10	1256	-1415	551	-482	33.388	12.913	793.388	363.950
10.5	1015	-1202	590	-502	27.713	13.650	760.000	351.038
11	822	-991	386	-293	22.663	8.488	732.288	337.388
11.5	757	-943	146	-88	21.250	2.925	709.625	328.900
12	798	-992	411	-336	22.375	9.338	688.375	325.975
12.5	785	-976	554	-494	22.013	13.100	666.000	316.638
13	755	-926	571	-499	21.013	13.375	643.988	303.538
13.5	628	-801	519	-451	17.863	12.125	622.975	290.163
14	325	-519	665	-591	10.550	15.700	605.113	278.038
14.5	162	-331	916	-831	6.163	21.838	594.563	262.338
15	245	-436	1093	-1007	8.513	26.250	588.400	240.500
15.5	382	-584	1150	-1068	12.075	27.725	579.888	214.250
16	634	-815	1081	-1003	18.113	26.050	567.813	186.525
16.5	915	-1091	981	-897	25.075	23.475	549.700	160.475
17	1204	-1390	795	-701	32.425	18.700	524.625	137.000
17.5	1351	-1539	474	-391	36.125	10.813	492.200	118.300
18	1369	-1563	303	-226	36.650	6.613	456.075	107.488
18.5	1451	-1617	167	-90	38.350	3.213	419.425	100.875
19	1573	-1749	161	-80	41.525	3.013	381.075	97.663
19.5	1660	-1849	245	-156	43.863	5.013	339.550	94.650
20	1493	-1667	438	-366	39.500	10.050	295.688	89.638
20.5	1109	-1284	776	-714	29.913	18.625	256.188	79.588
21	958	-1142	922	-841	26.250	22.038	226.275	60.963
21.5	848	-1036	881	-802	23.550	21.038	200.025	38.925
22	802	-989	716	-641	22.388	16.963	176.475	17.888
22.5	758	-922	667	-582	21.000	15.613	154.088	0.925
23	467	-651	602	-527	13.975	14.113	133.088	-14.688
23.5	284	-465	407	-343	9.363	9.375	119.113	-28.800
24	274	-460	302	-227	9.175	6.613	109.750	-38.175
24.5	229	-401	278	-213	7.875	6.138	100.575	-44.788
25	134	-311	340	-280	5.563	7.750	92.700	-50.925
25.5	95	-267	359	-286	4.525	8.063	87.138	-58.675
26	123	-304	317	-220	5.338	6.713	82.613	-66.738
26.5	275	-447	-73	152	9.025	-2.813	77.275	-73.450
27	594	-786	-371	449	17.250	-10.250	68.250	-70.638
27.5	690	-862	-526	614	19.400	-14.250	51.000	-60.388
28	659	-847	-828	896	18.825	-21.550	31.600	-46.138
28.5	424	-598	-948	1019	12.775	-24.588	12.775	-24.588
Reference Point (29 m)							0.000	0.000

C305-IM146020



Serial number probe: D11217

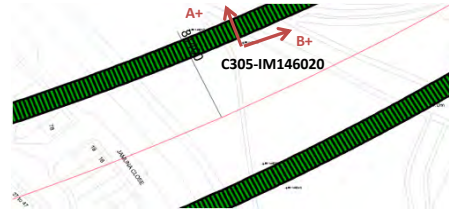
26-11-13 17:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-269	457	-207	60	-9.075	-3.338	1034.300	391.138
1	-105	267	-468	328	-4.650	-9.950	1043.375	394.475
1.5	198	-34	-651	540	2.900	-14.888	1048.025	404.425
2	147	36	-547	427	1.388	-12.175	1045.125	419.313
2.5	-145	308	-283	176	-5.663	-5.738	1043.738	431.488
3	-235	417	-144	34	-8.150	-2.225	1049.400	437.225
3.5	32	126	-157	25	-1.175	-2.275	1057.550	439.450
4	304	-139	-84	-24	5.538	-0.750	1058.725	441.725
4.5	526	-349	45	-158	10.938	2.538	1053.188	442.475
5	863	-701	239	-342	19.550	7.263	1042.250	439.938
5.5	924	-750	352	-483	20.925	10.438	1022.700	432.675
6	978	-802	338	-450	22.250	9.850	1001.775	422.238
6.5	1093	-918	229	-331	25.138	7.000	979.525	412.388
7	1224	-1051	226	-345	28.438	7.138	954.388	405.388
7.5	1236	-1042	210	-340	28.475	6.875	925.950	398.250
8	1183	-1020	258	-373	27.538	7.888	897.475	391.375
8.5	1319	-1152	308	-436	30.888	9.300	869.938	383.488
9	1460	-1279	341	-436	34.238	9.713	839.050	374.188
9.5	1513	-1352	372	-481	35.813	10.663	804.813	364.475
10	1410	-1208	448	-563	32.725	12.638	769.000	353.813
10.5	1166	-995	482	-595	27.013	13.463	736.275	341.175
11	976	-791	278	-374	22.088	8.150	709.263	327.713
11.5	915	-732	49	-176	20.588	2.813	687.175	319.563
12	956	-792	313	-411	21.850	9.050	666.588	316.750
12.5	938	-766	450	-570	21.300	12.750	644.738	307.700
13	906	-729	474	-571	20.438	13.063	623.438	294.950
13.5	780	-599	423	-530	17.238	11.913	603.000	281.888
14	477	-315	562	-680	9.900	15.525	585.763	269.975
14.5	316	-132	816	-910	5.600	21.575	575.863	254.450
15	404	-224	985	-1097	7.850	26.025	570.263	232.875
15.5	537	-377	1042	-1152	11.425	27.425	562.413	206.850
16	786	-610	975	-1090	17.450	25.813	550.988	179.425
16.5	1072	-884	879	-978	24.450	23.213	533.538	153.613
17	1355	-1182	685	-793	31.713	18.475	509.088	130.400
17.5	1503	-1331	362	-470	35.425	10.400	477.375	111.925
18	1523	-1361	206	-304	36.050	6.375	441.950	101.525
18.5	1606	-1412	67	-169	37.725	2.950	405.900	95.150
19	1722	-1547	57	-173	40.863	2.875	368.175	92.200
19.5	1814	-1647	131	-236	43.263	4.588	327.313	89.325
20	1640	-1467	329	-450	38.838	9.738	284.050	84.738
20.5	1263	-1068	674	-793	29.138	18.338	245.213	75.000
21	1105	-944	817	-921	25.613	21.725	216.075	56.663
21.5	1005	-828	769	-878	22.913	20.588	190.463	34.938
22	954	-788	613	-720	21.775	16.663	167.550	14.350
22.5	906	-723	565	-666	20.363	15.388	145.775	-2.313
23	620	-441	495	-612	13.263	13.838	125.413	-17.700
23.5	438	-267	309	-425	8.813	9.175	112.150	-31.538
24	431	-254	201	-316	8.563	6.463	103.338	-40.713
24.5	377	-199	180	-293	7.200	5.913	94.775	-47.175
25	293	-104	235	-361	4.963	7.450	87.575	-53.088
25.5	244	-73	249	-365	3.963	7.675	82.613	-60.538
26	270	-102	211	-302	4.650	6.413	78.650	-68.213
26.5	423	-241	-171	69	8.300	-3.000	74.000	-74.625
27	745	-591	-478	371	16.700	-10.613	65.700	-71.625
27.5	840	-656	-634	521	18.700	-14.438	49.000	-61.013
28	818	-639	-929	814	18.213	-21.788	30.300	-46.575
28.5	577	-390	-1051	932	12.088	-24.788	12.088	-24.788
Reference Point (29 m)							0.000	0.000



C305-IM146020

Serial number probe: D1244



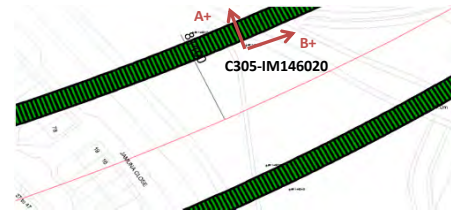
27-11-13 13:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-383	293	-66	187	-8.450	-3.163	1068.725	405.350
1	-214	112	-328	455	-4.075	-9.788	1077.175	408.513
1.5	84	-193	-511	656	3.463	-14.588	1081.250	418.300
2	33	-117	-410	550	1.875	-12.000	1077.788	432.888
2.5	-260	149	-136	297	-5.113	-5.413	1075.913	444.888
3	-345	251	-6	159	-7.450	-2.063	1081.025	450.300
3.5	-79	-42	-19	152	-0.463	-2.138	1088.475	452.363
4	184	-291	62	90	5.938	-0.350	1088.938	454.500
4.5	422	-506	181	-32	11.600	2.663	1083.000	454.850
5	751	-855	386	-223	20.075	7.613	1071.400	452.188
5.5	820	-914	491	-365	21.675	10.700	1051.325	444.575
6	864	-958	472	-325	22.775	9.963	1029.650	433.875
6.5	983	-1083	370	-216	25.825	7.325	1006.875	423.913
7	1115	-1203	372	-222	28.975	7.425	981.050	416.588
7.5	1116	-1203	357	-226	28.988	7.288	952.075	409.163
8	1077	-1184	402	-255	28.263	8.213	923.088	401.875
8.5	1214	-1305	449	-317	31.488	9.575	894.825	393.663
9	1347	-1447	474	-321	34.925	9.938	863.338	384.088
9.5	1399	-1506	508	-361	36.313	10.863	828.413	374.150
10	1292	-1373	587	-448	33.313	12.938	792.100	363.288
10.5	1051	-1157	625	-468	27.600	13.663	758.788	350.350
11	859	-950	419	-252	22.613	8.388	731.188	336.688
11.5	799	-896	186	-49	21.188	2.938	708.575	328.300
12	837	-945	446	-298	22.275	9.300	687.388	325.363
12.5	824	-931	593	-452	21.938	13.063	665.113	316.063
13	798	-884	609	-457	21.025	13.325	643.175	303.000
13.5	670	-758	557	-416	17.850	12.163	622.150	289.675
14	364	-477	702	-553	10.513	15.688	604.300	277.513
14.5	205	-287	952	-797	6.150	21.863	593.788	261.825
15	286	-388	1123	-973	8.425	26.200	587.638	239.963
15.5	424	-536	1189	-1034	12.000	27.788	579.213	213.763
16	678	-768	1116	-968	18.075	26.050	567.213	185.975
16.5	955	-1046	1020	-857	25.013	23.463	549.138	159.925
17	1243	-1349	832	-666	32.400	18.725	524.125	136.463
17.5	1395	-1492	509	-357	36.088	10.825	491.725	117.738
18	1414	-1521	343	-189	36.688	6.650	455.638	106.913
18.5	1490	-1576	205	-50	38.325	3.188	418.950	100.263
19	1614	-1707	192	-46	41.513	2.975	380.625	97.075
19.5	1699	-1810	275	-121	43.863	4.950	339.113	94.100
20	1536	-1625	476	-332	39.513	10.100	295.250	89.150
20.5	1150	-1235	810	-671	29.813	18.513	255.738	79.050
21	1002	-1101	953	-806	26.288	21.988	225.925	60.538
21.5	893	-993	912	-765	23.575	20.963	199.638	38.550
22	844	-947	753	-599	22.388	16.900	176.063	17.588
22.5	798	-883	700	-547	21.013	15.588	153.675	0.688
23	512	-605	635	-485	13.963	14.000	132.663	-14.900
23.5	328	-426	442	-304	9.425	9.325	118.700	-28.900
24	318	-421	340	-193	9.238	6.663	109.275	-38.225
24.5	265	-352	315	-174	7.713	6.113	100.038	-44.888
25	170	-267	371	-237	5.463	7.600	92.325	-51.000
25.5	132	-228	395	-251	4.500	8.075	86.863	-58.600
26	160	-263	353	-184	5.288	6.713	82.363	-66.675
26.5	319	-407	-34	193	9.075	-2.838	77.075	-73.388
27	636	-744	-333	484	17.250	-10.213	68.000	-70.550
27.5	726	-813	-492	647	19.238	-14.238	50.750	-60.338
28	703	-800	-788	932	18.788	-21.500	31.513	-46.100
28.5	463	-555	-912	1056	12.725	-24.600	12.725	-24.600
Reference Point (29 m)							0.000	0.000

C305-IM146020

Serial number probe:

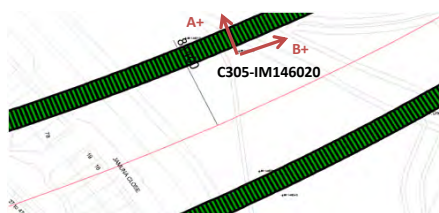
DI1217



26-11-13 18:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-218	463	-206	72	-8.513	-3.475	1063.500	388.038
1	-51	279	-461	313	-4.125	-9.675	1072.013	391.513
1.5	235	-21	-665	526	3.200	-14.888	1076.138	401.188
2	196	51	-575	426	1.813	-12.513	1072.938	416.075
2.5	-101	315	-304	189	-5.200	-6.163	1071.125	428.588
3	-188	418	-169	26	-7.575	-2.438	1076.325	434.750
3.5	84	126	-155	33	-0.525	-2.350	1083.900	437.188
4	342	-129	-86	-35	5.888	-0.638	1084.425	439.538
4.5	583	-344	20	-148	11.588	2.100	1078.538	440.175
5	903	-693	229	-344	19.950	7.163	1066.950	438.075
5.5	974	-741	350	-479	21.438	10.363	1047.000	430.913
6	1023	-794	324	-459	22.713	9.788	1025.563	420.550
6.5	1138	-925	206	-326	25.788	6.850	1002.850	410.763
7	1280	-1036	220	-344	28.950	7.050	977.063	404.113
7.5	1273	-1041	202	-339	28.925	6.763	948.113	397.063
8	1237	-1023	244	-377	28.250	7.763	919.188	390.300
8.5	1375	-1141	291	-435	31.450	9.075	890.938	382.538
9	1508	-1277	332	-459	34.813	9.888	859.488	373.463
9.5	1558	-1340	348	-467	36.225	10.188	824.675	363.575
10	1452	-1214	448	-565	33.325	12.663	786.450	353.388
10.5	1209	-992	481	-596	27.513	13.463	755.125	340.725
11	1023	-780	274	-400	22.538	8.425	727.613	327.263
11.5	957	-721	46	-155	20.975	2.513	705.075	318.838
12	995	-783	298	-426	22.225	9.050	684.100	316.325
12.5	986	-763	456	-575	21.863	12.888	661.875	307.275
13	960	-718	464	-576	20.975	13.000	640.013	294.388
13.5	828	-590	414	-520	17.725	11.675	619.038	281.388
14	527	-320	572	-680	10.588	15.650	601.313	269.713
14.5	366	-128	805	-914	6.175	21.488	590.725	254.063
15	446	-222	977	-1096	8.350	25.913	584.550	232.575
15.5	580	-374	1041	-1161	11.925	27.525	576.200	206.663
16	838	-598	973	-1086	17.950	25.738	564.275	179.138
16.5	1113	-875	878	-981	24.850	23.238	546.325	153.400
17	1399	-1181	691	-794	32.250	18.563	521.475	130.163
17.5	1554	-1321	374	-473	35.938	10.588	489.225	111.600
18	1572	-1362	194	-315	36.675	6.363	453.288	101.013
18.5	1648	-1411	44	-185	38.238	2.863	416.613	94.650
19	1766	-1545	43	-165	41.388	2.600	378.375	91.788
19.5	1864	-1650	117	-249	43.925	4.575	336.988	89.188
20	1694	-1467	338	-451	39.513	9.863	293.063	84.613
20.5	1302	-1074	654	-793	29.700	18.088	253.550	74.750
21	1155	-930	823	-920	26.063	21.788	223.850	56.663
21.5	1054	-831	769	-887	23.563	20.700	197.788	34.875
22	1000	-781	617	-729	22.263	16.825	174.225	14.175
22.5	960	-714	560	-662	20.925	15.275	151.963	-2.650
23	671	-439	496	-599	13.875	13.688	131.038	-17.925
23.5	486	-263	306	-428	9.363	9.175	117.163	-31.613
24	478	-248	198	-312	9.075	6.375	107.800	-40.788
24.5	421	-190	184	-290	7.638	5.925	98.725	-47.163
25	325	-93	234	-353	5.225	7.338	91.088	-53.088
25.5	290	-59	243	-374	4.363	7.713	85.863	-60.425
26	314	-97	202	-308	5.138	6.375	81.500	-68.138
26.5	473	-236	-175	67	8.863	-3.025	76.363	-74.513
27	785	-572	-470	365	16.963	-10.438	67.500	-71.488
27.5	883	-640	-633	520	19.038	-14.413	50.538	-61.050
28	865	-640	-934	813	18.813	-21.838	31.500	-46.638
28.5	619	-396	-1052	932	12.688	-24.800	12.688	-24.800
Reference Point (29 m)							0.000	0.000

C305-IM146020



Serial number probe: D11244

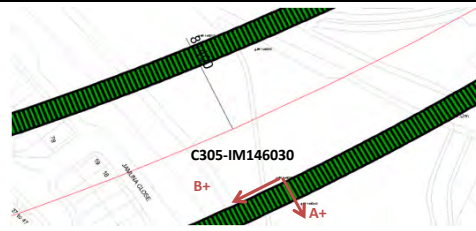
27-11-13 14:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-375	300	-63	193	-8.438	-3.200	1067.825	403.313
1	-208	122	-327	441	-4.125	-9.600	1076.263	406.513
1.5	86	-186	-520	653	3.400	-14.663	1080.388	416.113
2	39	-111	-428	543	1.875	-12.138	1076.988	430.775
2.5	-254	158	-156	303	-5.150	-5.738	1075.113	442.913
3	-337	255	-24	148	-7.400	-2.150	1080.263	448.650
3.5	-72	-33	-20	154	-0.488	-2.175	1087.663	450.800
4	192	-285	56	82	5.963	-0.325	1088.150	452.975
4.5	430	-500	158	-25	11.625	2.288	1082.188	453.300
5	748	-847	361	-220	19.938	7.263	1070.563	451.013
5.5	826	-901	488	-367	21.588	10.688	1050.625	443.750
6	870	-953	469	-337	22.788	10.075	1029.038	433.063
6.5	988	-1083	351	-212	25.888	7.038	1006.250	422.988
7	1122	-1197	363	-232	28.988	7.438	980.363	415.950
7.5	1123	-1200	347	-223	29.038	7.125	951.375	408.513
8	1085	-1176	386	-260	28.263	8.075	922.338	401.388
8.5	1220	-1300	437	-323	31.500	9.500	894.075	393.313
9	1354	-1438	470	-335	34.900	10.063	862.575	383.813
9.5	1407	-1502	489	-356	36.363	10.563	827.075	373.750
10	1300	-1369	585	-444	33.363	12.863	791.313	363.188
10.5	1060	-1150	616	-477	27.625	13.663	757.950	350.325
11	866	-945	421	-278	22.638	8.738	730.325	336.663
11.5	806	-885	189	-42	21.138	2.888	707.688	327.925
12	843	-936	433	-303	22.238	9.200	686.550	325.038
12.5	830	-926	596	-449	21.950	13.063	664.313	315.838
13	803	-879	605	-455	21.025	13.250	642.363	302.775
13.5	675	-752	555	-402	17.838	11.963	621.338	289.525
14	371	-474	708	-560	10.563	15.850	603.500	277.563
14.5	212	-281	943	-800	6.163	21.788	592.938	261.713
15	291	-382	1125	-973	8.413	26.225	586.775	239.925
15.5	428	-527	1187	-1036	11.938	27.788	578.363	213.700
16	682	-764	1116	-970	18.075	26.075	566.425	185.913
16.5	960	-1037	1017	-862	24.963	23.488	548.350	159.838
17	1246	-1340	832	-669	32.325	18.763	523.388	136.350
17.5	1405	-1482	515	-352	36.088	10.838	491.063	117.588
18	1420	-1515	341	-196	36.688	6.713	454.975	106.750
18.5	1495	-1569	192	-57	38.300	3.113	418.288	100.038
19	1618	-1698	180	-37	41.450	2.713	379.988	96.925
19.5	1707	-1805	262	-120	43.900	4.775	338.538	94.213
20	1544	-1624	479	-332	39.600	10.138	294.638	89.438
20.5	1154	-1228	798	-675	29.775	18.413	255.038	79.300
21	1005	-1096	960	-809	26.263	22.113	225.263	60.888
21.5	899	-988	910	-759	23.588	20.863	199.000	38.775
22	851	-941	755	-612	22.400	17.088	175.413	17.913
22.5	802	-876	697	-549	20.975	15.575	153.013	0.825
23	518	-602	632	-488	14.000	14.000	132.038	-14.750
23.5	333	-419	443	-301	9.400	9.300	118.038	-28.750
24	321	-414	341	-195	9.188	6.700	108.638	-38.050
24.5	270	-346	320	-171	7.700	6.138	99.450	-44.750
25	173	-259	373	-230	5.400	7.538	91.750	-50.888
25.5	135	-220	391	-247	4.438	7.975	86.350	-58.425
26	161	-255	350	-192	5.200	6.775	81.913	-66.400
26.5	322	-397	-37	187	8.988	-2.800	76.713	-73.175
27	637	-735	-335	481	17.150	-10.200	67.725	-70.375
27.5	726	-804	-493	636	19.125	-14.113	50.575	-60.175
28	708	-794	-787	929	18.775	-21.450	31.450	-46.063
28.5	464	-550	-912	1057	12.675	-24.613	12.675	-24.613
Reference Point (29 m)							0.000	0.000

C305-IM146030

Serial number probe:

D11244

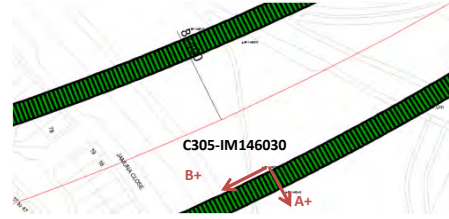


28-11-13 9:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	495	-598	273	-132	13.663	5.063	224.838	30.025
1	967	-1067	-89	270	25.425	-4.488	211.175	24.962
1.5	883	-1011	-298	446	23.675	-9.300	185.750	29.450
2	369	-474	-488	638	10.538	-14.075	162.075	38.750
2.5	-48	-49	-652	832	0.013	-18.550	151.538	52.825
3	-407	303	-716	896	-8.875	-20.150	151.525	71.375
3.5	-467	330	-502	673	-9.963	-14.688	160.400	91.525
4	-249	175	-232	409	-5.300	-8.013	170.363	106.213
4.5	-158	49	-173	327	-2.588	-6.250	175.663	114.225
5	-123	42	-102	271	-2.063	-4.663	178.250	120.475
5.5	-204	116	1	169	-4.000	-2.100	180.313	125.138
6	-302	181	94	41	-6.038	0.663	184.313	127.238
6.5	-244	151	258	-98	-4.938	4.450	190.350	126.575
7	-163	65	162	-9	-2.850	2.138	195.288	122.125
7.5	-93	24	-51	243	-1.463	-3.675	198.138	119.988
8	-19	-85	-139	308	0.825	-5.588	199.600	123.663
8.5	148	-251	-223	403	4.988	-7.825	196.775	129.250
9	347	-470	-511	697	10.213	-15.100	193.788	137.075
9.5	570	-688	-872	1054	15.725	-24.075	183.575	152.175
10	514	-615	-851	1030	14.113	-23.513	167.850	176.250
10.5	402	-530	-744	914	11.650	-20.725	153.738	199.763
11	421	-542	-708	889	12.038	-19.963	142.088	220.488
11.5	462	-577	-673	828	12.988	-18.763	130.050	240.450
12	451	-554	-557	754	12.563	-16.388	117.063	259.213
12.5	417	-508	-333	513	11.563	-10.575	104.500	275.600
13	343	-462	-71	233	10.063	-3.800	92.938	286.175
13.5	222	-324	-49	220	6.825	-3.363	82.875	289.975
14	127	-231	-85	247	4.475	-4.150	76.050	293.338
14.5	12	-102	-130	281	1.425	-5.138	71.575	297.488
15	-55	-3	-178	340	-0.650	-6.475	70.150	302.625
15.5	-81	-21	-66	232	-0.750	-3.725	70.800	309.100
16	3	-85	138	26	1.100	1.400	71.550	312.825
16.5	-43	-40	65	85	-0.038	-0.250	70.450	311.425
17	-61	-20	47	102	-0.513	-0.688	70.488	311.675
17.5	-31	-58	22	143	0.338	-1.513	71.000	312.363
18	4	-67	-10	158	0.888	-2.100	70.663	313.875
18.5	81	-202	109	48	3.538	0.763	69.775	315.975
19	266	-375	258	-63	8.013	4.013	66.238	315.213
19.5	297	-399	216	-60	8.700	3.450	58.225	311.200
20	280	-398	160	8	8.475	1.900	49.525	307.750
20.5	303	-408	140	29	8.888	1.388	41.050	305.850
21	376	-479	74	68	10.688	0.075	32.163	304.463
21.5	416	-542	136	32	11.975	1.300	21.475	304.388
22	329	-440	226	-70	9.613	3.700	9.500	303.088
22.5	257	-384	206	-34	8.013	3.000	-0.113	299.388
23	39	-130	75	68	2.113	0.088	-8.125	296.388
23.5	-170	88	-1	165	-3.225	-2.075	-10.238	296.300
24	-275	153	-11	168	-5.350	-2.238	-7.013	298.375
24.5	-263	157	64	112	-5.250	-0.600	-1.663	300.613
25	-69	-16	261	-115	-0.663	4.700	3.588	301.213
25.5	-35	-41	346	-198	0.075	6.800	4.250	296.513
26	-70	-3	403	-240	-0.838	8.038	4.175	289.713
26.5	-131	29	511	-351	-2.000	10.775	5.013	281.675
27	133	-247	534	-383	4.750	11.463	7.013	270.900
27.5	198	-313	521	-341	6.388	10.775	2.263	259.438
28	77	-163	564	-372	3.000	11.700	-4.125	248.663
28.5	-100	0	630	-460	-1.250	13.625	-7.125	236.963
29	-313	186	835	-673	-6.238	18.850	-5.875	223.338
29.5	-493	382	1107	-932	-10.938	25.488	0.362	204.488
30	-674	587	1267	-1126	-15.763	29.913	11.300	179.000
30.5	-734	616	1401	-1227	-16.875	32.850	27.063	149.088
31	-431	347	1227	-1068	-9.725	28.688	43.938	116.238
31.5	-148	48	747	-577	-2.450	16.550	53.663	87.550
32	-149	60	536	-361	-2.613	11.213	56.113	71.000
32.5	-201	82	510	-322	-3.538	10.400	58.725	59.788
33	-53	-29	325	-166	-0.300	6.138	62.263	49.388
33.5	84	-186	198	-14	3.375	2.650	62.563	43.250
34	219	-317	286	-138	6.700	5.300	59.188	40.600
34.5	449	-575	465	-312	12.800	9.713	52.488	35.300
35	700	-788	539	-401	18.600	11.750	39.688	25.588
35.5	786	-901	635	-472	21.088	13.838	21.088	13.838
Reference Point (36 m)							0.000	0.000

C305-IM146030

Serial number probe: D11217



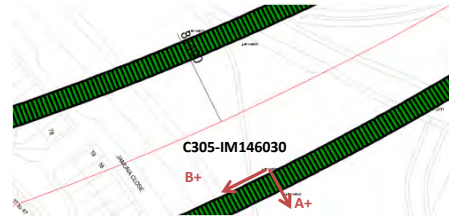
29-11-13 9:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	643	-434	129	-257	13.463	4.825	217.113	13.137
1	1123	-913	-235	142	25.450	-4.713	203.650	8.312
1.5	1042	-842	-439	326	23.550	-9.563	178.200	13.025
2	522	-314	-622	524	10.450	-14.325	154.650	22.587
2.5	102	119	-793	709	-0.213	-18.775	144.200	36.912
3	-260	464	-856	771	-9.050	-20.338	144.413	55.687
3.5	-308	497	-646	555	-10.063	-15.013	153.463	76.025
4	-100	332	-372	281	-5.400	-8.163	163.525	91.037
4.5	-7	213	-315	211	-2.750	-6.575	168.925	99.200
5	34	205	-236	155	-2.138	-4.888	171.675	105.775
5.5	-54	274	-142	54	-4.100	-2.450	173.813	110.663
6	-146	333	-47	-75	-5.988	0.350	177.913	113.113
6.5	-92	307	119	-222	-4.988	4.263	183.900	112.763
7	-5	230	22	-124	-2.938	1.825	188.888	108.500
7.5	57	177	-195	125	-1.500	-4.000	191.825	106.675
8	139	81	-278	183	0.725	-5.763	193.325	110.675
8.5	307	-92	-366	278	4.988	-8.050	192.600	116.438
9	506	-302	-655	573	10.100	-15.350	187.613	124.488
9.5	724	-526	-1013	933	15.625	-24.325	177.513	139.838
10	669	-446	-989	911	13.938	-23.750	161.888	164.163
10.5	557	-362	-888	800	11.488	-21.100	147.950	187.913
11	573	-379	-849	770	11.900	-20.238	136.463	209.013
11.5	613	-408	-807	708	12.763	-18.938	124.563	229.250
12	603	-391	-699	626	12.425	-16.563	111.800	248.188
12.5	564	-344	-468	393	11.350	-10.763	99.375	264.750
13	493	-303	-210	119	9.950	-4.113	88.025	275.513
13.5	376	-168	-184	105	6.800	-3.613	78.075	279.625
14	278	-76	-222	127	4.425	-4.363	71.275	283.238
14.5	169	52	-264	165	1.463	-5.363	66.850	287.600
15	93	152	-315	218	-0.738	-6.663	65.388	292.963
15.5	73	136	-208	105	-0.788	-3.913	66.125	299.625
16	159	74	0	-102	1.063	1.275	66.913	303.538
16.5	106	121	-79	-34	-0.188	-0.563	65.850	302.263
17	87	141	-91	-21	-0.675	-0.875	66.038	302.825
17.5	120	105	-115	19	0.188	-1.675	66.713	303.700
18	154	101	-145	40	0.663	-2.313	66.525	305.375
18.5	237	-50	-36	-67	3.588	0.388	65.863	307.688
19	413	-209	118	-191	7.775	3.863	62.275	307.300
19.5	451	-246	72	-183	8.713	3.188	54.500	303.438
20	430	-236	24	-112	8.325	1.700	45.788	300.250
20.5	452	-248	-2	-92	8.750	1.125	37.463	298.550
21	523	-323	-63	-60	10.575	-0.038	28.713	297.425
21.5	570	-375	0	-91	11.813	1.138	18.138	297.463
22	483	-271	90	-197	9.425	3.588	6.325	296.325
22.5	409	-218	69	-156	7.838	2.813	-3.100	292.738
23	197	31	-62	-58	2.075	-0.050	-10.938	289.925
23.5	-23	241	-143	46	-3.300	-2.363	-13.013	289.975
24	-120	309	-157	53	-5.363	-2.625	-9.713	292.338
24.5	-107	315	-82	-11	-5.275	-0.888	-4.350	294.963
25	82	148	124	-230	-0.825	4.425	0.925	295.850
25.5	115	126	201	-315	-0.138	6.450	1.750	291.425
26	80	155	264	-364	-0.938	7.850	1.888	284.975
26.5	17	189	369	-470	-2.150	10.488	2.825	277.125
27	290	-81	392	-498	4.638	11.125	4.975	266.638
27.5	351	-149	385	-461	6.250	10.575	0.338	255.513
28	235	-2	418	-497	2.963	11.438	-5.913	244.938
28.5	54	169	496	-581	-1.438	13.463	-8.875	233.500
29	-156	347	699	-791	-6.288	18.625	-7.438	220.038
29.5	-336	537	967	-1046	-10.913	25.163	-1.150	201.413
30	-525	747	1129	-1243	-15.900	29.650	9.763	176.250
30.5	-581	777	1256	-1351	-16.975	32.588	25.663	146.600
31	-273	503	1088	-1188	-9.700	28.450	42.638	114.013
31.5	4	214	609	-705	-2.625	16.425	52.338	85.563
32	4	227	400	-481	-2.788	11.013	54.963	69.138
32.5	-46	250	369	-449	-3.700	10.225	57.750	58.125
33	98	135	187	-285	-0.463	5.900	61.450	47.900
33.5	232	-23	52	-136	3.188	2.350	61.913	42.000
34	368	-158	146	-256	6.575	5.025	58.725	39.650
34.5	608	-406	327	-438	12.675	9.563	52.150	34.625
35	851	-636	395	-516	18.588	11.388	39.475	25.063
35.5	937	-734	497	-597	20.888	13.675	20.888	13.675
Reference Point (36 m)							0.000	0.000



**C305-IM146030**

Serial number probe: D11244

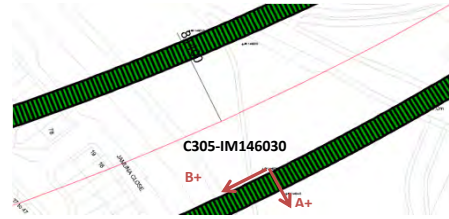


28-11-13 11:30

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	493	-610	281	-136	13.788	5.213	222.425	30.913
1	961	-1091	-91	263	25.650	-4.425	208.638	25.700
1.5	885	-999	-292	456	23.550	-9.350	182.988	30.125
2	376	-474	-479	642	10.625	-14.013	159.438	39.475
2.5	-60	-33	-656	829	-0.338	-18.563	148.813	53.488
3	-401	304	-720	878	-8.813	-19.975	149.150	72.050
3.5	-460	340	-499	672	-10.000	-14.638	157.963	92.025
4	-258	180	-234	401	-5.475	-7.938	167.963	106.663
4.5	-164	60	-170	338	-2.800	-6.350	173.438	114.600
5	-127	34	-115	269	-2.013	-4.800	176.238	120.950
5.5	-211	118	4	160	-4.113	-1.950	178.250	125.750
6	-300	169	100	46	-5.863	0.675	182.363	127.700
6.5	-254	146	259	-96	-5.000	4.438	188.225	127.025
7	-149	70	162	-3	-2.738	2.063	193.225	122.588
7.5	-81	12	-54	246	-1.163	-3.750	195.963	120.525
8	-16	-71	-136	305	0.688	-5.513	197.125	124.275
8.5	153	-256	-233	396	5.113	-7.863	196.438	129.788
9	366	-457	-520	678	10.288	-14.975	191.325	137.650
9.5	571	-675	-874	1059	15.575	-24.163	181.038	152.625
10	507	-611	-857	1036	13.975	-23.663	165.463	176.788
10.5	407	-517	-745	932	11.550	-20.963	151.488	200.450
11	421	-530	-700	883	11.888	-19.788	139.938	221.413
11.5	467	-573	-673	835	13.000	-18.850	128.050	241.200
12	460	-549	-557	748	12.613	-16.313	115.050	260.050
12.5	403	-504	-340	509	11.338	-10.613	102.438	276.363
13	358	-448	-78	241	10.075	-3.988	91.100	286.975
13.5	219	-319	-39	218	6.725	-3.213	81.025	290.963
14	114	-227	-68	247	4.263	-3.938	74.300	294.175
14.5	22	-110	-116	288	1.650	-5.050	70.038	298.113
15	-48	-5	-178	348	-0.538	-6.575	68.388	303.163
15.5	-79	-10	-61	235	-0.863	-3.700	68.925	309.738
16	-3	-77	132	34	0.925	1.225	69.788	313.438
16.5	-47	-24	67	81	-0.288	-0.175	68.863	312.213
17	-65	-25	54	106	-0.500	-0.650	69.150	312.388
17.5	-40	-48	36	139	0.100	-1.288	69.650	313.038
18	6	-65	-7	164	0.888	-2.138	69.550	314.325
18.5	89	-203	106	54	3.650	0.650	68.663	316.463
19	258	-372	240	-82	7.875	4.025	65.013	315.813
19.5	287	-395	222	-62	8.525	3.550	57.138	311.788
20	269	-390	170	2	8.238	2.100	48.613	308.238
20.5	290	-404	143	29	8.675	1.425	40.375	306.138
21	375	-479	85	66	10.675	0.238	31.700	304.713
21.5	430	-524	133	18	11.925	1.438	21.025	304.475
22	326	-439	231	-75	9.563	3.825	9.100	303.038
22.5	261	-367	193	-46	7.850	2.988	-0.463	299.213
23	52	-129	90	65	2.263	0.313	-8.313	296.225
23.5	-192	87	6	156	-3.488	-1.875	-10.575	295.913
24	-263	152	-17	169	-5.188	-2.325	-7.088	297.788
24.5	-247	167	49	100	-5.175	-0.638	-1.900	300.113
25	-89	-18	268	-92	-0.888	4.500	3.275	300.750
25.5	-47	-37	357	-179	-0.125	6.700	4.163	296.250
26	-83	4	406	-230	-1.088	7.950	4.288	289.550
26.5	-137	40	523	-343	-2.213	10.825	5.375	281.600
27	130	-242	540	-364	4.650	11.300	7.588	270.775
27.5	218	-319	523	-350	6.713	10.913	2.938	259.475
28	85	-158	551	-392	3.038	11.788	-3.775	248.563
28.5	-99	16	634	-453	-1.438	13.588	-6.813	236.775
29	-301	200	830	-673	-6.263	18.788	-5.375	223.188
29.5	-480	377	1099	-924	-10.713	25.288	0.887	204.400
30	-678	578	1280	-1125	-15.700	30.063	11.600	179.113
30.5	-747	628	1385	-1231	-17.188	32.700	27.300	149.050
31	-430	331	1230	-1085	-9.513	28.938	44.488	116.350
31.5	-146	61	751	-592	-2.588	16.788	54.000	87.413
32	-139	65	535	-359	-2.550	11.175	56.588	70.625
32.5	-189	81	493	-334	-3.375	10.338	59.138	59.450
33	-47	-33	309	-157	-0.175	5.825	62.513	49.113
33.5	82	-192	190	-18	3.425	2.600	62.688	43.288
34	207	-325	285	-131	6.650	5.200	59.263	40.688
34.5	458	-572	470	-316	12.875	9.825	52.613	35.488
35	687	-803	539	-392	18.625	11.638	39.738	25.663
35.5	791	-898	640	-482	21.113	14.025	21.113	14.025
Reference Point (36 m)							0.000	0.000

**C305-IM146030**

Serial number probe: D11217

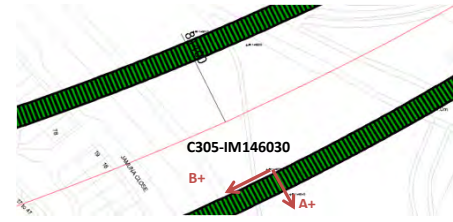


29-11-13 10:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	645	-447	140	-255	13.650	4.938	217.338	13.500
1	1119	-923	-235	148	25.525	-4.788	203.688	8.562
1.5	1045	-846	-426	333	23.638	-9.488	178.163	13.350
2	527	-308	-625	524	10.438	-14.363	154.525	22.837
2.5	101	119	-798	708	-0.225	-18.825	144.088	37.200
3	-248	466	-865	764	-8.925	-20.363	144.313	56.025
3.5	-311	501	-643	546	-10.150	-14.863	153.238	76.387
4	-102	333	-381	277	-5.438	-8.225	163.388	91.250
4.5	-7	218	-315	211	-2.813	-6.575	168.825	99.475
5	22	195	-251	150	-2.163	-5.013	171.638	106.050
5.5	-58	275	-143	44	-4.163	-2.338	173.800	111.063
6	-144	330	-47	-74	-5.925	0.338	177.963	113.400
6.5	-102	313	119	-210	-5.188	4.113	183.888	113.063
7	2	222	27	-127	-2.750	1.925	189.075	108.950
7.5	64	164	-195	120	-1.250	-3.938	191.825	107.025
8	139	87	-277	184	0.650	-5.763	193.075	110.963
8.5	306	-101	-371	277	5.088	-8.100	192.425	116.725
9	512	-301	-655	561	10.163	-15.200	187.338	124.825
9.5	725	-516	-1011	933	15.513	-24.300	177.175	140.025
10	660	-447	-995	916	13.838	-23.888	161.663	164.325
10.5	568	-359	-884	809	11.588	-21.163	147.825	188.213
11	570	-372	-842	765	11.775	-20.088	136.238	209.375
11.5	615	-408	-808	720	12.788	-19.100	124.463	229.463
12	606	-392	-695	625	12.475	-16.500	111.675	248.563
12.5	561	-349	-474	389	11.375	-10.788	99.200	265.063
13	505	-295	-212	121	10.000	-4.163	87.825	275.850
13.5	376	-154	-183	95	6.625	-3.475	77.825	280.013
14	270	-75	-209	129	4.313	-4.225	71.200	283.488
14.5	181	55	-263	168	1.575	-5.388	66.888	287.713
15	100	147	-321	222	-0.588	-6.788	65.313	293.100
15.5	73	144	-208	110	-0.888	-3.975	65.900	299.888
16	153	87	-11	-93	0.825	1.025	66.788	303.863
16.5	99	132	-70	-93	-0.413	-0.463	65.963	302.838
17	87	135	-86	-10	-0.600	-0.950	66.375	303.300
17.5	121	106	-108	22	0.188	-1.625	66.975	304.250
18	152	87	-140	38	0.813	-2.225	66.788	305.875
18.5	249	-46	-38	-61	3.688	0.288	65.975	308.100
19	419	-211	103	-201	7.875	3.800	62.288	307.813
19.5	444	-240	81	-179	8.550	3.250	54.413	304.013
20	430	-224	31	-119	8.175	1.875	45.863	300.763
20.5	448	-246	-3	-94	8.675	1.138	37.688	298.888
21	527	-319	-54	-53	10.575	-0.013	29.013	297.750
21.5	575	-361	-1	-104	11.700	1.288	18.438	297.763
22	479	-281	90	-194	9.500	3.550	6.738	296.475
22.5	418	-208	59	-162	7.825	2.763	-2.763	292.925
23	206	32	-56	-58	2.175	0.025	-10.588	290.163
23.5	-35	253	-131	41	-3.600	-2.150	-12.763	290.138
24	-112	308	-155	46	-5.250	-2.513	-9.163	292.288
24.5	-97	322	-92	-18	-5.238	-0.925	-3.913	294.800
25	71	145	124	-214	-0.925	4.225	1.325	295.725
25.5	110	122	217	-304	-0.150	6.513	2.250	291.500
26	74	159	264	-353	-1.063	7.713	2.400	284.988
26.5	16	199	380	-464	-2.288	10.550	3.463	277.275
27	289	-81	405	-489	4.625	11.175	5.750	266.725
27.5	365	-157	380	-463	6.525	10.538	1.125	255.550
28	231	-4	414	-505	2.938	11.488	-5.400	245.013
28.5	50	172	499	-574	-1.525	13.413	-8.338	233.525
29	-156	358	694	-789	-6.425	18.538	-6.813	220.113
29.5	-324	530	965	-1051	-10.675	25.200	-0.387	201.575
30	-528	741	1134	-1240	-15.863	29.675	10.288	176.375
30.5	-589	783	1242	-1357	-17.150	32.488	26.150	146.700
31	-276	499	1093	-1199	-9.688	28.650	43.300	114.213
31.5	13	216	609	-706	-2.538	16.438	52.988	85.563
32	12	222	400	-484	-2.625	11.050	55.525	69.125
32.5	-38	245	358	-456	-3.538	10.175	58.150	58.075
33	103	135	174	-277	-0.400	5.638	61.688	47.900
33.5	232	-24	56	-134	3.200	2.375	62.088	42.263
34	360	-164	143	-254	6.550	4.963	58.888	39.888
34.5	609	-415	329	-443	12.800	9.650	52.338	34.925
35	845	-640	404	-515	18.563	11.488	39.538	25.275
35.5	943	-735	498	-605	20.975	13.788	20.975	13.788
Reference Point (36 m)							0.000	0.000

**C305-IM146030**

Serial number probe: D1244

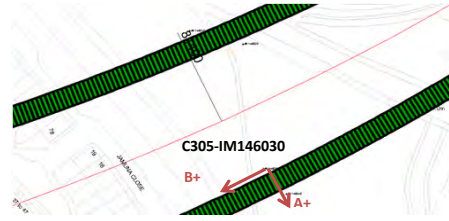


28-11-13 12:30

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	483	-603	268	-120	13.575	4.850	224.550	30.988
1	974	-1072	-101	270	25.575	-4.638	210.975	26.138
1.5	894	-1005	-290	448	23.738	-9.225	185.400	30.775
2	368	-457	-473	641	10.313	-13.925	161.663	40.000
2.5	-46	-46	-669	819	0.000	-18.600	151.350	53.925
3	-401	302	-722	879	-8.788	-20.013	151.350	72.525
3.5	-463	341	-494	669	-10.050	-14.538	160.138	92.538
4	-261	179	-229	404	-5.500	-7.913	170.188	107.075
4.5	-164	45	-160	325	-2.613	-6.063	175.688	114.988
5	-128	42	-101	264	-2.125	-4.563	178.300	121.050
5.5	-202	119	8	178	-4.013	-2.125	180.425	125.613
6	-294	173	110	55	-5.838	0.688	184.438	127.738
6.5	-241	151	264	-97	-4.900	4.513	190.275	127.050
7	-140	73	170	-13	-2.663	2.288	195.175	122.538
7.5	-78	13	-57	233	-1.138	-3.625	197.838	120.250
8	-4	-89	-141	286	1.063	-5.338	198.975	123.875
8.5	150	-265	-234	401	5.188	-7.938	197.913	129.213
9	346	-451	-510	688	9.963	-14.975	192.725	137.150
9.5	571	-676	-861	1044	15.588	-23.813	182.763	152.125
10	509	-607	-838	1045	13.950	-23.538	167.175	175.938
10.5	407	-526	-745	917	11.663	-20.775	153.225	199.475
11	412	-541	-698	886	11.913	-19.800	141.563	220.250
11.5	460	-581	-654	827	13.013	-18.513	129.650	240.050
12	455	-564	-556	742	12.738	-16.225	116.638	258.563
12.5	397	-500	-327	506	11.213	-10.413	103.900	274.788
13	351	-464	-68	238	10.188	-3.825	92.688	285.200
13.5	223	-318	-51	221	6.763	-3.400	82.500	289.025
14	136	-238	-73	256	4.675	-4.113	75.738	292.425
14.5	25	-120	-115	289	1.813	-5.050	71.063	296.538
15	-51	-15	-170	344	-0.450	-6.425	69.250	301.588
15.5	-76	-19	-63	235	-0.713	-3.725	69.700	308.013
16	-2	-77	133	23	0.938	1.375	70.413	311.738
16.5	-58	-38	78	82	-0.250	-0.050	69.475	310.363
17	-77	-28	41	104	-0.613	-0.788	69.725	310.413
17.5	-31	-45	34	134	0.175	-1.250	70.338	311.200
18	-5	-67	-2	166	0.775	-2.100	70.163	312.450
18.5	91	-209	98	55	3.750	0.538	69.388	314.550
19	260	-358	253	-75	7.725	4.100	65.638	314.013
19.5	297	-400	220	-59	8.713	3.488	57.913	309.913
20	276	-388	161	-4	8.300	2.063	49.200	306.425
20.5	288	-404	140	22	8.650	1.475	40.900	304.363
21	366	-485	78	75	10.638	0.038	32.250	302.888
21.5	424	-522	135	27	11.825	1.350	21.613	302.850
22	318	-432	228	-68	9.375	3.700	9.788	301.500
22.5	258	-364	200	-41	7.775	3.013	0.413	297.800
23	49	-134	89	80	2.288	0.113	-7.362	294.788
23.5	-177	79	5	165	-3.200	-2.000	-9.650	294.675
24	-265	140	-23	172	-5.063	-2.438	-6.450	296.675
24.5	-248	160	60	112	-5.100	-0.650	-1.387	299.113
25	-84	-13	268	-102	-0.888	4.625	3.713	299.763
25.5	-42	-44	348	-185	0.025	6.663	4.600	295.138
26	-84	-4	397	-228	-1.000	7.813	4.575	288.475
26.5	-132	31	506	-344	-2.038	10.625	5.575	280.663
27	140	-240	552	-372	4.750	11.550	7.613	270.038
27.5	212	-307	516	-342	6.488	10.725	2.863	258.488
28	74	-174	538	-379	3.100	11.463	-3.625	247.763
28.5	-93	24	643	-457	-1.463	13.750	-6.725	236.300
29	-317	191	828	-664	-6.350	18.650	-5.262	222.550
29.5	-479	368	1102	-933	-10.588	25.438	1.088	203.900
30	-681	588	1271	-1100	-15.863	29.638	11.675	178.463
30.5	-740	609	1399	-1228	-16.863	32.838	27.538	148.825
31	-432	344	1223	-1074	-9.700	28.713	44.400	115.988
31.5	-138	58	742	-603	-2.450	16.813	54.100	87.275
32	-137	58	534	-381	-2.438	11.438	56.550	70.463
32.5	-204	75	495	-338	-3.488	10.413	58.988	59.025
33	-48	-24	312	-158	-0.300	5.875	62.475	48.613
33.5	75	-183	178	-1	3.225	2.238	62.775	42.738
34	214	-327	286	-127	6.763	5.163	59.550	40.500
34.5	456	-575	458	-316	12.888	9.675	52.788	35.338
35	695	-812	548	-391	18.838	11.738	39.900	25.663
35.5	796	-889	627	-487	21.063	13.925	21.063	13.925
Reference Point (36 m)							0.000	0.000

**C305-IM146030**

Serial number probe: D11217

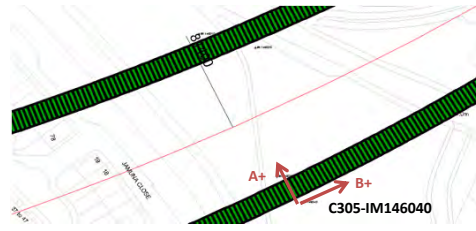


29-11-13 13:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	640	-442	129	-244	13.525	4.663	217.938	12.900
1	1128	-917	-235	155	25.563	-4.875	204.413	8.237
1.5	1051	-845	-433	327	23.700	-9.500	178.850	13.112
2	522	-301	-615	524	10.288	-14.238	155.150	22.612
2.5	106	114	-803	703	-0.100	-18.825	144.863	36.850
3	-247	459	-866	768	-8.825	-20.425	144.963	55.675
3.5	-306	503	-641	547	-10.113	-14.850	153.788	76.100
4	-104	335	-377	281	-5.488	-8.225	163.900	90.950
4.5	-14	207	-306	212	-2.763	-6.475	169.388	99.175
5	27	197	-242	153	-2.125	-4.938	172.150	105.650
5.5	-49	276	-137	50	-4.063	-2.338	174.275	110.588
6	-141	335	-35	-69	-5.950	0.425	178.338	112.925
6.5	-93	317	128	-214	-5.125	4.275	184.288	112.500
7	9	231	25	-127	-2.775	1.900	189.413	108.225
7.5	71	173	-198	111	-1.275	-3.863	192.188	106.325
8	144	77	-278	174	0.838	-5.650	193.463	110.188
8.5	308	-105	-366	281	5.163	-8.088	192.625	115.838
9	504	-293	-655	566	9.963	-15.263	187.463	123.925
9.5	721	-516	-1006	924	15.463	-24.125	177.500	139.188
10	657	-447	-985	916	13.800	-23.763	162.038	163.313
10.5	563	-361	-881	802	11.550	-21.038	148.238	187.075
11	565	-383	-843	768	11.850	-20.138	136.688	208.113
11.5	612	-416	-796	713	12.850	-18.863	124.838	228.250
12	608	-402	-694	625	12.625	-16.488	111.988	247.113
12.5	553	-346	-467	381	11.238	-10.600	99.363	263.600
13	509	-302	-211	117	10.138	-4.100	88.125	274.200
13.5	378	-160	-187	95	6.725	-3.525	77.988	278.300
14	285	-76	-215	131	4.513	-4.325	71.263	281.825
14.5	180	46	-256	167	1.675	-5.288	66.750	286.150
15	98	141	-317	223	-0.538	-6.750	65.075	291.438
15.5	72	135	-202	107	-0.788	-3.863	65.613	298.188
16	149	81	-13	-92	0.850	0.988	66.400	302.050
16.5	98	123	-64	-44	-0.313	-0.250	65.550	301.063
17	79	134	-91	-11	-0.688	-1.000	65.863	301.313
17.5	127	118	-100	11	0.113	-1.388	66.550	302.313
18	144	94	-136	42	0.625	-2.225	66.438	303.700
18.5	249	-43	-39	-63	3.650	0.300	65.813	305.925
19	410	-201	108	-201	7.638	3.863	62.163	305.625
19.5	445	-236	86	-183	8.513	3.363	54.525	301.763
20	433	-234	24	-120	8.338	1.800	46.013	298.400
20.5	436	-237	-4	-92	8.413	1.100	37.675	296.600
21	523	-324	-64	-44	10.588	-0.250	29.263	295.500
21.5	576	-368	-9	-93	11.800	1.050	18.675	295.750
22	475	-275	90	-192	9.375	3.525	6.875	294.700
22.5	412	-203	61	-162	7.688	2.788	-2.500	291.175
23	199	32	-58	-45	2.088	-0.163	-10.188	288.388
23.5	-27	241	-141	51	-3.350	-2.400	-12.275	288.550
24	-108	307	-157	59	-5.188	-2.700	-8.925	290.950
24.5	-99	320	-79	-16	-5.238	-0.788	-3.738	293.650
25	73	150	122	-229	-0.963	4.388	1.500	294.438
25.5	109	122	206	-306	-0.163	6.400	2.463	290.050
26	72	157	261	-348	-1.063	7.613	2.625	283.650
26.5	17	197	373	-468	-2.250	10.513	3.688	276.038
27	297	-86	404	-485	4.788	11.113	5.938	265.525
27.5	361	-149	374	-465	6.375	10.488	1.150	254.413
28	224	-7	402	-494	2.888	11.200	-5.225	243.925
28.5	58	183	497	-579	-1.563	13.450	-8.113	232.725
29	-166	352	696	-792	-6.475	18.600	-6.550	219.275
29.5	-322	527	958	-1048	-10.613	25.075	-0.075	200.675
30	-526	749	1139	-1229	-15.938	29.600	10.538	175.600
30.5	-585	774	1254	-1352	-16.988	32.575	26.475	146.000
31	-275	502	1091	-1191	-9.713	28.525	43.463	113.425
31.5	11	214	609	-715	-2.538	16.550	53.175	84.900
32	15	219	391	-493	-2.550	11.050	55.713	68.350
32.5	-50	240	357	-450	-3.625	10.088	58.263	57.300
33	105	137	172	-275	-0.400	5.588	61.888	47.213
33.5	232	-23	45	-124	3.188	2.113	62.288	41.625
34	366	-162	141	-251	6.600	4.900	59.100	39.513
34.5	607	-413	326	-441	12.750	9.588	52.500	34.613
35	852	-647	406	-508	18.738	11.425	39.750	25.025
35.5	949	-732	488	-600	21.013	13.600	21.013	13.600
Reference Point (36 m)							0.000	0.000

**C305-IM146040**

Serial number probe: D11244



28-11-13 15:00

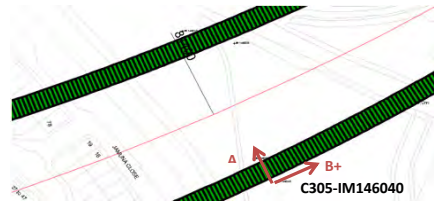
Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1207	1095	-120	309	-28.775	-5.363	1240.438	1526.975
1	-821	699	107	56	-19.000	0.638	1269.213	1532.338
1.5	-400	291	326	-152	-8.638	5.975	1288.213	1531.700
2	204	-307	431	-248	6.388	8.488	1296.850	1525.725
2.5	420	-520	612	-445	11.750	13.213	1290.463	1517.238
3	421	-543	627	-454	12.050	13.513	1278.713	1504.025
3.5	412	-513	612	-447	11.563	13.238	1266.663	1490.513
4	410	-522	624	-447	11.650	13.388	1255.100	1477.275
4.5	426	-525	664	-526	11.888	14.875	1243.450	1463.888
5	523	-619	779	-589	14.275	17.100	1231.563	1449.013
5.5	692	-805	684	-516	18.713	15.000	1217.288	1431.913
6	743	-850	627	-485	19.913	13.900	1198.575	1416.913
6.5	783	-909	585	-422	21.150	12.588	1178.663	1403.013
7	834	-925	485	-305	21.988	9.875	1157.513	1390.425
7.5	887	-1010	412	-258	23.713	8.375	1135.525	1380.550
8	1011	-1135	447	-260	26.825	8.838	1111.813	1372.175
8.5	1074	-1177	446	-282	28.138	9.100	1084.988	1363.338
9	997	-1129	451	-271	26.575	9.025	1056.850	1354.238
9.5	817	-916	484	-312	21.663	9.950	1030.275	1345.213
10	554	-681	548	-369	15.438	11.463	1008.613	1335.263
10.5	358	-444	643	-470	10.025	13.913	993.175	1323.800
11	341	-444	713	-547	9.813	15.750	983.150	1309.888
11.5	435	-555	613	-474	12.375	13.588	973.338	1294.138
12	264	-375	608	-442	7.988	13.125	960.963	1280.550
12.5	43	-120	860	-684	2.038	19.300	952.975	1267.425
13	-185	69	1210	-1061	-3.175	28.388	950.938	1248.125
13.5	-407	295	1412	-1246	-8.775	33.225	954.113	1219.738
14	-575	440	1509	-1333	-12.688	35.525	962.888	1186.513
14.5	-517	423	1250	-1106	-11.750	29.450	975.575	1150.988
15	-147	22	1153	-980	-2.113	26.663	987.325	1121.538
15.5	262	-357	1084	-920	7.738	25.050	989.438	1094.875
16	579	-713	1049	-878	16.150	24.088	981.700	1069.825
16.5	929	-1016	1035	-867	24.313	23.775	965.550	1045.738
17	1255	-1372	1104	-936	32.838	25.500	941.238	1021.963
17.5	1408	-1517	1125	-942	36.563	25.838	908.400	996.463
18	1434	-1532	834	-674	37.075	18.850	871.838	970.625
18.5	1441	-1557	781	-627	37.475	17.600	834.763	951.775
19	1500	-1597	710	-548	38.713	15.725	797.288	934.175
19.5	1592	-1693	693	-531	41.063	15.300	758.575	918.450
20	1643	-1766	648	-474	42.613	14.025	717.513	903.150
20.5	1575	-1707	930	-731	41.025	20.763	674.900	889.125
21	1281	-1371	965	-790	33.150	21.938	633.875	868.363
21.5	1065	-1158	1045	-878	27.788	24.038	600.725	846.425
22	961	-1090	1161	-994	25.638	26.938	572.938	822.388
22.5	831	-929	1371	-1222	22.000	32.413	547.300	795.450
23	607	-733	1656	-1464	16.750	39.000	525.300	763.038
23.5	520	-638	1992	-1841	14.475	47.913	508.550	724.038
24	438	-549	2078	-1898	12.338	49.700	494.075	676.125
24.5	412	-509	2079	-1889	11.513	49.600	481.738	626.425
25	446	-583	1925	-1743	12.863	45.850	470.225	576.825
25.5	552	-627	1609	-1432	14.738	38.013	457.363	530.975
26	602	-722	1268	-1096	16.550	29.550	442.625	492.963
26.5	692	-802	1073	-904	18.675	24.713	426.075	463.413
27	679	-790	979	-818	18.363	22.463	407.400	438.700
27.5	759	-873	1056	-871	20.400	24.088	389.038	416.238
28	918	-1023	1195	-1051	24.263	28.075	368.638	392.150
28.5	1005	-1138	1251	-1094	26.788	29.313	344.375	364.075
29	1044	-1153	1128	-957	27.463	26.063	317.588	334.763
29.5	1112	-1192	910	-733	28.800	20.538	290.125	308.700
30	1124	-1230	763	-604	29.425	17.088	261.325	288.163
30.5	1220	-1308	717	-569	31.600	16.075	231.900	271.075
31	1275	-1361	837	-671	32.950	18.850	200.300	255.000
31.5	1107	-1217	1031	-870	29.050	23.763	167.350	236.150
32	963	-1071	1257	-1074	25.425	29.138	138.300	212.388
32.5	1068	-1183	1546	-1377	28.138	36.538	112.875	183.250
33	944	-1056	1556	-1372	25.000	36.600	84.738	146.713
33.5	771	-871	1468	-1288	20.525	34.450	59.738	110.113
34	846	-956	1550	-1376	22.525	36.575	39.213	75.663
34.5	603	-732	1658	-1469	16.688	39.088	16.688	39.088
Reference Point (35 m)							0.000	0.000



**C305-IM146040**

Serial number probe:

D11217



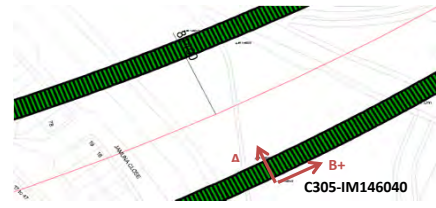
29-11-13 15:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1060	1251	-266	190	-28.888	-5.700	1235.238	1509.938
1	-668	865	-39	-59	-19.163	0.250	1264.125	1515.638
1.5	-246	449	190	-274	-8.688	5.800	1283.288	1515.388
2	354	-145	297	-374	6.238	8.388	1291.975	1509.588
2.5	570	-363	468	-559	11.663	12.838	1285.738	1501.200
3	571	-375	492	-580	11.825	13.400	1274.075	1488.363
3.5	563	-353	471	-561	11.450	12.900	1262.250	1474.963
4	564	-363	490	-563	11.588	13.163	1250.800	1462.063
4.5	575	-372	528	-640	11.838	14.600	1239.213	1448.900
5	676	-456	643	-716	14.150	16.988	1227.375	1434.300
5.5	845	-643	544	-643	18.600	14.838	1213.225	1417.313
6	901	-690	493	-608	19.888	13.763	1194.625	1402.475
6.5	939	-742	442	-541	21.013	12.288	1174.738	1388.713
7	981	-760	340	-430	21.763	9.625	1153.725	1376.425
7.5	1040	-842	273	-373	23.525	8.075	1131.963	1366.800
8	1170	-977	301	-378	26.838	8.488	1108.438	1358.725
8.5	1223	-1024	312	-399	28.088	8.888	1081.600	1350.238
9	1156	-961	312	-387	26.463	8.738	1053.513	1341.350
9.5	973	-764	339	-436	21.713	9.688	1027.050	1332.613
10	710	-519	410	-487	15.363	11.213	1005.338	1322.925
10.5	508	-292	498	-589	10.000	13.588	989.975	1311.713
11	489	-276	570	-664	9.563	15.425	979.975	1298.125
11.5	587	-393	472	-589	12.250	13.263	970.413	1282.700
12	422	-208	464	-566	7.875	12.875	958.163	1269.438
12.5	198	32	723	-811	2.075	19.175	950.288	1256.563
13	-33	233	1073	-1176	-3.325	28.113	948.213	1237.388
13.5	-259	449	1278	-1365	-8.850	33.038	951.538	1209.275
14	-420	605	1374	-1455	-12.813	35.363	960.388	1176.238
14.5	-369	584	1112	-1222	-11.913	29.175	973.200	1140.875
15	9	189	1007	-1094	-2.250	26.263	985.113	1111.700
15.5	410	-202	944	-1038	7.650	24.775	987.363	1085.438
16	733	-546	905	-995	15.988	23.750	979.713	1060.663
16.5	1083	-862	894	-992	24.313	23.575	963.725	1036.913
17	1408	-1221	966	-1051	32.863	25.213	939.413	1013.338
17.5	1566	-1362	981	-1058	36.600	25.488	906.550	988.125
18	1590	-1374	694	-797	37.050	18.638	869.950	962.638
18.5	1599	-1400	641	-743	37.488	17.300	832.900	944.000
19	1651	-1429	576	-675	38.500	15.638	795.413	926.700
19.5	1740	-1539	548	-657	40.988	15.063	756.913	911.063
20	1796	-1599	508	-602	42.438	13.875	715.925	896.000
20.5	1729	-1539	787	-857	40.850	20.550	673.488	882.125
21	1433	-1209	831	-906	33.025	21.713	632.638	861.575
21.5	1218	-1006	911	-992	27.800	23.788	599.613	839.863
22	1120	-935	1017	-1113	25.888	26.625	571.813	816.075
22.5	982	-778	1232	-1345	22.000	32.213	546.125	789.450
23	756	-579	1514	-1582	16.688	38.700	524.125	757.238
23.5	672	-482	1848	-1958	14.425	47.575	507.438	718.538
24	592	-394	1936	-2026	12.325	49.625	493.013	670.963
24.5	569	-358	1934	-2015	11.588	49.363	480.688	621.438
25	599	-415	1786	-1859	12.675	45.563	469.100	572.075
25.5	700	-475	1473	-1547	14.688	37.750	456.425	526.513
26	754	-569	1128	-1213	16.538	29.263	441.738	488.763
26.5	846	-642	928	-1026	18.600	24.425	425.200	459.500
27	829	-624	833	-935	18.163	22.100	406.600	435.075
27.5	917	-705	912	-998	20.275	23.875	388.438	412.975
28	1075	-867	1058	-1175	24.275	27.913	368.163	389.100
28.5	1157	-986	1117	-1215	26.788	29.150	343.888	361.188
29	1201	-1000	991	-1077	27.513	25.850	317.100	332.038
29.5	1265	-1040	766	-860	28.813	20.325	289.588	306.188
30	1277	-1077	627	-721	29.425	16.850	260.775	285.863
30.5	1373	-1157	583	-686	31.625	15.863	231.350	269.013
31	1430	-1210	702	-792	33.000	18.675	199.725	253.150
31.5	1254	-1055	894	-987	28.863	23.513	166.725	234.475
32	1112	-912	1114	-1190	25.300	28.800	137.863	210.963
32.5	1224	-1022	1402	-1497	28.075	36.238	112.563	182.163
33	1093	-901	1417	-1500	24.925	36.463	84.488	145.925
33.5	924	-716	1326	-1412	20.500	34.225	59.563	109.463
34	998	-792	1407	-1504	22.375	36.388	39.063	75.238
34.5	760	-575	1512	-1596	16.688	38.850	16.688	38.850
Reference Point (35 m)							0.000	0.000

**C305-IM146040**

Serial number probe:

DI1244



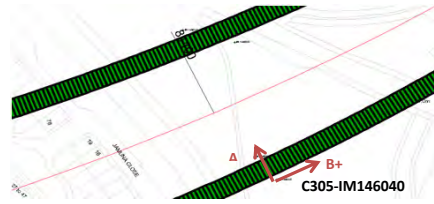
28-11-13 17:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1206	1094	-128	295	-28.750	-5.288	1239.563	1527.350
1	-826	717	110	47	-19.288	0.788	1268.313	1532.638
1.5	-390	279	332	-160	-8.363	6.150	1287.600	1531.850
2	199	-319	429	-262	6.475	8.638	1295.963	1525.700
2.5	413	-549	608	-435	12.025	13.038	1289.488	1517.063
3	418	-522	642	-471	11.750	13.913	1277.463	1504.025
3.5	401	-511	596	-429	11.400	12.813	1265.713	1490.113
4	407	-514	627	-453	11.513	13.500	1254.313	1477.300
4.5	414	-521	672	-520	11.688	14.900	1242.800	1463.800
5	512	-618	770	-595	14.125	17.063	1231.113	1448.900
5.5	691	-790	671	-526	18.513	14.963	1216.988	1431.838
6	751	-845	645	-490	19.950	14.188	1198.475	1416.875
6.5	786	-909	581	-424	21.188	12.563	1178.525	1402.688
7	824	-918	460	-315	21.775	9.688	1157.338	1390.125
7.5	899	-1014	424	-264	23.913	8.600	1135.563	1380.438
8	1012	-1150	446	-255	27.025	8.763	1111.650	1371.838
8.5	1069	-1182	445	-286	28.138	9.138	1084.625	1363.075
9	1000	-1106	464	-266	26.325	9.125	1056.488	1353.938
9.5	797	-908	479	-312	21.313	9.888	1030.163	1344.813
10	564	-666	545	-366	15.375	11.388	1008.850	1334.925
10.5	348	-452	649	-463	10.000	13.900	993.475	1323.538
11	342	-425	703	-540	9.588	15.538	983.475	1309.638
11.5	443	-544	632	-464	12.338	13.700	973.888	1294.100
12	265	-369	613	-448	7.925	13.263	961.550	1280.400
12.5	42	-108	872	-688	1.875	19.500	953.625	1267.138
13	-190	67	1235	-1053	-3.213	28.600	951.750	1247.638
13.5	-413	302	1415	-1269	-8.938	33.550	954.963	1219.038
14	-568	461	1518	-1349	-12.863	35.838	963.900	1185.488
14.5	-515	413	1252	-1083	-11.600	29.188	976.763	1149.650
15	-145	38	1143	-983	-2.288	26.575	988.363	1120.463
15.5	271	-369	1077	-925	8.000	25.025	990.650	1093.888
16	574	-720	1046	-878	16.175	24.050	982.650	1068.863
16.5	936	-1035	1049	-876	24.638	24.063	966.475	1044.813
17	1254	-1374	1097	-939	32.850	25.450	941.838	1020.750
17.5	1409	-1520	1116	-928	36.613	25.550	908.988	995.300
18	1430	-1519	840	-671	36.863	18.888	872.375	969.750
18.5	1452	-1565	782	-618	37.713	17.500	835.513	950.863
19	1492	-1587	722	-549	38.488	15.888	797.800	933.363
19.5	1584	-1700	690	-525	41.050	15.188	759.313	917.475
20	1637	-1762	656	-464	42.488	14.000	718.263	902.288
20.5	1574	-1709	915	-734	41.038	20.613	675.775	888.288
21	1288	-1372	961	-787	33.250	21.850	634.738	867.675
21.5	1058	-1162	1042	-868	27.750	23.875	601.488	845.825
22	961	-1088	1155	-975	25.613	26.625	573.738	821.950
22.5	833	-927	1372	-1242	22.000	32.675	548.125	795.325
23	601	-744	1644	-1474	16.813	38.975	526.125	762.650
23.5	514	-629	1998	-1842	14.288	48.000	509.313	723.675
24	440	-563	2077	-1913	12.538	49.875	495.025	675.675
24.5	422	-530	2068	-1898	11.900	49.575	482.488	625.800
25	451	-575	1941	-1738	12.825	45.988	470.588	576.225
25.5	548	-636	1612	-1435	14.800	38.088	457.763	530.238
26	611	-711	1258	-1097	16.525	29.438	442.963	492.150
26.5	702	-793	1057	-900	18.688	24.463	426.438	462.713
27	670	-788	982	-803	18.225	22.313	407.750	438.250
27.5	766	-866	1053	-872	20.400	24.063	389.525	415.938
28	923	-1039	1211	-1034	24.525	28.063	369.125	391.875
28.5	1013	-1134	1272	-1088	26.838	29.500	344.600	363.813
29	1058	-1144	1133	-948	27.525	26.013	317.763	334.313
29.5	1115	-1207	918	-721	29.025	20.488	290.238	308.300
30	1112	-1231	766	-609	29.288	17.188	261.213	287.813
30.5	1205	-1331	729	-571	31.700	16.250	231.925	270.625
31	1280	-1370	846	-658	33.125	18.800	200.225	254.375
31.5	1076	-1225	1043	-858	28.763	23.763	167.100	235.575
32	969	-1067	1232	-1076	25.450	28.850	138.338	211.813
32.5	1083	-1190	1534	-1372	28.413	36.325	112.888	182.963
33	949	-1064	1560	-1385	25.163	36.813	84.475	146.638
33.5	767	-860	1455	-1301	20.338	34.450	59.313	109.825
34	850	-938	1541	-1375	22.350	36.450	38.975	75.375
34.5	605	-725	1650	-1464	16.625	38.925	16.625	38.925
Reference Point (35 m)							0.000	0.000

**C305-IM146040**

Serial number probe:

DI1217

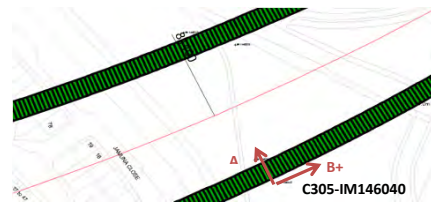


29-11-13 16:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1061	1258	-269	181	-28.988	-5.625	1233.950	1509.600
1	-669	880	-29	-76	-19.363	0.588	1262.938	1515.225
1.5	-239	446	191	-286	-8.563	5.963	1282.300	1514.638
2	358	-152	285	-378	6.375	8.288	1290.863	1508.675
2.5	565	-381	468	-562	11.825	12.875	1284.488	1500.388
3	563	-358	501	-586	11.513	13.588	1272.663	1487.513
3.5	558	-351	461	-555	11.363	12.700	1261.150	1473.925
4	566	-359	488	-578	11.563	13.325	1249.788	1461.225
4.5	571	-361	536	-642	11.650	14.725	1238.225	1447.900
5	662	-452	636	-718	13.925	16.925	1226.575	1433.175
5.5	841	-632	535	-643	18.413	14.725	1212.650	1416.250
6	899	-687	502	-613	19.825	13.938	1194.238	1401.525
6.5	938	-744	448	-546	21.025	12.425	1174.413	1387.588
7	983	-761	327	-430	21.800	9.463	1153.388	1375.163
7.5	1058	-860	285	-383	23.975	8.350	1131.588	1365.700
8	1160	-987	303	-369	26.838	8.400	1107.613	1357.350
8.5	1218	-1030	300	-402	28.100	8.775	1080.775	1348.950
9	1158	-954	324	-391	26.400	8.938	1052.675	1340.175
9.5	954	-753	334	-436	21.338	9.625	1026.275	1331.238
10	717	-505	402	-479	15.275	11.013	1004.938	1321.613
10.5	503	-292	507	-580	9.938	13.588	989.663	1310.600
11	488	-266	562	-665	9.425	15.338	979.725	1297.013
11.5	591	-392	486	-588	12.288	13.425	970.300	1281.675
12	422	-217	472	-569	7.988	13.013	958.013	1268.250
12.5	194	44	729	-813	1.875	19.275	950.025	1255.238
13	-40	231	1089	-1179	-3.888	28.350	948.150	1235.963
13.5	-258	456	1277	-1382	-8.925	33.238	951.538	1207.613
14	-409	615	1372	-1464	-12.800	35.450	960.463	1174.375
14.5	-361	573	1110	-1206	-11.675	28.950	973.263	1138.925
15	7	198	998	-1103	-2.388	26.263	984.938	1109.975
15.5	420	-207	932	-1045	7.838	24.713	987.325	1083.713
16	731	-552	902	-993	16.038	23.688	979.488	1059.000
16.5	1083	-875	908	-989	24.475	23.713	963.450	1035.313
17	1408	-1213	964	-1058	32.763	25.275	938.975	1011.600
17.5	1570	-1360	981	-1052	36.625	25.413	906.213	986.325
18	1589	-1362	693	-784	36.888	18.463	869.588	960.913
18.5	1600	-1402	649	-733	37.525	17.275	832.700	942.450
19	1637	-1435	586	-668	38.400	15.675	795.175	925.175
19.5	1735	-1535	552	-648	40.875	15.000	756.775	909.500
20	1794	-1594	511	-585	42.350	13.700	715.900	894.500
20.5	1734	-1553	779	-858	41.088	20.463	673.550	880.800
21	1437	-1214	819	-902	33.138	21.513	632.463	860.338
21.5	1210	-1009	902	-991	27.738	23.663	599.325	838.825
22	1122	-928	1019	-1102	25.625	26.513	571.588	815.163
22.5	982	-771	1227	-1356	21.913	32.288	545.963	788.650
23	753	-579	1502	-1597	16.650	38.738	524.050	756.363
23.5	661	-475	1863	-1965	14.200	47.850	507.400	717.625
24	600	-410	1944	-2029	12.625	49.663	493.200	669.775
24.5	577	-363	1933	-2017	11.750	49.375	480.575	620.113
25	605	-413	1794	-1851	12.725	45.563	468.825	570.738
25.5	706	-474	1477	-1553	14.750	37.875	456.100	525.175
26	764	-553	1114	-1212	16.463	29.075	441.350	487.300
26.5	849	-636	917	-1026	18.563	24.288	424.888	458.225
27	818	-633	843	-919	18.138	22.025	406.325	433.938
27.5	925	-708	910	-994	20.413	23.800	388.188	411.913
28	1070	-872	1064	-1161	24.275	27.813	367.775	388.113
28.5	1163	-972	1126	-1201	26.688	29.088	343.500	360.300
29	1203	-988	992	-1074	27.388	25.825	316.813	331.213
29.5	1272	-1049	773	-848	29.013	20.263	289.425	305.388
30	1271	-1068	622	-724	29.238	16.825	260.413	285.125
30.5	1362	-1165	587	-691	31.588	15.975	231.175	268.300
31	1426	-1213	702	-782	32.988	18.550	199.588	252.325
31.5	1237	-1065	897	-983	28.775	23.500	166.600	233.775
32	1114	-900	1097	-1190	25.175	28.588	137.825	210.275
32.5	1234	-1024	1401	-1496	28.225	36.213	112.650	181.688
33	1110	-912	1413	-1507	25.275	36.500	84.425	145.475
33.5	915	-704	1309	-1417	20.238	34.075	59.150	108.975
34	1006	-785	1404	-1499	22.388	36.288	38.913	74.900
34.5	758	-564	1508	-1581	16.525	38.613	16.525	38.613
Reference Point (35 m)							0.000	0.000

**C305-IM146040**

Serial number probe: D11244



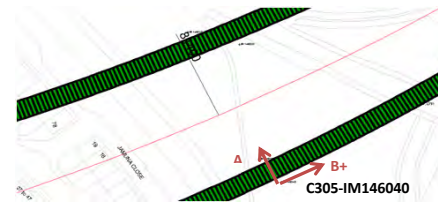
28-11-13 17:30

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1214	1106	-148	311	-29.000	-5.738	1240.988	1527.000
1	-818	702	111	49	-19.000	0.775	1269.988	1532.738
1.5	-398	285	337	-161	-8.538	6.225	1288.988	1531.963
2	205	-305	441	-257	6.375	8.725	1297.525	1525.738
2.5	427	-541	614	-449	12.100	13.288	1291.150	1517.013
3	412	-527	631	-478	11.738	13.863	1279.050	1503.725
3.5	410	-518	598	-431	11.600	12.863	1267.313	1489.863
4	413	-513	631	-458	11.575	13.613	1255.713	1477.000
4.5	415	-531	681	-516	11.825	14.963	1244.138	1463.388
5	514	-606	783	-597	14.000	17.250	1232.313	1448.425
5.5	690	-784	686	-514	18.425	15.000	1218.313	1431.175
6	738	-847	652	-504	19.813	14.450	1199.888	1416.175
6.5	788	-907	597	-417	21.188	12.675	1180.075	1401.725
7	836	-925	490	-312	22.013	10.025	1158.888	1389.050
7.5	889	-1013	429	-256	23.775	8.563	1136.875	1379.025
8	1024	-1145	423	-260	27.113	8.538	1113.100	1370.463
8.5	1061	-1182	436	-280	28.038	8.950	1085.988	1361.925
9	994	-1120	453	-262	26.425	8.938	1057.950	1352.975
9.5	802	-922	466	-297	21.550	9.538	1031.525	1344.038
10	565	-680	555	-371	15.563	11.575	1009.975	1334.500
10.5	347	-467	645	-471	10.175	13.950	994.413	1322.925
11	332	-420	712	-541	9.400	15.663	984.238	1308.975
11.5	440	-558	623	-479	12.475	13.775	974.838	1293.313
12	261	-370	615	-464	7.888	13.488	962.363	1279.538
12.5	37	-126	845	-686	2.038	19.138	954.475	1266.050
13	-181	82	1213	-1048	-3.288	28.263	952.438	1246.913
13.5	-417	295	1412	-1243	-8.900	33.188	955.725	1218.650
14	-566	463	1510	-1329	-12.863	35.488	964.625	1185.463
14.5	-531	424	1258	-1092	-11.938	29.375	977.488	1149.975
15	-147	28	1163	-976	-2.188	26.738	989.425	1120.600
15.5	255	-355	1079	-923	7.625	25.025	991.613	1093.863
16	572	-706	1040	-868	15.975	23.850	983.988	1068.838
16.5	934	-1040	1027	-868	24.675	23.688	968.013	1044.988
17	1264	-1379	1105	-925	33.038	25.375	943.338	1021.300
17.5	1419	-1522	1112	-940	36.763	25.650	910.300	995.925
18	1424	-1541	829	-671	37.063	18.750	873.538	970.275
18.5	1443	-1563	788	-617	37.575	17.563	836.475	951.525
19	1495	-1592	719	-550	38.588	15.863	798.900	933.963
19.5	1585	-1694	683	-523	40.988	15.075	760.313	918.100
20	1644	-1757	655	-483	42.513	14.225	719.325	903.025
20.5	1595	-1699	938	-745	41.175	21.038	676.813	888.800
21	1274	-1380	964	-783	33.175	21.838	635.638	867.763
21.5	1062	-1156	1057	-854	27.725	23.888	602.463	845.925
22	970	-1105	1161	-985	25.938	26.825	574.738	822.038
22.5	824	-917	1359	-1239	21.763	32.475	548.800	795.213
23	615	-730	1643	-1469	16.813	38.900	527.038	762.738
23.5	528	-626	2000	-1855	14.425	48.188	510.225	723.838
24	439	-557	2068	-1928	12.450	49.950	495.800	675.650
24.5	423	-524	2063	-1915	11.838	49.725	483.350	625.700
25	456	-572	1927	-1735	12.850	45.775	471.513	575.975
25.5	555	-644	1616	-1417	14.988	37.913	458.663	530.200
26	603	-736	1271	-1079	16.738	29.375	443.675	492.288
26.5	688	-790	1063	-904	18.475	24.588	426.938	462.913
27	672	-792	973	-809	18.300	22.275	408.463	438.325
27.5	760	-877	1033	-899	20.463	24.150	390.163	416.050
28	919	-1022	1202	-1054	24.263	28.200	369.700	391.900
28.5	1007	-1143	1254	-1093	26.875	29.338	345.438	363.700
29	1039	-1156	1142	-956	27.438	26.225	318.563	334.363
29.5	1118	-1205	912	-738	29.038	20.625	291.125	308.138
30	1122	-1247	756	-595	29.613	16.888	262.088	287.513
30.5	1221	-1329	720	-565	31.875	16.063	232.475	270.625
31	1279	-1365	834	-669	33.050	18.788	200.600	254.563
31.5	1099	-1218	1026	-863	28.963	23.613	167.550	235.775
32	954	-1055	1236	-1072	25.113	28.850	138.588	212.163
32.5	1080	-1194	1529	-1359	28.425	36.100	113.475	183.313
33	942	-1068	1573	-1392	25.125	37.063	85.050	147.213
33.5	761	-863	1459	-1281	20.300	34.250	59.925	110.150
34	851	-965	1554	-1386	22.700	36.750	39.625	75.900
34.5	615	-739	1659	-1473	16.925	39.150	16.925	39.150
Reference Point (35 m)							0.000	0.000

**C305-IM146040**

Serial number probe:

DI1217



29-11-13 17:00

Depth (m)	A+	A-	B+	B-	A (mm)	B (mm)	Cumulative A (mm)	Cumulative B (mm)
0.5	-1057	1269	-281	193	-29.075	-5.925	1234.650	1510.188
1	-662	866	-24	-68	-19.100	0.550	1263.725	1516.113
1.5	-241	444	199	-280	-8.563	5.988	1282.825	1515.563
2	360	-148	295	-378	6.350	8.413	1291.388	1509.575
2.5	576	-380	474	-563	11.950	12.963	1285.038	1501.163
3	567	-371	492	-589	11.725	13.513	1273.088	1488.200
3.5	563	-361	454	-553	11.550	12.588	1261.363	1474.688
4	561	-359	490	-571	11.500	13.263	1249.813	1462.100
4.5	567	-374	533	-636	11.763	14.613	1238.313	1448.838
5	662	-450	643	-721	13.900	17.050	1226.550	1434.225
5.5	846	-627	553	-643	18.413	14.950	1212.650	1417.175
6	895	-690	508	-617	19.813	14.063	1194.238	1402.225
6.5	938	-742	458	-544	21.000	12.525	1174.425	1388.163
7	984	-766	345	-430	21.875	9.688	1153.425	1375.638
7.5	1045	-857	287	-372	23.775	8.238	1131.550	1365.950
8	1177	-988	289	-382	27.063	8.388	1107.775	1357.713
8.5	1217	-1020	300	-399	27.963	8.738	1080.713	1349.325
9	1148	-958	314	-387	26.325	8.763	1052.750	1340.588
9.5	960	-759	333	-423	21.488	9.450	1026.425	1331.825
10	713	-521	407	-497	15.425	11.300	1004.938	1322.375
10.5	501	-306	504	-587	10.088	13.638	989.513	1311.075
11	483	-260	565	-652	9.288	15.213	979.425	1297.438
11.5	594	-394	490	-593	12.350	13.538	970.138	1282.225
12	418	-209	479	-582	7.838	13.263	957.788	1268.688
12.5	186	37	711	-814	1.863	19.063	949.950	1255.425
13	-31	236	1076	-1177	-3.338	28.163	948.088	1236.363
13.5	-266	457	1278	-1366	-9.038	33.050	951.425	1208.200
14	-409	618	1375	-1456	-12.838	35.388	960.463	1175.150
14.5	-376	586	1113	-1213	-12.025	29.075	973.300	1139.763
15	4	190	1015	-1089	-2.325	26.300	985.325	1110.688
15.5	411	-195	931	-1047	7.575	24.725	987.650	1084.388
16	720	-545	906	-983	15.813	23.613	980.075	1059.663
16.5	1091	-878	894	-987	24.613	23.513	964.263	1036.050
17	1414	-1220	960	-1050	32.925	25.125	939.650	1012.538
17.5	1569	-1366	978	-1063	36.688	25.513	906.725	987.413
18	1582	-1376	689	-798	36.975	18.588	870.038	961.900
18.5	1599	-1408	645	-736	37.588	17.263	833.063	943.313
19	1643	-1434	580	-671	38.463	15.638	795.475	926.050
19.5	1733	-1527	551	-645	40.750	14.950	757.013	910.413
20	1796	-1603	518	-600	42.488	13.975	716.263	895.463
20.5	1745	-1541	794	-864	41.075	20.725	673.775	881.488
21	1424	-1214	829	-906	32.975	21.688	632.700	860.763
21.5	1216	-997	913	-983	27.663	23.700	599.725	839.075
22	1128	-945	1020	-1109	25.913	26.613	572.063	815.375
22.5	982	-762	1226	-1357	21.800	32.288	546.150	788.763
23	768	-566	1505	-1581	16.675	38.575	524.350	756.475
23.5	676	-469	1863	-1966	14.313	47.863	507.675	717.900
24	594	-397	1934	-2042	12.388	49.700	493.363	670.038
24.5	572	-370	1924	-2030	11.775	49.425	480.975	620.338
25	607	-411	1793	-1860	12.725	45.663	469.200	570.913
25.5	703	-482	1479	-1544	14.813	37.788	456.475	525.250
26	755	-569	1127	-1201	16.550	29.100	441.663	487.463
26.5	839	-631	926	-1032	18.375	24.475	425.113	458.363
27	824	-627	841	-930	18.138	22.138	406.738	433.888
27.5	918	-719	895	-1011	20.463	23.825	388.600	411.750
28	1073	-858	1054	-1171	24.138	27.813	368.138	387.925
28.5	1157	-983	1115	-1218	26.750	29.163	344.000	360.113
29	1193	-993	996	-1085	27.325	26.013	317.250	330.950
29.5	1266	-1039	768	-860	28.813	20.350	289.925	304.938
30	1279	-1082	612	-711	29.513	16.538	261.113	284.588
30.5	1371	-1165	577	-677	31.700	15.675	231.600	268.050
31	1433	-1210	700	-788	33.038	18.600	199.900	252.375
31.5	1249	-1052	889	-981	28.763	23.375	166.863	233.775
32	1108	-901	1104	-1183	25.113	28.588	138.100	210.400
32.5	1229	-1028	1390	-1481	28.213	35.888	112.988	181.813
33	1092	-914	1428	-1511	25.075	36.738	84.775	145.925
33.5	918	-708	1311	-1406	20.325	33.963	59.700	109.188
34	1009	-798	1419	-1497	22.588	36.450	39.375	75.225
34.5	766	-577	1518	-1584	16.788	38.775	16.788	38.775
Reference Point (35 m)							0.000	0.000



APPENDIX C:

MINUTES CLOSE OUT MEETING AREA

Learning Legacy Document



# I&M Close Out Meeting

Date & Time		02/09/2015 10:30	
Meeting No.		4	
<p>The purpose of this document is to record agreement to cease monitoring long term monitoring and decommission based on review of the data against the requirements. Agreement from this meeting is then considered acceptance from all parties that the Close Out Report can then be produced based on the data shown and this will be acceptable to the Project Manager.</p>			
Attendees:			
Susannah Hanna DSJV Stuart Dawson DSJV Garry Savage DSJV Gonzalo Carnicero Geocisa <i>Ara Cabanero Geocisa</i>		Mark Lemmon CRL Roger Lindsay C122 <i>Brian Murphy C122</i>	
Data Reviewed			
Monitoring References	Location	Settlement rate	Agreement to decommission
<b>Levelling Points Area 14 Drive Z</b>			
C305-LP14070-C305-LP14092	14A Wick Lane	10% at 2mm/year 20% at 3mm/year	<i>N/A - covered in Ham &amp; Wick close out report.</i>
C305-LP14255-C305-LP14261	HAM & Wick Site	100% at 2mm/year 100% at 3mm/year	<i>Yes, re-baseline for TBM to be renewed/</i>
C305-LP15221-C305-LP15254	14B Wrexham Road, Baldock Street	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP140301-C305-LP140347	Ridgdale Street	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP140401-C305-LP140435	14C Grove Hall Park	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP140501-C305-LP140540	14D Bow Road	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP140601-C305-LP140639	14E Rainhill Way	82% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP140701-C305-LP140729	Rainhill Way	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP140801-C305-LP140821	Rainhill Way	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP140901-C305-LP140910	Rainhill Way	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP141001-C305-LP141050	14F Campbell Road	67% at 2mm/year 98% at 3mm/year	<i>Last 2 readings to be used, in close out report which demonstrate works from c 360 affecting points. C360 data to be included. Stable after TBM</i>
C305-LP141101-C305-LP141139	14G Eagling Close	13% at 2mm/year 32% at 3mm/year	<i>Yes - lots of points lost due to other works.</i>
C305-LP141501-C305-LP141522	14H	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP141601-C305-LP141635	Bow triangle busines centre	96% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP141410-C305-LP141426	<i>Fairfoot Road</i>	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP141701-C305-LP141734	<i>Dismantled Railway / behind Fairfoot rd.</i>	96% at 2mm/year 100% at 3mm/year	<i>Yes - 25-26 show uncharacteristic movement to rest. To be discarded</i>
C305-LP141801-C305-LP141813	<i>Drive off of Fairfoot Rd</i>	100% at 2mm/year 100% at 3mm/year	<i>Yes*</i>
C305-LP141901-C305-LP141912	<i>Fairfoot → Knapp Road</i>	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP141943-C305-LP141962	<i>Ackeroyd Drive</i>	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP142101-C305-LP142138	<i>14J Cantrell / Knapp Road</i>	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP142017-C305-LP142055	<i>Cantrell Road Park</i>	97% at 2mm/year 100% at 3mm/year	<i>Yes</i>
C305-LP146101-C305-LP146119	<i>14K Bow Common Lane</i>	100% at 2mm/year 100% at 3mm/year	<i>Yes</i>



C305-LP142201-C305-LP142213	Bow Common Lane	100% at 2mm/year 100% at 3mm/year	Yes
C305-LP142301-C305-LP142316	Walvisch House	100% at 2mm/year 100% at 3mm/year	Yes
C305-LP14270-C305-LP14273	Robeson Street	100% at 2mm/year 100% at 3mm/year	Yes
C305-LP14260-C305-LP14263	Robeson Street	100% at 2mm/year 100% at 3mm/year	Yes
C305-LP14250-C305-LP14253	Huddart Street	100% at 2mm/year 100% at 3mm/year	Yes
C305-LP142440-C305-LP142443	Huddart Street	100% at 2mm/year 100% at 3mm/year	Yes
C305-LP142430-C305-LP142433	Joseph Street	100% at 2mm/year 100% at 3mm/year	Yes
C305-LP142401-C305-LP142428	14L Joseph Street	95% at 2mm/year 100% at 3mm/year	Yes
C305-LP142501-C305-LP142530	14M Burdett Row	74% at 2mm/year 96% at 3mm/year	Yes - close to Mile End Shaft with Mile End Park section below stable.
C305-LP142701-C305-LP142725	Mile End Park	100% at 2mm/year 100% at 3mm/year	Yes
C305-LP142801-C305-LP142831	14N Mile End Park.	70% at 2mm/year 100% at 3mm/year	Yes
C305-LP142950-C305-LP142953	Rhodeswell Road under FSI	50% at 2mm/year 100% at 3mm/year	Yes stable after TBM. Last reading shows (localised) movement
C305-LP142940-C305-LP142943	11	25% at 2mm/year 100% at 3mm/year	Yes stable after TBM
C305-LP142901-C305-LP142933	14O	81% at 2mm/year 97% at 3mm/year	Yes "
C305-LP143101-C305-LP143110	Mile End Park	50% at 2mm/year 100% at 3mm/year	Yes "
C305-LP143201-C305-LP143226	14P	100% at 2mm/year 100% at 3mm/year	Yes "
C305-LP143301-C305-LP143338	14Q Jamma close	100% at 2mm/year 100% at 3mm/year	Yes
C305-LP143401-C305-LP143419	Eastfield Street	100% at 2mm/year 100% at 3mm/year	Yes - not affected by niche.
C305-LP143501-C305-LP143503	Carr Street	67% at 2mm/year 100% at 3mm/year	Yes 1 of 3 shows odd behaviour adjacent to others.
C305-LP143601-C305-LP143634	14R Gidsworthy Avenue	100% at 2mm/year 100% at 3mm/year	Yes - Affected by niche, additional set of readings to be included in report.
C305-LP143701-C305-LP143741	14S Hornshaw/Halls est	100% at 2mm/year 100% at 3mm/year	Yes
C305-LP143801-C305-LP143840	14T Aston Street.	100% at 2mm/year 100% at 3mm/year	Yes - same as 14R, additional set of readings.
<b>Sockets Area 14 Drive Z</b>			
C305-LB14201-C305-LB14236	Wrexham Road, Baldock Street	100% at 2mm/year 100% at 3mm/year	Yes
C305-LB143101-C305-LB143108	Ridgale Street	100% at 2mm/year 100% at 3mm/year	Yes
C305-LB143201	Jebb Street. Grove Hall Court	100% at 2mm/year 100% at 3mm/year	Yes
C305-LB143301-C305-LB143315	Grove Hall Court	100% at 2mm/year 100% at 3mm/year	Yes
C305-LB143001-C305-LB143005	Fairfield Road	100% at 2mm/year 100% at 3mm/year	Yes
C305-LB143601-C305-LB143614	Bow Road	100% at 2mm/year 100% at 3mm/year	Yes
C305-LB143701-C305-LB143710	Rainhill Way	100% at 2mm/year 100% at 3mm/year	Yes
C305-LB143901-C305-LB143908	Rainhill Way	78% at 2mm/year 100% at 3mm/year	Yes
C305-LB144401-C305-LB144403	Campbell Road	100% at 2mm/year 100% at 3mm/year	Yes
C305-LB144301-C305-LB144305	Campbell Road	100% at 2mm/year 100% at 3mm/year	Yes - check data after WB for report.
C305-LB144101-C305-LB144104	Hackworth Point	100% at 2mm/year 100% at 3mm/year	Yes



C305-LB144207-C305-LB144216	Rainhill Way / <i>over the</i>	100% at 2mm/year 100% at 3mm/year	Yes
C305-LB144501-C305-LB144535	The Cherrytrees School	12% at 2mm/year 60% at 3mm/year	<del>Yes</del> <i>affected by C360 same as Eagling Close</i>
C305-LB144601-C305-LB144604	<i>Lit Sub station</i> Eagling Close - Works	100% at 2mm/year 100% at 3mm/year	Yes
C305-LB145105-C305-LB145111		50% at 2mm/year 100% at 3mm/year	Next meeting
C305-LB145001-C305-LB145004	Navenby walk	100% at 2mm/year 100% at 3mm/year	Next meeting
C305-LB145301-C305-LB145307	Dismantled Railway/Playground	100% at 2mm/year 100% at 3mm/year	Next meeting
C305-LB145501-C305-LB145504	Cantrell Road	100% at 2mm/year 100% at 3mm/year	Next meeting
C305-LB145801-C305-LB145804	Steadman Street	100% at 2mm/year 100% at 3mm/year	Next meeting
C305-LB145901-C305-LB145904	Zeital House	100% at 2mm/year 100% at 3mm/year	Next meeting
C305-LB146001-C305-LB146008	Joseph Street	83% at 2mm/year 100% at 3mm/year	Next meeting
C305-LB146101-C305-LB146126		71% at 2mm/year 93% at 3mm/year	Next meeting
C305-LB146402-C305-LB146408	Jamuna Close	100% at 2mm/year 100% at 3mm/year	Next meeting
C305-LB146501-C305-LB146505	Eastfield Street	100% at 2mm/year 100% at 3mm/year	Next meeting
C305-LB146602-C305-LB146625	Niche	100% at 2mm/year 100% at 3mm/year	Next meeting
C305-LB146701-C305-LB146710	Donoghue Cottages	100% at 2mm/year 100% at 3mm/year	Next meeting
<b>Notes</b>			
<p>- Location details to be included on graphs.</p> <p>- Niche monitoring closed out in CTC meetings. Additional set to be taken to confirm recovery since switch off was stabilised.</p>			
<b>Sign off</b>			
DSJV	Geocisa	Crossrail	C122
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

*\* See 14.6 same apply*

I&M Close Out Template - 13th July 2015

\* On going movement as a result of C360 works, C122 to review, what C360 are monitoring.

- Next meeting provisionally planned as 12<sup>th</sup> Sept.
- Monitoring points to be reviewed next ~~week~~ meeting (awaiting additional readings): LP 143401-16 and LP 143801-05

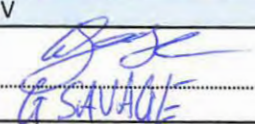
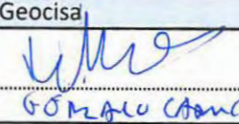
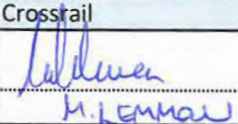





# I&M Close Out Meeting

Date & Time		11/09/2015 11:00	
Meeting No.		5	
The purpose of this document is to record agreement to cease monitoring long term monitoring and decommission based on review of the data against the requirements. Agreement from this meeting is then considered acceptance from all parties that the Close Out Report can then be produced based on the data shown and this will be acceptable to the Project Manager.			
Attendees:			
Susannah Hanna DSJV Stuart Dawson DSJV Garry Savage DSJV Gonzalo Carnicero Geocisa <i>Ana Cabrera Geocisa</i>		Mark Lemmon CRL Brian Murphy C122 <i>Narges Husain</i> <i>Jose Berrio Geocisa</i>	
Data Reviewed			
Monitoring References	Location	Settlement rate	Agreement to decommission
<b>Levelling Points Area 14 Drive Z</b>			
C305-LP143901-C305-LP143943	14U - Whitehorse Road Park	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LP144001-C305-LP144016	Whitehorse Road Park	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LP148101-C305-LP148132	14V - Whitehorse Road	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LP148401-C305-LP148409	Stepney Churchyard	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LP148501-C305-LP148524	14W - Stepney Churchyard	95% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LP148301-C305-LP148308	Stepney Churchyard	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LP148201-C305-LP148219	Stepney Churchyard	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LP148201-C305-LP148220	Stepney Churchyard	96% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LP148701-C305-LP148712	Stepney Churchyard	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LP148801-C305-LP148824	Stepney High Street <i>14x</i>	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LP143401-C305-LP143416	Eastfield Street	100% at 2mm/year 100% at 3mm/year	<i>N/A</i>
C305-LP143801-C305-LP143805		100% at 2mm/year 100% at 3mm/year	<i>N/A</i>
<b>Sockets Area 14 Drive Z</b>			
C305-LB145105-C305-LB145111	Fairfoot Road	50% at 2mm/year 100% at 3mm/year	<i>ok - levelling points adjacent and stable</i>
C305-LB145001-C305-LB145004	Navenby walk	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LB145301-C305-LB145307	Dismantled Railway/Playground	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LB145501-C305-LB145504	Cantrell Road	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LB145801-C305-LB145804	Steadman Street	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LB145901-C305-LB145904	Zeital House	100% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LB146001-C305-LB146008	Joseph Street	83% at 2mm/year 100% at 3mm/year	<i>ok</i>
C305-LB146101-C305-LB146126	Wager Street	71% at 2mm/year 93% at 3mm/year	<i>ok - probably affected by long term movement from Mile End shaft + TBH's</i>
C305-LB146402-C305-LB146408	Jamuna Close	100% at 2mm/year 100% at 3mm/year	<i>ok</i>



C305-LB146501-C305-LB146505	Eastfield Street	100% at 2mm/year 100% at 3mm/year	OK
C305-LB146602-C305-LB146625	Niche	100% at 2mm/year 100% at 3mm/year	Additional set to confirm heave stable from Niche switch a
C305-LB146701-C305-LB146710	Donoghue Cottages	100% at 2mm/year 100% at 3mm/year	As above.
C305-LB146801-C305-LB146808	Aston Street	0% at 2mm/year 0% at 3mm/year	OK
C305-LB148001-C305-LB148033	Church of St Dunstan and All Saints	100% at 2mm/year 100% at 3mm/year	Stable, take an additional set after STG switch off.
<b>Notes</b>			
<p>- PUL 1, 2, 3 &amp; PUL cable. → all sections at 100% 2mm/year - agreed to close out.                  - Sockets LB143401-16 (low level) → last 2 readings stable, from July 14 → Aug 15 up to 10mm not consistent with adjacent transects 14C and 14D - Geocisa to check readings.</p>			
<b>Sign off</b>			
DSJV	Geocisa	Crosstail	C122
 G. SAVAGE	 G. GONZALEZ	 M. LEMAN	 B. MURPHY

I&M Close Out Template - 13th July 2015

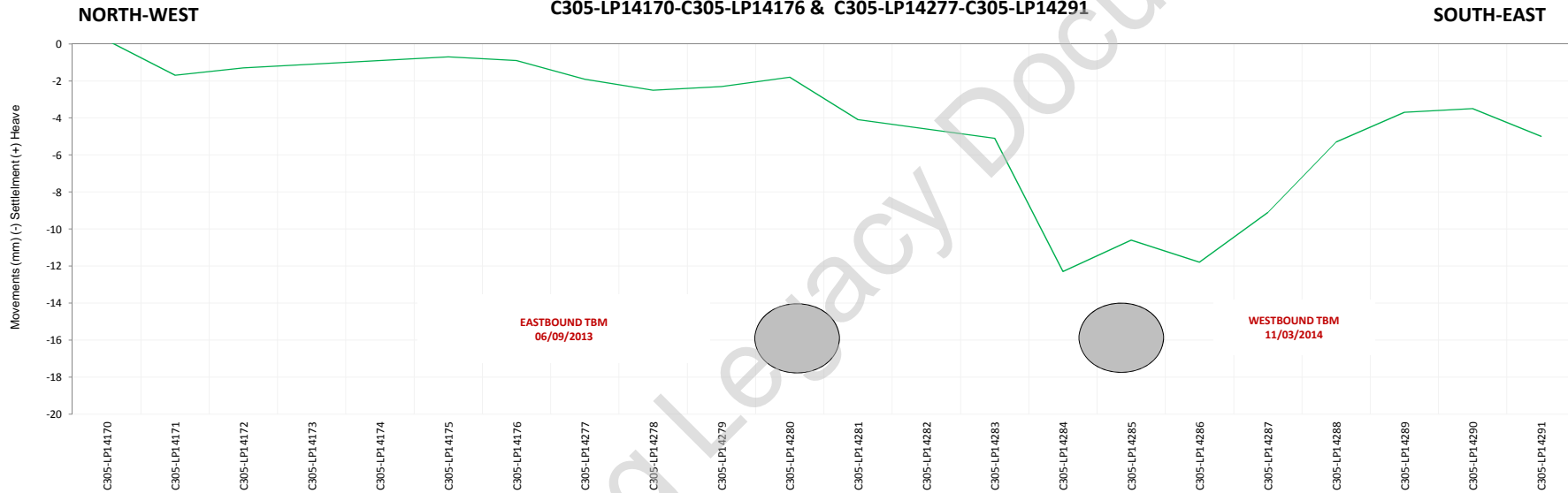
- \* For St. Dunstan Sockets review heave after EB y drive TBM. Also label graph with Drive Y TBMs passage.
- \* For Stepney take full set of readings of all LPs around ~~stepney~~<sup>site</sup> that were last read in 2014. Also take readings of LB07017, 18, 19.
- \* Raise RFI for Stepney shaft inclinometers and SEL bundle instruments to agree close out with C121, C123. Also strain gauges.

Learning Log

Learning Legacy Document

APPENDIX D:  
DEFLECTION RATIO

**AREA 14 Wick Lane PROFILE**  
**C305-LP14170-C305-LP14176 & C305-LP14277-C305-LP14291**



NOTE: x axis is of monitoring points and is not a scaled distance

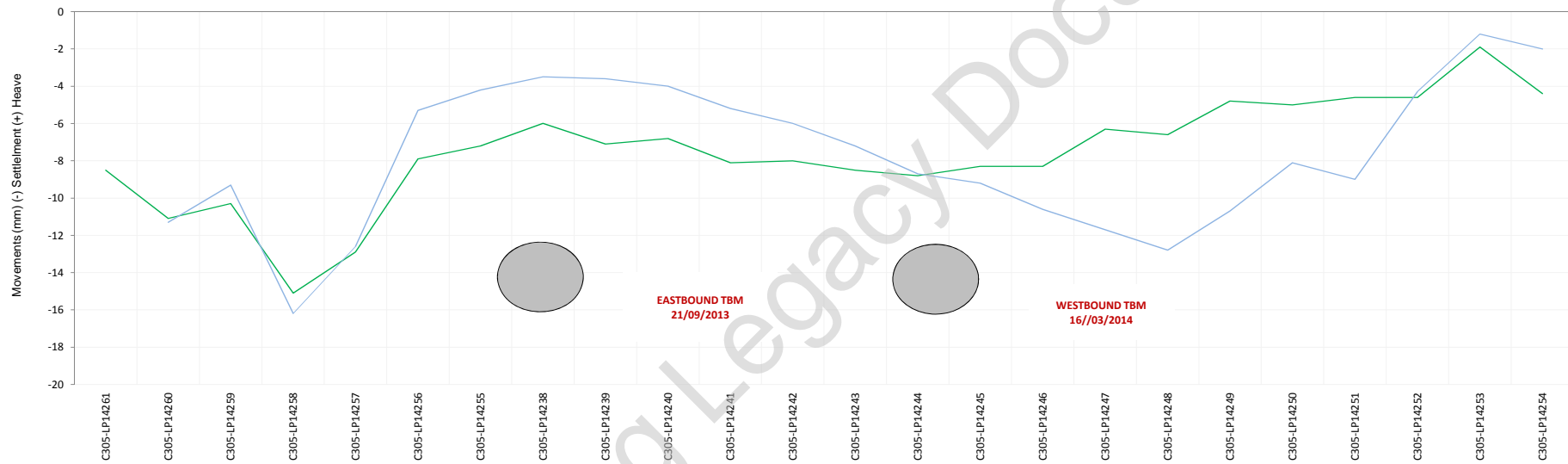
TRANSECT	ALERT VALUE	AMBER TRIGGER VALUE	MAX DEFLECTION RATIO	
			TBMs Passage	Long Term
Wick Lane	1/3800-1/4600	-	1/6486	-

21/03/2014 AFTER TBMs TRANSIT

**AREA 14 Baldock Street PROFILE**  
**C305-LP14255-C305-LP14261 & LP14238-LP14254**

**NORTH-WEST**

**SOUTH-EAST**

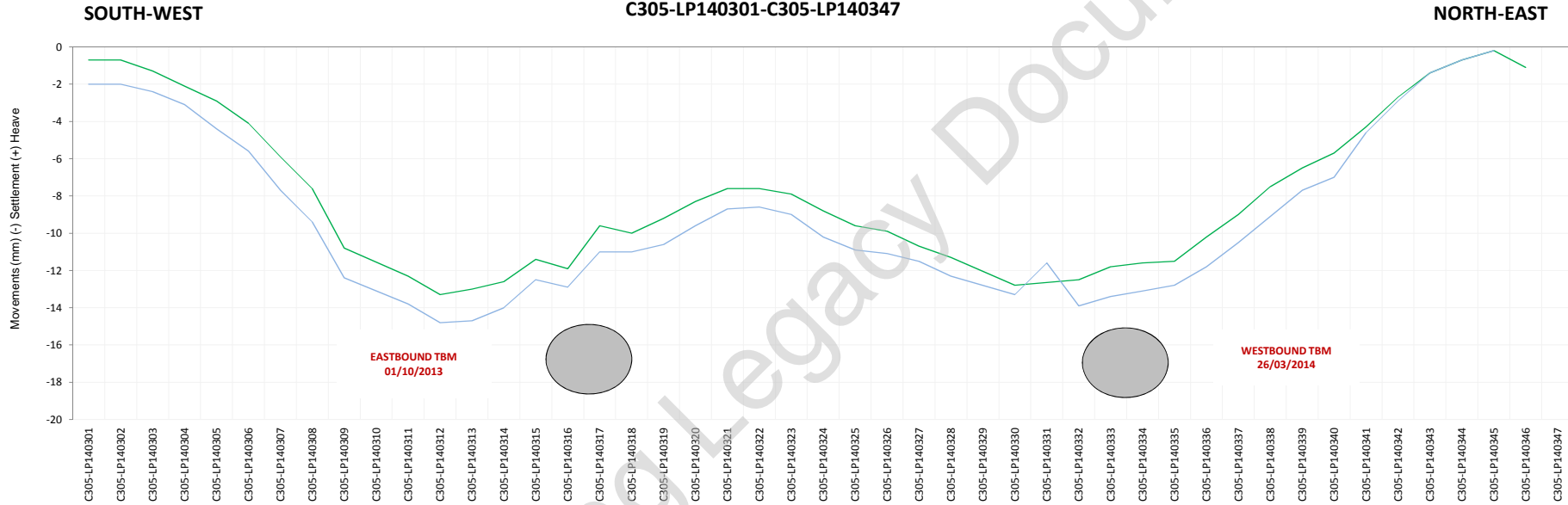


NOTE: x axis is of monitoring points and is not a scaled distance

TRANSECT	ALERT VALUE	AMBER TRIGGER VALUE	MAX DEFLECTION RATIO	
			TBMs Passage	Long Term
14 B	1/2000	-	1/3815	1/2620

— 23/03/2014 AFTER TBMs TRANSIT  
— 04/08/2015 LONG TERM

**AREA 14 Ridgale Street PROFILE  
C305-LP140301-C305-LP140347**



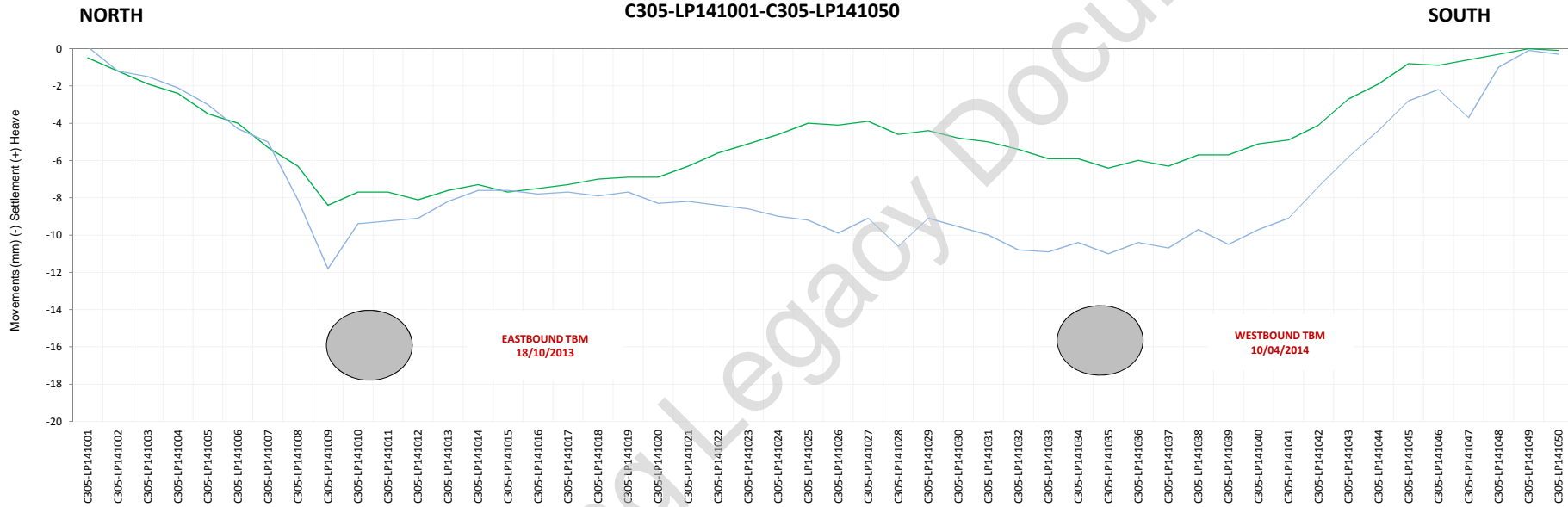
NOTE: x axis is of monitoring points and is not a scaled distance

TRANSECT	ALERT VALUE	AMBER TRIGGER VALUE	MAX DEFLECTION RATIO	
			TBMs Passage	Long Term
Ridgale St.	1/2000	-	1/14999	1/13042

— 09/04/2014 AFTER TBMs TRANSIT  
— 04/08/2015 LONG TERM



**AREA 14 Campbell Road PROFILE  
C305-LP141001-C305-LP141050**



NOTE: x axis is of monitoring points and is not a scaled distance

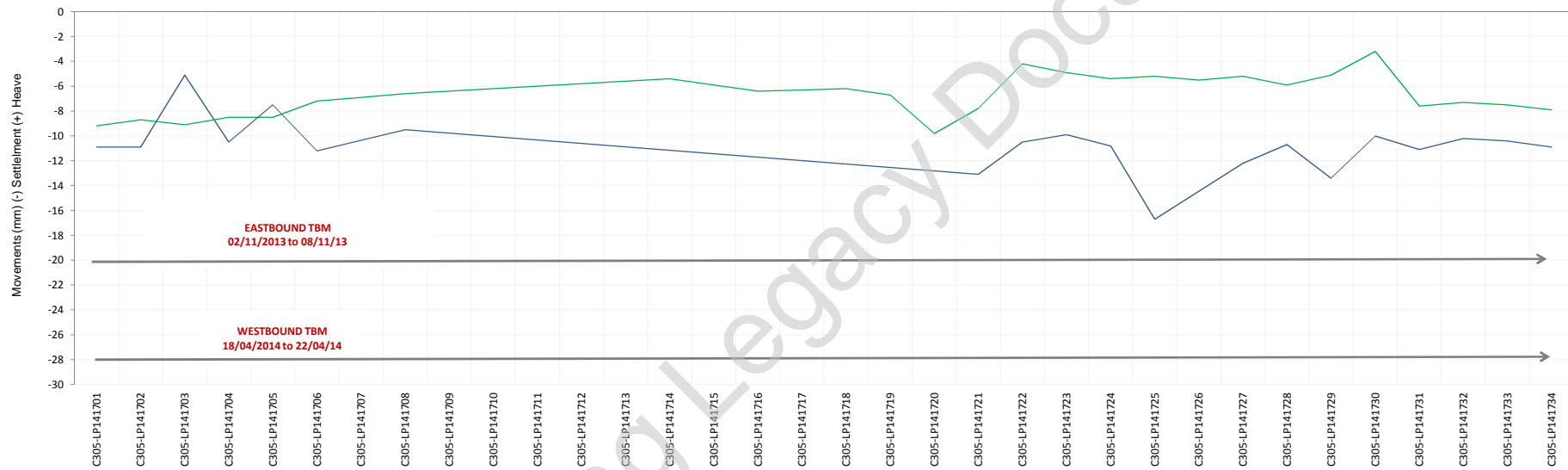
TRANSECT	ALERT VALUE	AMBER TRIGGER VALUE	MAX DEFLECTION RATIO	
			TBMs Passage	Long Term
Campbell St.	1/2000	-	1/14190	1/7383

— 14/04/2014 AFTER TBMs TRANSIT  
— 07/08/2015 LONG TERM

**AREA 14 Fairfoot Road PROFILE  
C305-LP141701-C305-LP141734**

**NORTH-EAST**

**SOUTH-WEST**

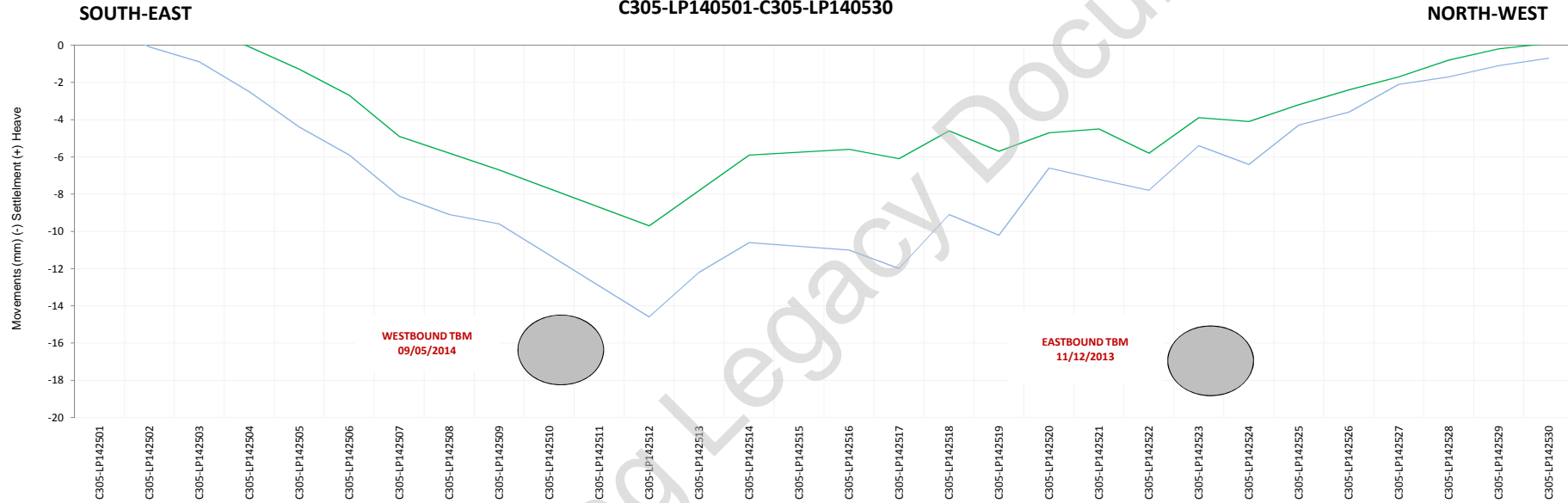


NOTE: x axis is of monitoring points and is not a scaled distance

TRANSECT	ALERT VALUE	AMBER TRIGGER VALUE	MAX DEFLECTION RATIO	
			TBMs Passage	Long Term
Fairfoot Road	1/2000	-	1/4903	1/2274

— 06/05/2014 AFTER TBMs TRANSIT  
— 05/08/2015 LONG TERM

**AREA 14 Burdett Road PROFILE  
C305-LP140501-C305-LP140530**

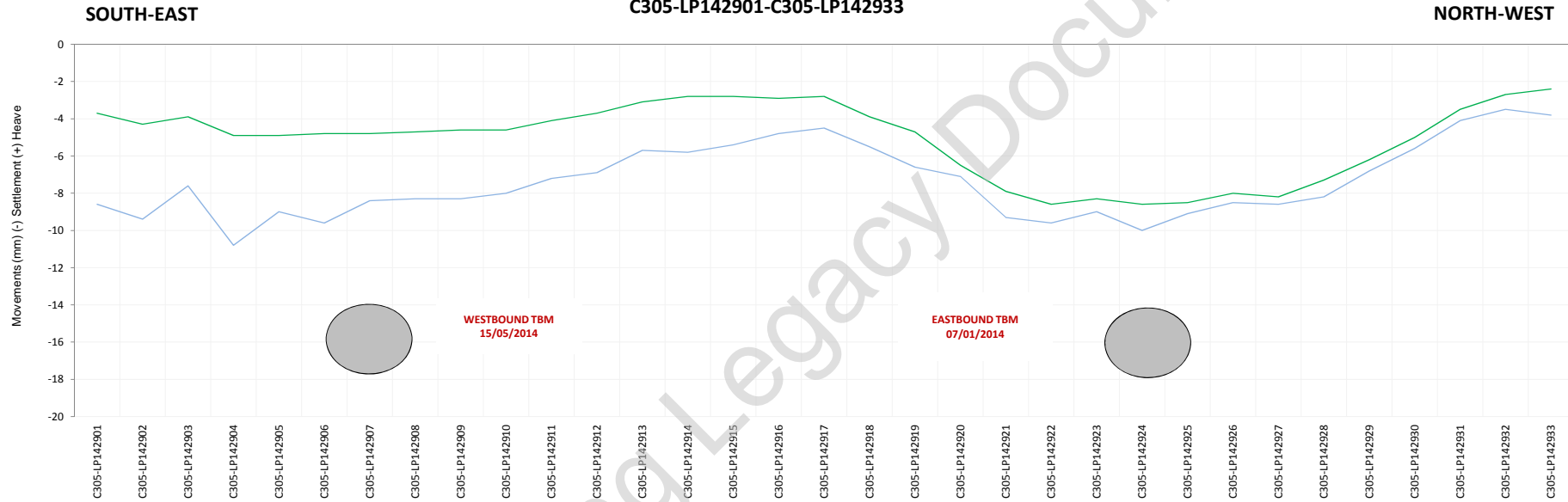


NOTE: x axis is of monitoring points and is not a scaled distance

TRANSECT	ALERT VALUE	AMBER TRIGGER VALUE	MAX DEFLECTION RATIO	
			TBMs Passage	Long Term
14 M	1/2800	-	1/10418	1/5475

— 21/05/2014 AFTER TBMs TRANSIT  
— 30/07/2015 LONG TERM

**AREA 14 Rodeswell Road PROFILE  
C305-LP142901-C305-LP142933**



NOTE: x axis is of monitoring points and is not a scaled distance

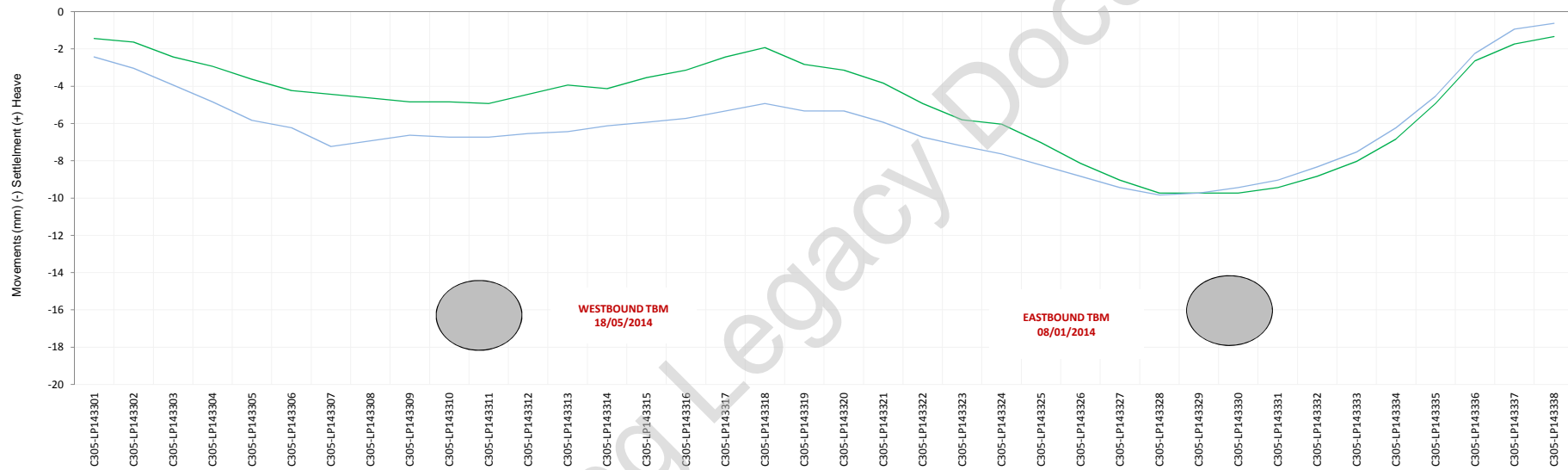
TRANSECT	ALERT VALUE	AMBER TRIGGER VALUE	MAX DEFLECTION RATIO	
			TBMs Passage	Long Term
14 O	1/3900	-	1/17674	1/8757

— 27/05/2014 AFTER TBMs TRANSIT  
— 23/07/2015 LONG TERM

**AREA 14 Jamuna Close PROFILE  
C305-LP143301-C305-LP143338**

**SOUTH-EAST**

**NORTH-WEST**



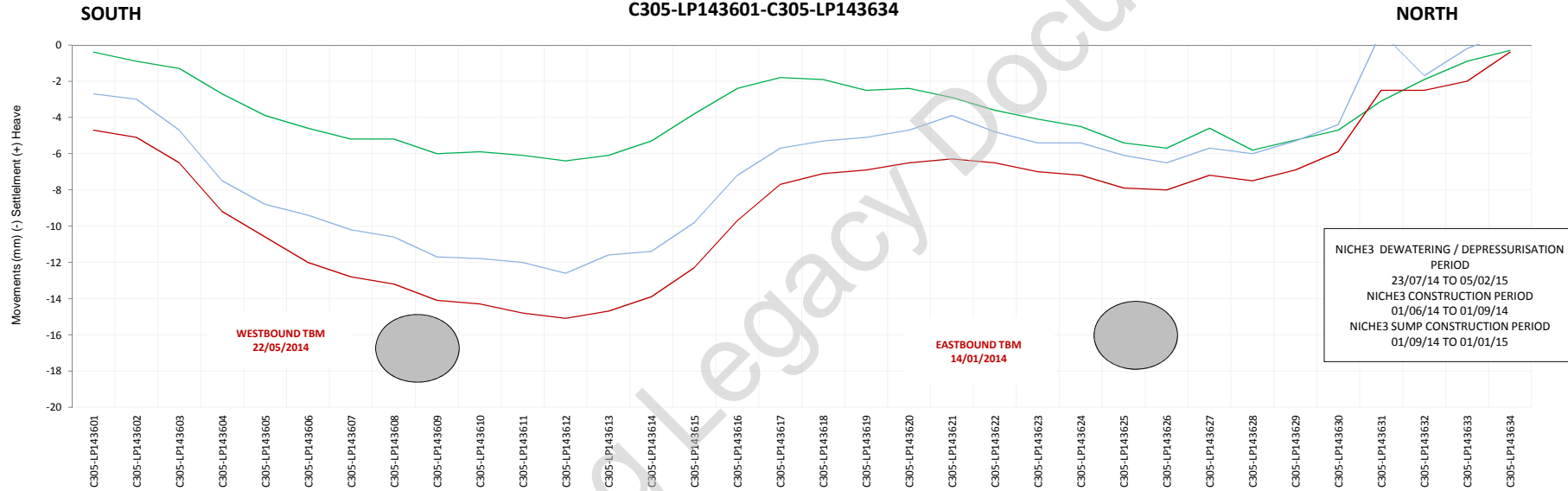
NOTE: x axis is of monitoring points and is not a scaled distance

TRANSECT	ALERT VALUE	AMBER TRIGGER VALUE	MAX DEFLECTION RATIO	
			TBMs Passage	Long Term
14 Q	1/2000	-	1/15316	1/19212

— 29/05/2014 AFTER TBMs TRANSIT  
— 29/07/2015 LONG TERM



**AREA 14 Glasworthy Avenue PROFILE  
C305-LP143601-C305-LP143634**



NICHE3 DEWATERING / DEPRESSURISATION PERIOD  
23/07/14 TO 05/02/15  
NICHE3 CONSTRUCTION PERIOD  
01/06/14 TO 01/09/14  
NICHE3 SUMP CONSTRUCTION PERIOD  
01/09/14 TO 01/01/15

NOTE: x axis is of monitoring points and is not a scaled distance

TRANSECT	ALERT VALUE	AMBER TRIGGER VALUE	MAX DEFLECTION RATIO		
			TBMs Passage	Long Term	NICHE3 Dewatering
14 R	1/2000	-	1/16823	1/3756	1/9361

- 29/05/2014 AFTER TBMs TRANSIT
- 27/10/2015 LONG TERM
- 10/02/2015 NICHE3 DEWATERING

**C305 Deflection Ratio – Area 14 Tracker (DR calculation not required)**

Loc.	Sub-location	SAI Area	Road	Maximum Recorded movement (+/-mm)	Relevant I&M		Water Mains Spec Deflection Ratio; 1 in X	Sewers Spec Deflection Ratio; 1 in X	Comment
					Levelling Points	Shallow Datums			
Z	SGS-PML	14	Wrexham Road	-6	LP14221-LP14238	-	2000	2000	
Z	SGS-PML	14	Bow Road	-7	LP140501-LP140540	-	2800	2000	
Z	SGS-PML	14	Rainhill Way	-7	LP140801-LP140821	-	2000	-	
Z	SGS-PML	14	Fairfoot Road	-6	LP141901-LP141912	SD14010, SD14020 (-4mm)	-	5400	
Z	SGS-PML	14	Knapp Road	-6	LP142101-LP142138	-	2000	2000	
Z	SGS-PML	14	Gas Works Parallel to Railway	-6	LP142020-LP142056	-	-	5400	Monitoring instruments installed on the opposite side of the railway to Lower Sewer No 2.
Z	SGS-PML	14	Bow Common Lane	-7	LP146101-LP146119	-	2600	2000	
Z	SGS-PML	14	Robeson Street	-9	LP142460-LP142473	-	-	2000	Four LPs on each side of the street. Insufficient for a deflection ratio calculation.
Z	SGS-PML	14	Huddart Street	-7	LP142440-LP142453	SD14070, SD14080 (-5mm)	-	2000	Four LPs on each side of the street. Not enough for a deflection ratio
Z	SGS-PML	14	Joseph Street	-8	LP142402-LP142426	-	-	2000	
Z	SGS-PML	14	Parallel to Rodeswell Road (Park Path)	-7	LP143113-LP143101 + LP143209-LP143203	-	2600	2000	
Z	SGS-PML	14	Eastfield Street	-4	LP143401-LP143419	SD14190 (-6mm)	-	2000	Shallow Datum SD14190 has recorded -6mm of settlement.
Z	SGS-PML	14	Carr Street	-12	LP149302-LP149305, LP143501-LP143503	SD14160, SD14170, SD14180 (-9mm)	2000	2000	Insufficient points for a deflection ratio calculation.
Z	SGS-PML	14	Jamuna Close/Carr Street	-12	LP149302-LP149305, LP143501-LP143503	SD14150, SD14160, SD14170, SD14180 (-9mm)	-	2200	Insufficient points for a deflection ratio calculation.
Z	SGS-PML	14	Jumuna Close to Stepney Church	-11	-	SD14200, SD14220, SD14230, SD14250, SD14260, SD14270 (-11mm)	-	11700	Shallow Datum instruments installed to monitor this asset.
Z	SGS-PML	14	Maroon Street	-8	LP143713-LP143718	-	2000	2000	
Z	SGS-PML	14	Hearnshaw Street	-8	LP143701-LP143712	-	-	2000	
Z	SGS-PML	14	Coltman Street	-3	-	SD14230 (-3mm)	-	2000	
Z	SGS-PML	14	Aston Street	-8	LP143801-LP143840	-	2000	2000	
Z	SGS-PML	14	Whitehorse Road	-6	LP148101-LP148132	SD14280 (-4mm)	2700	2100	
Z	SGS-PML	14	Dakin Place	-3	-	SD14260, SD14270 (-3mm)	2000	-	