METROLINK

Monitoring Report

Project Title: **Etihad – Taverna Grouting & Piling Site.**

Principal Contractor: Switch Infrastructure Limited for Monitoring

Location: Etihad Campus.

Route: Ashton Under Lyme Line.

Prepared by: **Paul Connor.**

Signed: [redacted]

Date: 17/09/2026.

Approved by:

Signed: [redacted]

Date:

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1. **Project Details**

Project Name and location	Etihad Taverna. Construction Development.
Project Contact	
Start date of works (affecting KAM/TFGM Assets)	28th September 2026
End date of works (affecting KAM/TFGM Assets)	Anticipated as 18th December 2026
Description of the work being undertaken	Grouting of coal seams and CFA piling.
Where works are to be completed in stages, provide details here	Grouting proposed 28/09/2026 – 30/10/ 2026 Piling proposed 30/11/2026 – 18/12/2026
Will work be completed during a possession, line blockage or with the line open to traffic?	No possession will be placed whilst are being undertaken, works to be carried out during normal working hours, with both Inbound and Outbound lines line open to traffic.

2. **Site Details**

Route detail.	Ashton Under Lyme line – Etihad Campus Station
Track. Inbound, outbound.	Inbound and outbound.
	Ballasted Track section
Start (Km & m)	Inbound - 3 km 025 m
	Outbound - 3 km 025 m
End (Km & m)	Inbound - 3 km 300 m.
	Outbound - 3km 300m.
Line speed (mph)	Outbound - 20 MPH
	Inbound - 20 MPH

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3. Responsibility for Day to Day Management of the Monitoring

Primary Contact

Principal Contractor	Switch Infrastructure Limited
Name of Representative	Paul Connor
Position	Manager
Contact Number	[redacted]
Contact Email	[redacted]

Secondary Contact

Principal Contractor	Switch Infrastructure Limited
Name of Deputy Representative	Aaron Coyle
Position	Supervisor
Contact Number	[redacted]
Contact email	[redacted]

4. Responsibility for carrying out monitoring activities

The individual/company referenced below is responsible for monitoring activities for the duration of the works.

Company	Switch Infrastructure Limited
Name	Paul Connor
Position	Manager
Contact Number	[redacted]
Contact email	[redacted]

5. Responsibility for the Rectification of Track Faults

Company	Keolis Amey Metrolink.
Name	Phil Nebesniak
Position	Track Maintenance Manager
Contact Number	[redacted]
Contact email	[redacted]

Both above responsibilities apply for the duration of the monitoring works.

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6. **Baseline Readings**

Baseline Readings

Type/Location	Easting	Northing	Elevation
Baseline reading table to be populated taking the position of the riser wall at 3m centres against the Cess of the Inbound line. Retro Targets will also be installed as a way to measure rail position.	53°36′58″N , 002°09′19″W	53.616085 , -2.1552751	389826 , 413293

Note 6.1: Where baseline readings cannot be related in terms of Eastings, Northings and Elevation the above table should be modified accordingly.

7. **Affected KAM and TfGM Assets**

The following KAM/TfGM assets will be affected by the works being undertaken.

Note: Where specific monitoring is required for the identified assets additional sections should be added to this TMP and they should be referenced in the table below accordingly.

Affected Asset	Location (km and m)	Monitoring Required	Relevant Section of this TMP
Metrolink ballasted track slab and rails.	Inbound track. AS 03 0282 to AS 03 296	Verticality and rotation of retaining wall structure, including vibration monitoring with nodes	
OHLE structures, IB track,			
AS 03 0282	03Km 282m		
AS 03 0296	03Km 296m		N/A.
Alan Turing Way – ASH19 Tunnel	03Km 185m	For reference only	N/A
Alan Turing Way retaining			

Wall – ASH19A	03Km 0440m	For reference only	N/A
Alan Turing Way Retaining Wall - ASHR19B	03Km 0455m	For reference only	N/A

8. **Monitoring Assets**

Implementation of remote vibrations monitoring to capture induced vibration to the structure. This is because settlement / tilt monitoring mostly wouldn't give us any early warning before any structural movement occurs, and once that movement occurs, no matter how minute, we're at a point of no return such that no mitigation can be put in place to recover the damage to structure of that size.

Site engineer to review daily and trigger thresholds to be reportable.

8a. Threshold

Vibration Monitoring

Three vibration monitoring units will be installed at critical locations near sensitive structures, installed on riser wall.

These units will measure peak particle velocity (PPV) to detect vibration impacts.

Green: Vibration at less than 3mm/sec.

Amber: Vibrations at 3mm/sec and less than 5mm/sec. Increased monitoring and potential review of construction methods.

Red: Vibration at 5mm/sec PPV or above. Immediate cessation of works and investigation.

8a. Monitoring Asset



Fig 1. Riser Wall from track level to be monitored for movement and vibration.



Fig 2. Tilt nodes to be installed at 3m centres on riser wall.

9. Site Overview

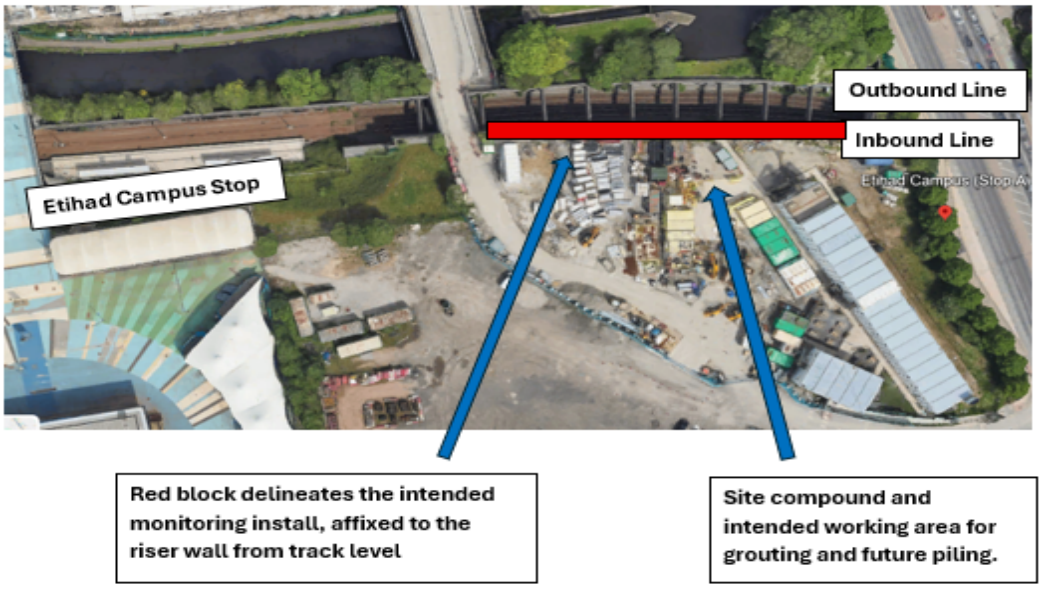


Fig 3. Site overview

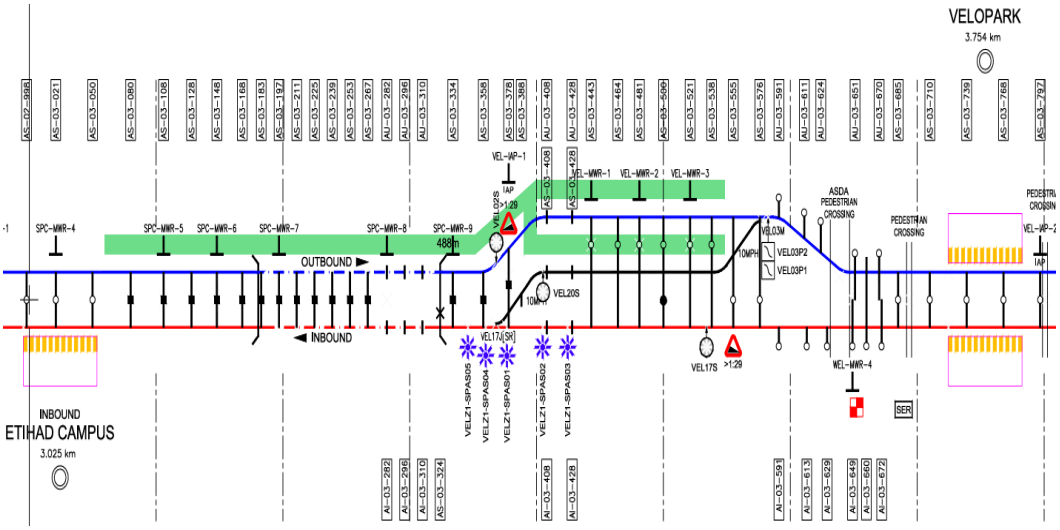


Fig 4.Metrolink Route Map.