

Geospatial certainty you can trust murphygs.com

# **Inclinometer Report**

23<sup>RD</sup> AUGUST 2021 - WEEK 29, REPORT 023

Project Name – Camden Street Project Number – 35357 Client – Murphy Group

## Document Register – MGS35357-OP-RP-02-023

Rev	Date	Prepared by	Role	Checked by	Role	Revision Reason	
0	23/08/2021	YO	Monitoring Engineer	SN	Project Manager		





## Contents

1.	Project Details	. 3
	Project Description	. 3
	Monitoring Specification	. 3
	Reporting Specification	. 3
	Notes	. 4
2.	Monitoring Network Layout and Installation overview	. 5
3.	Tabular Representation – Piezometer boreholes	. 6
4.	Graph Representation – Piezometer boreholes	.7



## 1. Project Details

#### Project Description

Murphy Geospatial have been appointed by J. Murphy & Sons Limited to carry out environmental and structural monitoring for the above project; 140-146 Camden Street. The site is bounded by Bonny Street to the north, Camden Street to the West, Regent's Canal to the South and the Regents Canalside building to the east.

The works will be carried out as per the client's specification and requirements. A layout diagram can be seen below (Figure 1) detailing the proposed area of work.



Figure 1 – Overall site boundary

#### **Monitoring Specification**

During the excavation and construction phases, ground movement will be monitored through a network of installed inclinometer casings. The inclinometer is designed to measure lateral movement within the imbedded wall via a digital probe which is used to determine the depth, direction, magnitude, and rate of movement. The lateral cumulative movement displacement (measured in mm) is represented in graphical format where each graph is plotted against the depth of each casing, having the top of each profile fixed, thus providing that data is being summed from the top. The displacement is measured in two directions (a-axis represents lateral movement and b-axis represents longitudinal movement). Positive direction is towards site. The fluctuation in the water table level will also be measured by means of Piezometers.

#### **Reporting Specification**



The following report details the weekly observed inclinometer readings, with the five pre-determined areas located within 140-146 Camden Street, the locations of which can be seen in (Figure 2) site diagram drawing on page 5.

Elevation on top of the boreholes has been set at the elevation for measurement.

Notes



### 2. Monitoring Network Layout and Installation overview





## 3. Tabular Representation – Piezometer boreholes

Graph Data											
Camden Street											
	11/01/2021	15/01/2021	20/04/2021	29/04/2021	06/05/2021	13/05/2021	20/05/2021	27/05/2021	30/06/2021	23/07/2021	23/08/2021
Borehole	Baseline 1	Baseline 2	Reading 15	Reading 16	Reading 17	Reading 18	Reading 19	Reading 20	Reading 21	Reading 22	Reading 23
BH01	-5.55	-5.5	-5.13	-5.15	-5.17	-5.17	-5.19	-5.2	-5.2	-4.9	-4.145
BH02	-3.33	-3.25	-3.54	-3.59	-3.57	-3.79	-3.37	-3.32	-2.65	-3	-3.7
Notes: All measurements are in metric from a marked point on the top of the tube.											

Figure 03 – Table representing baseline values.



## 4. Graph Representation – Piezometer boreholes



Figure 04 - Graphical Representation of Piezometer boreholes